

June 14, 2022

Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E., Room 1A  
Washington, D.C. 20426

*Re: PJM Interconnection, L.L.C., Docket No. ER22-\_\_\_\_-000  
Tariff Revisions for Interconnection Process Reform, Request for Commission Action by  
October 3, 2022, and Request for 30-Day Comment Period*

Dear Secretary Bose:

Pursuant to section 205 of the Federal Power Act (“FPA”),<sup>1</sup> and part 35 of the Federal Energy Regulatory Commission (“Commission” or “FERC”) regulations,<sup>2</sup> PJM Interconnection, L.L.C. (“PJM”) submits this filing to modify its Open Access Transmission Tariff (“Tariff”) to add new Parts VII, VIII, and IX and revise the Table of Contents and Parts II, III, IV, and VI.<sup>3</sup> The filing constitutes a comprehensive reform of the PJM interconnection process designed to more efficiently and timely process New Service Requests by transitioning from a serial “first-come, first-served” queue approach to a “first-ready, first-served” Cycle<sup>4</sup> approach utilized by other regional transmission organizations (“RTOs”) and stand-alone transmission providers.

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<sup>1</sup> 16 U.S.C. § 824d.

<sup>2</sup> 18 C.F.R. part 35.

<sup>3</sup> The PJM Transmission Owners are separately filing revisions to Parts VII, VIII, and IX to incorporate provisions related to their proposed Network Upgrade Funding Agreement (“NUFA”). Issues related to the currently effective NUFA provisions are currently pending before the Commission in Docket No. ER21-2282-000. For purposes of the filing being submitted by PJM today, PJM takes no position on the issues raised in Docket No. ER21-2282-000. *See PPL Electric Utils. Corp., PJM Tariff Revisions to Implement Transmission Owners’ Funding of Network Upgrades*, Docket No. ER21-2282-000 (June 30, 2021).

<sup>4</sup> Capitalized terms not defined herein have the meanings set forth in the Tariff or in proposed Tariff, Parts VII, VIII, and IX. Appendix 1 to this filing also includes a glossary of defined terms.

The proposed reforms detailed in this filing represent the culmination of an eighteen-month stakeholder process. The final vote by the PJM Members Committee occurred during the April 27, 2022 meeting with the proposed reforms, as amended during the May 17, 2022 Members Committee meeting, garnering the overwhelming support of PJM stakeholders.

PJM believes, as do the vast majority of PJM stakeholders, that these reforms will vastly improve today's interconnection process in the PJM Region. PJM therefore respectfully requests that the Commission issue an order: (1) accepting this filing, without condition or modification, no later than October 3, 2022, more than 90 days from the date of this filing;<sup>5</sup> (2) establishing an effective date of January 3, 2023, for revised Parts II, III, IV, VI, and new Parts VII and IX of the Tariff; and (3) establishing an "indefinite" effective date of 12/31/9998 for Part VIII of the Tariff.<sup>6</sup> The proposed revisions and new proposed provisions are just, reasonable, and not unduly discriminatory or preferential, are consistent with Commission policy and precedent, including the Commission's Order No. 2003,<sup>7</sup> are supported by a high degree of stakeholder support, and, to the extent required, satisfy the Commission's independent entity standard.<sup>8</sup>

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<sup>5</sup> PJM has assigned an effective date of October 3, 2022, to one eTariff record (Tariff, Part II, section 15.7) submitted with this filing (in metadata only) in order to effectuate Commission action by this date.

<sup>6</sup> See *infra* Part VIII. PJM is requesting an indefinite effective date for Part VIII because it is unknown when the preconditions for those Tariff sections will be satisfied such that Part VIII can become effective; PJM will submit a compliance filing to provide the Commission with the effective date of Part VIII once that date is known.

<sup>7</sup> *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103 (2003), *order on reh'g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh'g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh'g*, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008).

<sup>8</sup> The Commission has found that queue reform efforts submitted by RTOs, as independent entities, are entitled to greater flexibility under the "independent entity variation" rather than the "consistent with or

In addition to this transmittal letter explaining and supporting PJM's proposed Tariff revisions, the filing is comprised of the following materials:

- Appendix 1: Glossary of Key Terminology;
- Appendix 2: Brief History of PJM's Interconnection-Related Tariff Revision Filings Since 2004;
- Appendix 3: Chart of Processing Time Under the Current Serial Queue;
- Attachment A: Marked Tariff Sheets Reflecting PJM's Proposed Tariff Revisions;
- Attachment B: Clean Tariff Sheets Reflecting PJM's Proposed Tariff Revisions;
- Attachment C: Affidavit of Jason P. Connell ("Connell Aff.");
- Attachment D: Affidavit of Jason R. Shoemaker ("Shoemaker Aff."); and
- Attachment E: Affidavit of Mark Sims ("Sims Aff.).

PJM recognizes that the Commission is considering reforms to its interconnection process.<sup>9</sup> While PJM looks forward to engaging with the Commission and interested parties as the Commission considers these reforms, consideration of these reforms does not change the fact that this filing represents a just and reasonable way to address the issues PJM currently faces in processing its interconnection queue. The Commission deferring action on this filing or rejecting it, pending the outcome of other proceedings, would not be in the best interests of PJM or its stakeholders. PJM therefore requests that the

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superior to" standard generally applied to tariff revisions submitted by non-independent entities. *See Midwest Indep. Sys. Operation, Inc.*, 124 FERC ¶ 61,183, at P 31 (2008) ("*MISO 2008*"). Under the independent entity standard, the RTO "must demonstrate that its proposed variations are just and reasonable and not unduly discriminatory, and that they would accomplish the purposes of Order No. 2003." *Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,003, at P 21 (2017), *order on compliance*, 162 FERC ¶ 61,106 (2018).

<sup>9</sup> *See, e.g., Building for the Future Through Electric Regional Transmission Planning & Cost Allocation & Generator Interconnection*, Advance Notice of Proposed Rulemaking, 176 FERC ¶ 61,024 (2021).

Kimberly D. Bose, Secretary

June 14, 2022

Page iv

Commission accept this filing as just and reasonable, with the acknowledgment that further reforms may be required in the future.



## TABLE OF CONTENTS

	Page
I. EXECUTIVE SUMMARY .....	1
A. PJM Proposes a Comprehensive Reform of Its Interconnection Process by Moving to a Clustered, First-Ready, First-Served Cycle Process and Strengthening Interconnection Requirements.....	1
B. The Transition Period Rules Balance Mature Projects' Interest in Completing the Existing Process with the Need to Move Expeditiously to the New Rules.....	10
C. The Commission Should Accept the Proposed Filing to Be Effective on the Dates Requested, as It Is Just, Reasonable, and Not Unduly Discriminatory and Has Received Tremendous Consensus Stakeholder Support after an Extensive Stakeholder Process .....	13
II. BACKGROUND .....	14
A. PJM's Present Interconnection Process Grew From a Well-Functioning Historic Foundation, but Is Now Ripe for the Reforms Proposed in This Filing.....	14
B. Until Recently, Incremental Innovations in PJM's Interconnection Process Kept Pace with Industry Trends .....	17
C. PJM's Interconnection Process Faces a Massive Influx of New Service Requests Which, Using Today's Rules, is Slowing the Interconnection Process .....	19
III. STAKEHOLDER PROCESS .....	25
IV. NEW PARTS VII AND VIII ARE JUST AND REASONABLE.....	28
A. The Transition Period Rules and New Rules Will Establish a More Efficient and Effective Interconnection Process.....	28
B. The Proposed Transition Period Rules Will Allow PJM to Move to the New Rules Quickly and Efficiently While Also Respecting the Priority of Late-Stage Projects in the Existing Queue .....	30
1. Transition Period Eligibility and the Initial Sorting Process .....	30
2. Transition Cycles #1 and #2 .....	33

a.	Transition Cycle #1 and Transition Cycle #2 Timing and Process .....	37
b.	There will be no block-out period under the Transition Period or New Rules.....	39
c.	The proposed Transition Rules and sorting procedures appropriately balance the need for PJM to clear the study backlog as quickly as possible and start the Cycle process while at the same time allowing mature projects to proceed under the old rules (or, in the case of certain projects) subject to the Expedited Process .....	40
3.	Application Process .....	43
4.	The Three-Phase Study Process, Decision Points and Additional Readiness Deposits .....	47
a.	Phase I, Decision Point I, and Readiness Deposit No. 2.....	47
b.	Phase II, Decision Point II, and Readiness Deposit No. 3.....	50
c.	Phase III, Decision Point III, and the Obligation to Provide Security <sup>3</sup> .....	55
d.	Final Agreement Negotiation Phase .....	57
5.	Analyses Included in System Impact Studies .....	58
6.	Cost Allocation .....	60
7.	PJM Will Adopt a Parallel Process for Upgrade Requests .....	61
8.	PJM’s Proposal to Eliminate the Ability of Project Developers to Suspend Their Projects After Execution of a Generator Interconnection Agreement or WMPA Is Just and Reasonable, as a Balanced Approach That Protects the Interconnection Process as Well as the Project Developers .....	64
V.	NEW PART IX IS JUST AND REASONABLE .....	65
A.	Part IX Promotes Clarity and Administrative Efficiency .....	65

B.	The Components of Part IX Provide Transparency and Will Help Streamline the Application, Study, and Contracting Processes .....	67
VI.	THE PROPOSED REVISIONS TO PARTS II, III, IV, AND VI ARE JUST AND REASONABLE .....	71
A.	The Proposed Revisions to Parts II and III Are Just and Reasonable .....	72
B.	The Proposed Minor Revisions to Part IV and VI Are Just and Reasonable .....	74
C.	The Commission Should Accept the Minor Non-Substantive Revisions Proposed in This Filing .....	75
VII.	EFFECTIVE DATE AND REQUESTED DATE FOR COMMISSION ACTION .....	75
VIII.	REQUIREMENTS OF SECTION 35.13 OF COMMISSION’S REGULATIONS, INCLUDING DOCUMENTS INCLUDED WITH FILING .....	76
IX.	COMMUNICATIONS .....	77
X.	SERVICE .....	77
XI.	CONCLUSION .....	78

## **I. EXECUTIVE SUMMARY**

### **A. PJM Proposes a Comprehensive Reform of Its Interconnection Process by Moving to a Clustered, First-Ready, First-Served Cycle Process and Strengthening Interconnection Requirements**

PJM is a Commission-established independent system operator (“ISO”) and RTO.<sup>10</sup>

PJM is a Transmission Provider under, and the administrator of, the Tariff and coordinates the movement of wholesale electricity in the PJM Region. As an RTO, PJM is responsible for planning the expansion and enhancement of the PJM Transmission System on a regional basis, which includes administering the interconnection of new generation and transmission facilities through its New Services Request process.

This filing’s proposed reforms include:

- Moving from a serial queue process to a clustered Cycle<sup>11</sup> process for both studies and cost allocation;
- Implementation of multiple Decision Points at which Project Developers and other parties seeking interconnection-related services will need to provide Readiness Deposits and meet other threshold requirements to move forward, thus permitting projects that are ready to progress to do so while incentivizing projects that are not ready to proceed to exit the interconnection process;
- A transition mechanism to ensure a timely transition to the new “first-ready, first-served” Cycle approach while providing an expedited process for projects in the existing interconnection queue that are close to completing that process (the “Expedited Process”); and

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<sup>10</sup> See *Modernizing Wholesale Electric Market Design*, 179 FERC ¶ 61,029, at P 1 (2022) (order requiring reports and listing nation’s RTOs and ISOs).

<sup>11</sup> A clustered Cycle is simply a group of projects that are studied together in a single study, rather than on an individual basis in serial fashion based on the order in which the projects entered the queue. The term Cycle means “that period of time between the start of an Application phase and conclusion of the corresponding Final Agreement Negotiation Phase.” See Tariff, Part VII, Subpart A, section 300 (definition of Cycle) and Part VIII, Subpart A, section 400 (definition of Cycle).

- Consolidation of PJM's interconnection-related service agreements and forms that will be used for the Part VII transition process and the Part VIII New Rules set forth in new Part IX of the Tariff.

The proposed reforms are the negotiated result of an extensive stakeholder process that commenced in October 2020.<sup>12</sup> This stakeholder process allowed for participation by all interested stakeholders and resulted in the overwhelming approval of the proposed Tariff reforms, including a sector weighted vote of 4.368 out of a total of 5.00 at PJM's Markets and Reliability Committee and a sector weighted vote of 4.518 out of a total of 5.00 at PJM's Members Committee, both of which exceed the two-third weighted sector threshold of 3.33 needed for approval.<sup>13</sup> Representing one of the highest levels of stakeholder support in terms of votes cast during the PJM stakeholder process, this vote reflects resounding support across all the PJM stakeholder sectors. This vote is particularly noteworthy given the contemplated overhaul of PJM's interconnection process.

Moreover, the proposed reforms will allow for significant improvements in the timely processing of existing interconnection requests as well as of New Service Requests submitted under Part VIII, and will more effectively clear the existing interconnection study backlog which will enable PJM to support federal and state public policy (including various renewable and clean energy initiatives). The process also creates a "fast lane" as an expedited and accelerated mechanism for projects that are determined to have only a minimal network impact or only have minimal cost responsibility for Network Upgrades to move through the process early and proceed to a final interconnection-related

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<sup>12</sup> Connell Aff. ¶ 17.

<sup>13</sup> *Id.* ¶ 23.

agreement.<sup>14</sup> The Commission should accept the revised and new Tariff sections as filed, to be effective as of the dates requested.<sup>15</sup> Due to the length of the filing, PJM requests Commission action by October 3, 2022, which is more than 60 days from the date of this filing, and proposes that the Commission establish an extended comment period of 30 days, rather than the standard 21-day comment period, for this filing.

These reforms represent a significant shift from PJM's existing interconnection process, which orders New Service Requests serially for purposes of both interconnection studies and allocation of costs of Network Upgrades necessary to accommodate New Service Requests as well as provides individual studies and cost allocation for each project.<sup>16</sup> The existing interconnection process accepts New Service Requests during two six-month queue windows each year (from April 1 to September 30 of each year and from October 1 to March 31 of the following year).<sup>17</sup> Interconnection Customers are required to provide evidence of Site Control only for their generator sites and only once, at the time they submit their New Service Requests.<sup>18</sup>

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<sup>14</sup> As the Commission has acknowledged, "a transition from a serial first-come, first-served approach to a clustered first-ready, first-served approach . . . should improve the transmission providers' ability to address queue backlogs." *Duke Energy Carolinas, LLC*, 176 FERC ¶ 61,075, at P 51 (2021); *PacifiCorp*, 171 FERC ¶ 61,112, at P 47 (finding that the first-ready, first-served approach will address interconnection queue backlogs and allow projects that are further along in development to proceed on a more accelerated basis while allowing less developed projects to receive early information), *order on clarification & reh'g*, 173 FERC ¶ 61,016 (2020); *Pub. Serv. Co. of N.M.*, 136 FERC ¶ 61,231, at P 77 (2011) (similar finding).

<sup>15</sup> The Tariff sheets being filed today are, for the most part, those approved through the PJM stakeholder process. PJM has made a number of non-substantive, ministerial changes to correct typographical errors and correct Tariff cross-references.

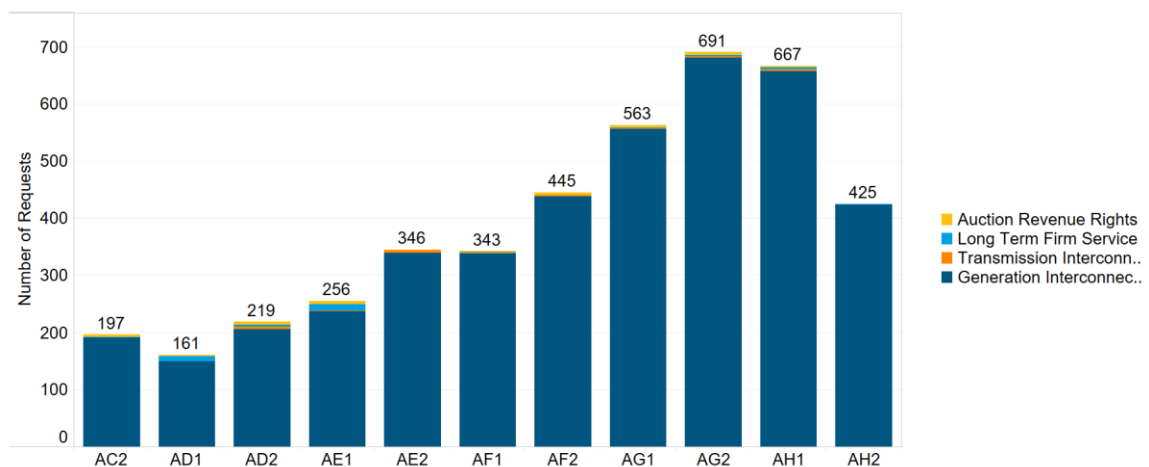
<sup>16</sup> Connell Aff. ¶ 7.

<sup>17</sup> *Id.*

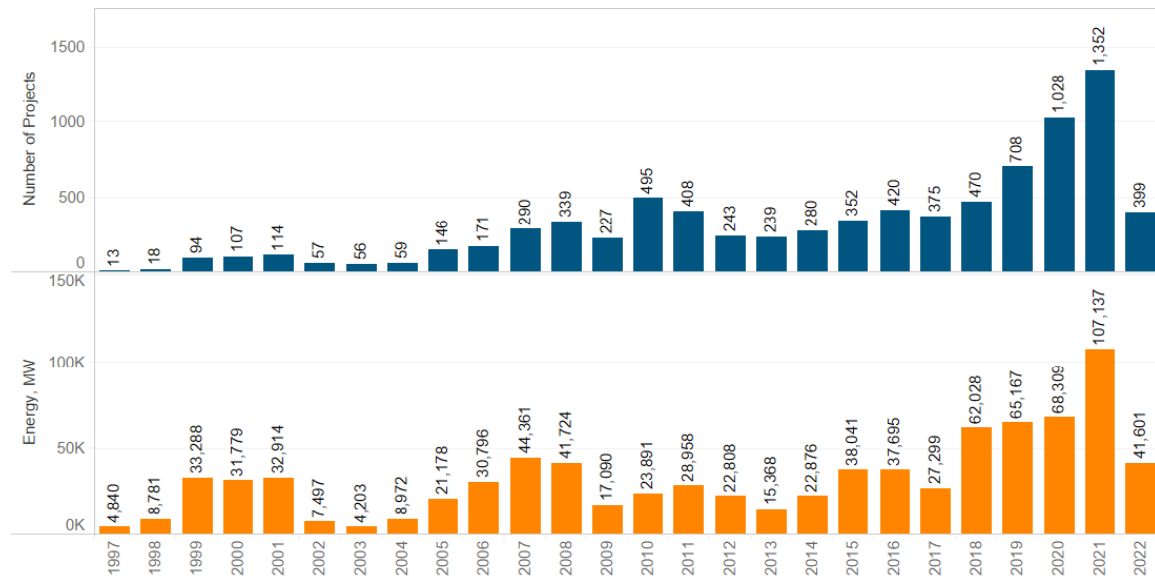
<sup>18</sup> *Id.*

The time-intensive serial approach of PJM’s current interconnection process, coupled with the exponential increase in New Services Requests received in each queue window in recent years has resulted in a mounting backlog that compels the reforms proposed in this filing. Figure 1 below illustrates the increasing total number of New Service Requests submitted in each queue window in recent years, and Figure 2 below illustrates the annual increase in the total number of New Service Requests.

**FIGURE 1: TOTAL NEW SERVICES REQUESTS BY APPLICATION TYPE<sup>19</sup>**



<sup>19</sup> See Figure 5, *infra*, for the years that correspond to the queue windows in Figure 1.

**FIGURE 2: TOTAL NEW SERVICES REQUESTS BY YEAR<sup>20</sup>**

As illustrated by the foregoing Figures, the volume of New Service Requests has increased drastically over the past four full calendar years, with the number of 2018 requests representing a 25 percent increase over the 2017 amount, the number of 2019 requests representing a 50 percent increase over the 2018 amount, the number of 2020 requests more than double the 2018 amount, and the number of 2021 requests almost triple the 2018 amount.<sup>21</sup> These increases have caused both the number of queued projects actively under study and the number of projects with backlogged studies to grow.

The delays arising from sheer volume are exacerbated by the large number of speculative projects that withdraw from the queue because they cannot be completed.<sup>22</sup>

<sup>20</sup> The information for 2022 is for the period January 1, 2022, through March 31, 2022, the close of the AH2 queue window.

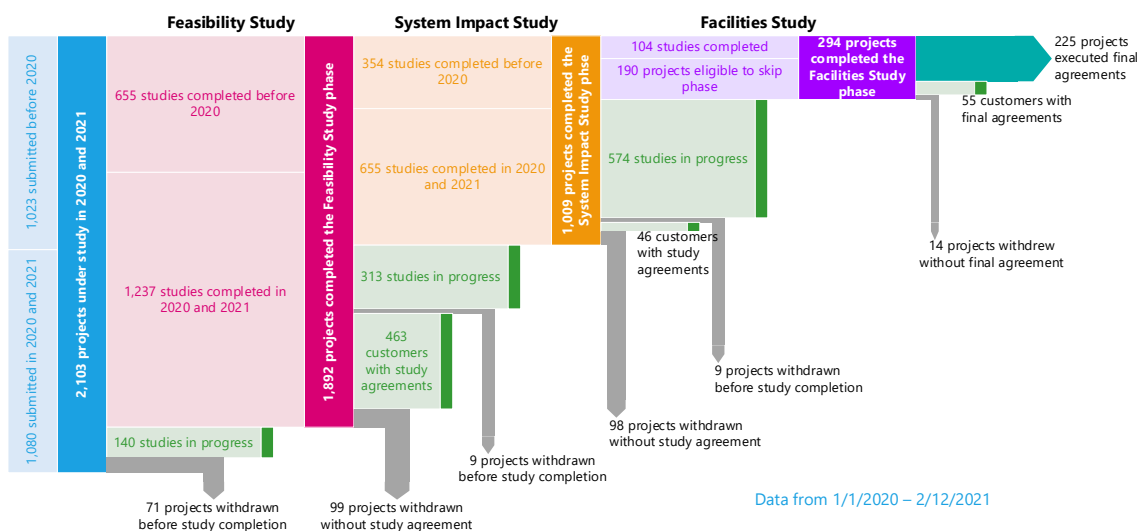
<sup>21</sup> Connell Aff. ¶ 9.

<sup>22</sup> See *id.* ¶¶ 10-13.



For almost every project that withdraws, PJM must restudy lower-queued projects to ensure the proper upgrades are identified and built to meet planning criteria and maintain reliability, which results in delays in processing those other New Service Requests. These withdrawals also create significant cost uncertainty for lower-queued projects, which may cause those projects to withdraw, causing a cascade of withdrawals.

**FIGURE 3: PROJECT WITHDRAWALS BY STUDY PHASE**

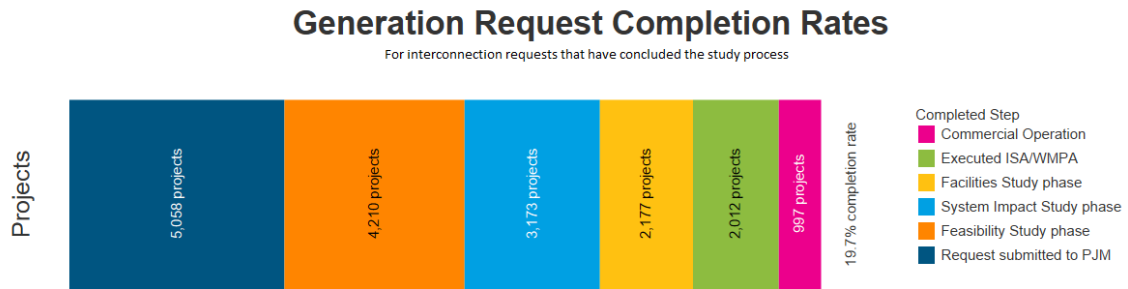


PJM’s existing interconnection process is a “first-come, first-served” process that was designed at a time when the number of overall requests was significantly lower and many more projects withdrew from the queue at an early stage. Under that process, PJM undertakes an initial Feasibility Study, to be followed by a System Impact Study and then, if necessary, a Facilities Study.<sup>23</sup> Historically, as many as 33 percent of projects withdrew from the queue after the Feasibility Study, while at present, only about 5 percent of projects

<sup>23</sup> See, e.g., Tariff, Part IV, Subpart A, section 36.2; Tariff, Part IV, Subpart G, section 110.1(1)(a)(ix); Tariff, Part VI, Subpart A, sections 205 and 206.

withdraw that early; this leaves many projects languishing in the queue only to drop out at a rate that totals 80 percent of the total number of initial queue applications.<sup>24</sup>

**FIGURE 4**



PJM has found that its incremental changes and more targeted reforms to the interconnection process are useful, but have been yielding diminishing returns in efficiency. Consequently, in the fall of 2020, PJM commenced a stakeholder process to comprehensively overhaul its interconnection process. The proposed Tariff revisions and additions contained in this filing are the result of that process.

Accordingly, PJM now proposes to move to a “first-ready, first-served process” that groups projects in three-phase Cycles for purposes of studying and allocating costs. Under this process, only projects that meet threshold criteria at several Decision Points and provide Readiness Deposits to ensure they are prepared to proceed will remain in the Cycle, while projects that cannot meet those requirements will be incentivized to exit the Cycle process. In contrast, PJM’s current interconnection queue process provides little incentive for speculative projects to exit the queue.

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<sup>24</sup> Connell Aff. ¶ 10.

The permanent “New Rules” PJM proposes will apply to valid New Service Requests submitted on or after October 1, 2021, the date the AH2 queue window opened.<sup>25</sup> The New Rules also establish System Impact Studies and cost allocation on a Cycle-wide basis, rather than an individual project basis, which are designed to streamline the study process, reduce retool studies, and reduce cost responsibility and cost allocation disputes. Providing incentives for the early exit of projects that are not ready (financially or otherwise) and performing studies on a Cycle-wide basis will greatly reduce the number of late-stage withdrawals and the accompanying retool studies,<sup>26</sup> which disrupt lower-queued projects’ expectations.

In addition to the New Rules, this filing also sets forth the procedures and rules for the transition from the existing interconnection process to the proposed new process. The Part VII rules for the transition process (“Transition Period Rules”) were developed to balance the interests of projects already in the PJM interconnection queue, some of them at an advanced stage of development and therefore seeking to maintain their current status and cost allocation under the existing rules, with the need to begin processing New Service

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<sup>25</sup> Tariff, Part VIII, Subpart A, section 401(A); Shoemaker Aff. ¶¶ 3, 31-32. While the New Rules would apply to New Service Requests received prior to the date of this filing and the effective date of the proposed Tariff revisions, PJM implemented a stakeholder process to consider these reforms in the fall of 2020, and the Interconnection Process Reform Task Force has been considering potential Tariff reforms since March 2021. Thus, parties have been noticed on notice since at least March 2021 that significant reforms to PJM’s Tariff were being considered and likely to be implemented.

<sup>26</sup> A “retool” is a revision or rerun of any past analysis that has been run to evaluate the projects and requests in an existing New Services Queue or a Cycle, and often run to evaluate the impact of a withdrawal on New Service Requests with a later queue. The studies in both Phase II and Phase III of the new interconnection process will be Cycle-wide retools. Sims Aff. ¶¶ 9, 11. Performing these retooled studies (which sections 6.4, 7.6 and 8.5 of the Commission’s *pro forma* LGIP refer to as “re-studies”), consistent with the new approach of studying and allocating costs to all the projects in a Cycle, will avoid the disruptive cascading withdrawals that can result from late-stage project withdrawals and the ensuing retools. The Commission’s *pro forma* LGIP are posted on the Commission’s website. *Standard Large Generator Interconnection Procedures (LGIP)*, Federal Energy Regulatory Commission (Nov. 21, 2019), <https://www.ferc.gov/sites/default/files/2020-04/LGIP-procedures.pdf>.

Requests under the New Rules in the near future so that new and future projects can be processed quickly and efficiently.<sup>27</sup> Transition Period Rules will apply to projects in the AE1, AE2, AF1, AF2, AG1, AG2, and AH1 queue windows (the period from April 1, 2018, through September 30, 2021) that have not been tendered an Interconnection Service Agreement (“ISA”) or wholesale market participant agreement as of the Transition Date.<sup>28</sup> Figure 5 below details the periods of time in which New Service Requests designated as AE1 through AH1 were submitted, i.e., when the AE1 through AH1 queue windows were open. Projects that submitted Interconnection Requests in the AD2 or earlier queue windows will remain subject to PJM’s existing interconnection procedures.

**FIGURE 5: QUEUE WINDOW TIME PERIODS**

<b>Queue Window</b>	<b>Time Period</b>
AC2	November 1, 2016 through March 31, 2017
AD1	April 1, 2018 through September 30, 2018
AD2	October 1, 2017 through March 31, 2018
AE1	April 1, 2018 through September 30, 2018
AE2	October 1, 2018 through March 31, 2019
AF1	April 1, 2019 through September 30, 2019
AF2	October 1, 2019 through March 31, 2020
AG1	April 1, 2020 through September 30, 2020
AG2	October 1, 2020 through March 31, 2021
AH1	April 1, 2021 through September 30, 2021

PJM’s existing interconnection procedures apply to Interconnection Customers, Eligible Customers, and Upgrade Customers.<sup>29</sup> The Transition Period Rules and New

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<sup>27</sup> Connell Aff. ¶ 19.

<sup>28</sup> Tariff, Part VII, Subpart A, section 301(A)(2); Shoemaker Aff. ¶ 5.

<sup>29</sup> Upgrade Requests will be subject to a separate serial study process based on a discrete aspect of PJM’s interconnection process that is more efficiently addressed using rules and procedures specific to that type of request. Shoemaker Aff. ¶¶ 61-62.

Rules maintain this scope, but implement a number of terminology changes and comprehensively revise interconnection procedures.<sup>30</sup> For example, rather than using the term “Interconnection Customer,” PJM now uses the term “Project Developer” to denote the fact the Project Developer is not simply a customer purchasing services—it is actively involved in the steps necessary for the construction and interconnection of its project to the grid. PJM is also now designating its basic interconnection agreement—the ISA—as a Generator Interconnection Agreement (“GIA”) and has made other revisions to be consistent with the Commission’s Order No. 2003 terminology or the terminology adopted by other RTOs.

**B. The Transition Period Rules Balance Mature Projects’ Interest in Completing the Existing Process with the Need to Move Expeditiously to the New Rules**

As noted above, while projects in the AD2 or early queue window will remain under the PJM’s existing procedures, projects in the AE1 through AH1 queue window will be subject to the Part VII Transition Cycles, and projects in later queue windows or Cycles will be subject to the Part VIII New Rules. The Transition Period procedures balance the interest of mature projects that have substantially completed the interconnection process in moving forward while at the same time allowing PJM to implement its new procedures in a way that does not increase the backlog. This process and the timing of projects that will

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<sup>30</sup> PJM’s existing interconnection procedures are set forth primarily in Tariff, Parts IV and VI, and in certain Tariff Attachments, such as Attachments O, O-1, and P. It is important to note that while new Parts VII, VIII, and IX revise and build from PJM’s existing interconnection procedures, those existing interconnection procedures will remain in effect for requests not subject to Transition Period Rules or New Rules. PJM is making only limited revisions to Tariff, Parts II, III, IV, and VI, as shown in the marked Tariff sheets attached hereto as Attachment A, necessary to implement the Transition Period Rules and New Rules procedures and other discrete improvements. PJM also proposes minor clean up revisions to Tariff cross references in Tariff, Parts IV and VI, to improve PJM’s linked web Tariff and to Parts II and III to remove obsolete provisions.

remain in the existing process, transition to the new process, or go straight to the new process were extensively reviewed in the stakeholder process, with Interconnection Customers presently in the queue very much in favor of the proposed timing.<sup>31</sup> The Transition Period will begin upon the later of the date by which all queue window AD2 or prior projects have an executed ISA or wholesale market participant agreement or have been tendered a service agreement for execution and the effective date for the Tariff, Part VII provisions that the Commission grants. As of the Transition Date, all existing projects in queue windows AE1 through AG1 (i.e., representing New Service Requests submitted during the period from April 1, 2018, through September 30, 2020) that do not have an executed service agreement or have not been tendered a service agreement for execution will have 60 days to provide the required Readiness Deposits and evidence of Site Control for their project for one year.<sup>32</sup> Projects in queue windows AE1 through AG1 that do not provide the required Readiness Deposits and Site Control evidence will be deemed terminated and withdrawn.

Projects in the AE1 through AG1 queue windows that have not been tendered a service agreement that do provide the required Readiness Deposits and Site Control evidence by the 60-day deadline will be part of a retool study to determine the impacts of these projects as a cluster, i.e., a single, aggregated group. Based on the results of the retool, PJM will process those projects that do not cause the need for any Network

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<sup>31</sup> See Connell Aff. ¶¶ 19-20.

<sup>32</sup> Tariff, Part VII, Subpart B, section 303(A); Shoemaker Aff. ¶ 6.

Upgrades and those projects that cause the need for Network Upgrades costing \$5 million or less using Tariff, Part VII's Expedited Process.<sup>33</sup>

Projects in the Expedited Process will be subject to all the Transition Period Rules in Tariff, Part VII, except that these projects will be processed using the existing serial cost allocation rules rather than as a cluster. As a result, PJM will treat projects in the Expedited Process individually and on a serial basis, such that PJM will determine the costs for which an Expedited Process project is responsible and tender a GIA for execution. If the first project does not execute the GIA and elects to withdraw, PJM will move to the next project in the queue.

The remaining queue windows AE1 through AG1 projects that are responsible for Network Upgrade costs in excess of \$5 million will be designated as Transition Cycle #1.<sup>34</sup> Transition Cycle #1 will be subject to all the Tariff, Part VII rules, including Cycle-wide cost allocation. Projects in queue windows AG2 and AH1 will be designated as Transition Cycle #2 and will be subject to all Tariff, Part VII rules, including Cycle-wide cost allocation. Projects in both Transition Cycle #1 and Transition Cycle #2 will be required to provide evidence of Site Control at the outset (in the case of Transition Cycle #2 as part of their initial Application), as well as at Decision Points I and III.

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<sup>33</sup> Tariff, Part VII, Subpart B, sections 304(A)(1)-(B); Shoemaker Aff. ¶ 7.

<sup>34</sup> Tariff, Part VII, Subpart B, section 304(C)(2); Shoemaker Aff. ¶ 7.

**C. The Commission Should Accept the Proposed Filing to Be Effective on the Dates Requested, as It Is Just, Reasonable, and Not Unduly Discriminatory and Has Received Tremendous Consensus Stakeholder Support after an Extensive Stakeholder Process**

The Tariff changes proposed herein are the result of a lengthy and involved stakeholder process which commenced in October 2020, arising out of the critical need to improve and modernize the PJM interconnection process. All interested parties had the opportunity to participate in the stakeholder process. While not every party achieved its desired outcomes, interested stakeholders demonstrated a willingness to compromise throughout the process. Similarly, PJM modified its proposal throughout this process in response to stakeholders.<sup>35</sup> The proposed revisions were approved by three separate PJM committees (the Planning Committee, Markets and Reliability Committee, and Members Committee).<sup>36</sup> The result is a detailed and well-vetted compromise solution package that takes into account the concerns of all parties to reform and improve PJM's interconnection process.<sup>37</sup> Accordingly, the proposed Tariff revisions are just, reasonable and, as noted herein, consistent with Commission precedent, and should be accepted as filed, without modification or condition.

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<sup>35</sup> See Connell Aff. ¶ 18.

<sup>36</sup> *Id.* ¶¶ 21-23.

<sup>37</sup> *Id.* ¶¶ 18, 20.



## II. BACKGROUND

### A. PJM's Present Interconnection Process Grew From a Well-Functioning Historic Foundation, but Is Now Ripe for the Reforms Proposed in This Filing

PJM recognizes the importance of the interconnection process and how it represents a “critical component”<sup>38</sup> of open access transmission service. In the years prior to the Commission’s 2003 interconnection reforms, PJM established itself as a leader in open access transmission operations and was already employing many of the concepts that the Commission relied upon for its *pro forma* interconnection procedures. PJM first filed its generation interconnection process rules with the Commission in March 1999. As PJM explained at the time, it needed to establish rules in order to process an increasing number of requests to interconnect to the PJM Transmission System “so that generation projects are encouraged in the PJM Control Area and are handled in a fair and non-discriminatory manner.”<sup>39</sup> At that time, large natural gas and other conventional fuel projects dominated the queue as illustrated below in Figure 6.

In January 2003, PJM filed standard interconnection procedures for connecting merchant transmission projects in the PJM Control Area.<sup>40</sup> PJM’s stated objective was “to achieve timely and efficient interconnections of generation in the PJM region while assuring generators of evenhanded treatment throughout the interconnection process, all without denigrating the rights of other users of the transmission system.”<sup>41</sup> Another goal

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<sup>38</sup> Order No. 2003 at P 9.

<sup>39</sup> *PJM Interconnection, L.L.C.*, Transmittal Letter, Docket No. ER99-2340-000, at 2 (Mar. 31, 1999).

<sup>40</sup> *PJM Interconnection, L.L.C.*, Transmittal Letter, Docket No. ER03-405-000 (Jan. 10, 2003).

<sup>41</sup> *PJM Interconnection, L.L.C.*, Transmittal Letter, Docket No. ER04-457-000, at 8 (Jan. 20, 2004) (“Order No. 2003 Compliance Filing”).

was to “ensur[e] that economically viable generation projects are completed and that unviable projects are [removed] from the interconnection request queues.”<sup>42</sup> To achieve those goals, PJM employed a serial framework using a six-month analysis period.<sup>43</sup> The process utilized an increasingly comprehensive study progression consisting of a Feasibility Study, System Impact Study, and a Facilities Study,<sup>44</sup> along with related Study Deposits of \$10,000, \$50,000, and \$100,000, respectively.<sup>45</sup> Site Control was also required, but no duration for such control was specified.<sup>46</sup>

In January 2004, PJM submitted its Order No. 2003 Compliance Filing with the Commission, explaining that its then-current interconnection process and procedures were developed “through extensive stakeholder processes and are carefully tailored to the operating provisions and market structures of the PJM region.”<sup>47</sup> PJM therefore proposed to modify its Tariff to add provisions of Order No. 2003’s LGIP and Large Generator Interconnection Agreement that PJM’s Tariff did not already address, and to revise certain terms to be compatible with Order No. 2003 to the extent feasible without upsetting the careful balances on which its current interconnection process was founded.<sup>48</sup> The Commission accepted PJM’s process, allowing several independent entity variations.<sup>49</sup>

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<sup>42</sup> Order No. 2003 Compliance Filing at 8.

<sup>43</sup> *Id.*

<sup>44</sup> *Id.* at 7-8.

<sup>45</sup> See Order No. 2003 Compliance Filing at 14 & Appendix §§ 36.1, 36.3.2, 36.6.2.

<sup>46</sup> See Order No. 2003 Compliance Filing at Appendix § 36.1.

<sup>47</sup> Order No. 2003 Compliance Filing at 2-3.

<sup>48</sup> *Id.*

<sup>49</sup> *PJM Interconnection, L.L.C.*, 108 FERC ¶ 61,025 (2004), *order on reh’g & compliance*, 110 FERC ¶ 61,099, *order on paper hearing*, 112 FERC ¶ 61,276 (2005), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket No. EL05-60-003 (Oct. 10, 2007).

While the bedrock concepts of timeliness, fairness, non-discriminatory access, and efficiency that shaped the PJM interconnection process in the early 2000s hold true today, other factors have dramatically changed, most notably the volume of new capacity and the number and fuel types of projects seeking to interconnect. PJM frequently reviews and tweaks aspects of its interconnection process, continually improving upon how best to interconnect resources. Periodically, PJM and its stakeholders reviewed PJM's interconnection process and proposed changes needed to continue to offer an open, transparent, and efficient interconnection process to all parties involved.<sup>50</sup> While the process may now need certain reforms, the existing Tariff provisions have provided efficient and effective interconnection procedures for many resources for more than two decades. PJM has processed more than 7,000 projects in the interconnection queue to date and, despite the high drop-out rate, almost 80 gigawatts ("GWs") of energy have been interconnected to the PJM Transmission System since 1997, including more than 17.3 GW of renewable generation.<sup>51</sup> Recently, the amount of resources and number of projects

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<sup>50</sup> See, e.g., *PJM Interconnection, L.L.C.*, Letter Order, Docket No. EL08-36-001 (Aug. 19, 2008); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER09-26-000 (Nov. 6, 2008); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER09-755-000 (Mar. 25, 2009); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER09-978-001 (Aug. 17, 2009); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER11-3085-000 (May 5, 2011); *PJM Interconnection, L.L.C.*, 139 FERC ¶ 61,079 (2012) (accepting PJM's interconnection queue process reforms intended to relieve bottlenecks in the interconnection queue among other things); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER12-1177-001 (Aug. 28, 2012); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER16-2518-000 (Oct. 7, 2016); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER16-2518-001 (Dec. 20, 2016).

<sup>51</sup> This amount is the amount of renewable generation with signed service agreements, meaning that these projects completed the interconnection process and 16 GWs of that amount is in service. The new capacity enabled the smooth transition involved in the retirement of close to 40,000 per megawatt ("MW") of coal fired generation since 1997, and allowed PJM to play a pivotal role in assisting the Midcontinent Independent System Operator, Inc. ("MISO") and Southwest Power Pool, Inc. ("SPP") during the Texas winter 2021 emergency. Information on generation deactivations in PJM can be found on PJM's website. *Generation Deactivation*, PJM Interconnection, L.L.C., <https://www.pjm.com/planning/services-requests/gen-deactivations.aspx> (last visited June 10, 2022).

seeking to interconnect has increased exponentially, as described more fully below in Section II.C. Specifically, parties submitted 1,783 New Service Requests from October 1, 2020, through March 31, 2022. As of May 10, 2022, PJM has 2,700 active projects, representing more than 250 GW, at various points in its study process.

PJM, along with its stakeholders, acknowledges the need to closely reexamine its interconnection process and propose meaningful reforms based on the bedrock concepts of timeliness, fairness, non-discriminatory access, and efficiency that are designed to meet the challenges of today and the future. This filing is the culmination of that hard look.

**B. Until Recently, Incremental Innovations in PJM's Interconnection Process Kept Pace with Industry Trends**

The principal components of PJM's interconnection procedures have been largely unchanged since the Commission issued Order No. 2003. Order No. 2003 established *pro forma* procedures and agreements to “(1) limit opportunities for Transmission Providers to favor their own generation, (2) facilitate market entry for generation competitors by reducing interconnection costs and time, and (3) encourage needed investment in generator and transmission infrastructure.”<sup>52</sup> The Commission directed all public utilities that own, control, or operate transmission facilities to amend their open access transmission tariffs to add the relevant procedures and *pro forma* agreements.<sup>53</sup>

On January 20, 2004, PJM submitted its Order No. 2003 Compliance Filing. In its filing, PJM noted that while its Tariff was largely consistent with Order No. 2003, some

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<sup>52</sup> Order No. 2003 at P 12.

<sup>53</sup> *Id.*

areas needed new provisions.<sup>54</sup> Prior to Order No. 2003, PJM's interconnection procedures were contained in Part IV and included provisions addressing study procedures, cost responsibility, and standard interconnection and construction terms.<sup>55</sup> PJM's Tariff also included forms of a Feasibility Study Agreement, an ISA, and an Interconnection Construction Service Agreement ("ICSA").<sup>56</sup> In its compliance filing, PJM proposed changes that sought to bridge gaps between Order No. 2003 and the existing Tariff, including, among other things, alignment of terms, information postings, designation of Point of Interconnection, and certain study-related provisions.<sup>57</sup> PJM also submitted forms of a System Impact Study Agreement, Optional Interconnection Study Agreement, and Interim Interconnection Service Agreement.<sup>58</sup> Following PJM's completion of its various compliance obligations and a paper hearing regarding certain study provisions, the Commission accepted PJM's compliance filing.<sup>59</sup>

The electric industry and related policies continued to evolve and PJM continued to make incremental adjustments to its interconnection process, as detailed in Appendix 2. The industry transformations that led to Order No. 2003, such as the dissolution of some vertically integrated utilities, application of open access concepts, and introduction of competitive markets,<sup>60</sup> were followed by major shifts in the volume and types of generation

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<sup>54</sup> Order No. 2003 Compliance Filing at 3.

<sup>55</sup> *Id.* at 6-7.

<sup>56</sup> *Id.* at 7.

<sup>57</sup> *Id.* at 12-20.

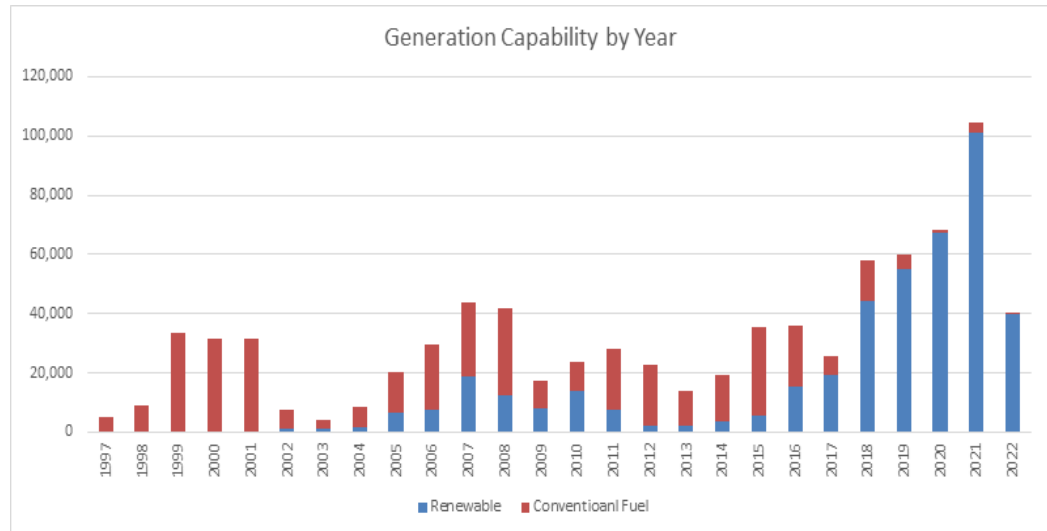
<sup>58</sup> *Id.* at 19.

<sup>59</sup> *See supra* note 49.

<sup>60</sup> Order No. 2003 at P 3.

that customers sought to connect to the grid. Figure 6 below illustrates the shift from conventional fuel sources, the interconnection of which PJM's interconnection process was designed to facilitate, to renewable resources.<sup>61</sup>

**FIGURE 6: INTERCONNECTING RESOURCE TYPES PER YEAR**

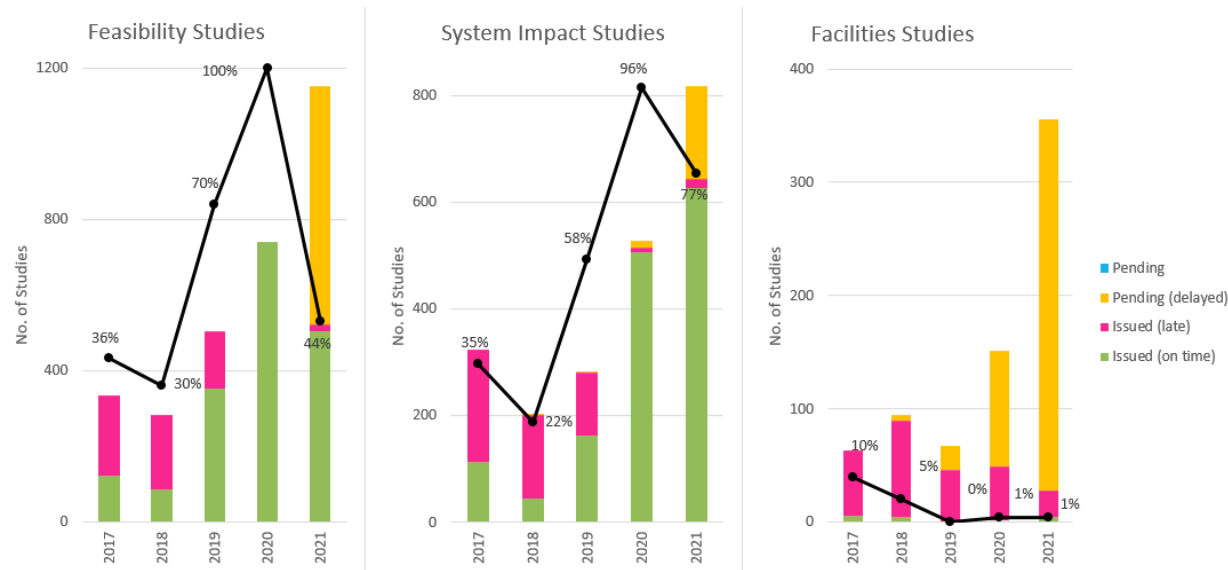


**C. PJM's Interconnection Process Faces a Massive Influx of New Service Requests Which, Using Today's Rules, is Slowing the Interconnection Process**

Recently, the number of resources seeking to interconnect to the Transmission System began increasing exponentially. The volume of New Service Requests more than tripled in the past three years, as shown above in Figures 1 and 2, *see supra* Section I.A. Consequently, the number of queued projects under study has increased, along with the number of backlogged projects waiting to complete the interconnection process, as shown in Figure 7 below.

<sup>61</sup> Here, "conventional fuel" means fuels such as coal, natural gas or nuclear and "renewable" means resources such as wind, solar, or hydroelectric.

**FIGURE 7: STUDY VOLUME AND ON TIME RATE AS OF DECEMBER 31, 2021**



There are multiple reasons for the increase in New Service Requests, but one significant factor is the proliferation of small renewable resources driven by advances in technology, investment in renewables generally, state and federal policies and the particulars of certain legislation, such as the Investment and Production Tax Credits, which includes tax credits for wind and solar technology.<sup>62</sup>

<sup>62</sup> The “Energy Investment Tax Credit” is term used for the investment tax credit related to certain energy property. *See The Energy Credit or Energy Investment Tax Credit (ITC)*, Congressional Research Service (Apr. 23, 2021), <https://crsreports.congress.gov/product/pdf/IF/IF10479>. Congress continues to extend the production tax credit and investment tax credit for renewable energy resources, as in the Consolidated Appropriations Act of 2021, Pub. L. No. 116-260, 134 Stat. 1182 (2020) (enacting the Taxpayer Certainty and Disaster Tax Relief Act of 2020 as Division EE, which amended Sections 45 and 38 of the Internal Revenue Code with regard to the production tax credit and investment tax credit). In addition to Congress’ extension of the Production Tax Credits and Investment Tax Credits for renewable resources, other factors include state renewable portfolio standards, state incentive programs, corporate green incentives, and decreasing costs for inverter-based technology. *See PJM Releases Initial Results of Renewable Energy Transition Study*, PJM Interconnection, L.L.C. (Dec. 15, 2021), <https://www.pjm.com/-/media/about-pjm/newsroom/2021-releases/20211215-pjm-releases-initial-results-of-renewable-energy-transition-study.ashx> (“PJM synthesized the diverse set of state policies within its footprint into three scenarios in which an increasing amount of energy is served by renewable generation on an annual basis (10 percent, 22 percent and 50 percent), up to 70 percent carbon-free generation when combined with nuclear generation. Currently, renewables represent approximately 6 percent of the annual energy, a total of over 40 percent carbon-free when combined with nuclear’s contribution to the energy mix in 2020.”); *see also 2022 Renewable Energy Industry Outlook*, Deloitte 2 (Nov. 17, 2021),

The numbers of New Service Requests remain large even though the Tariff already includes requirements for Study Deposits and pre-conditions related to project development, such as evidence of Site Control, meant to help avoid speculative proposals. Today's study deposits are minimal, not progressive, and largely refundable, which does not incent speculative projects to drop out of the queue. Further, developers are waiting for higher queued projects to make decisions in order to have cost certainty about the network upgrade costs that they will be responsible for before making a decision about whether to proceed or withdraw. This highly serialized process along with low or regressive continuation requirements encourages developers to continue in the process often in spite of potentially high network upgrade costs with the hope that a higher queued project will withdraw and make their project viable. This may be because under the existing interconnection procedures, PJM may only require evidence of Site Control once, at the application stage. In PJM's experience, this has proven inadequate, because a speculative project can provide evidence of Site Control when it submits its application but may not maintain Site Control through the entire study process. PJM's reforms ensure the project has Site Control at the application stage as well as at Decision Point I and at Decision Point III.

The high volume of New Service Request submissions that PJM has received in recent years has a direct, adverse effect on PJM's study processes.<sup>63</sup> While the volume of

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<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/energy-resources/us-eri-renewable-energy-outlook-2022.pdf> (indicating that declining costs and growing competitiveness of battery storage led to increased growth in 2021).

<sup>63</sup> PJM's ability to process and study the massive number of New Service Requests received is further hampered by a tight labor market and extraordinary competition for the highly skilled individuals needed to staff its Interconnection Projects and Interconnection Analysis departments. *See* Connell Aff. ¶ 14.



studies increased through June 30, 2021, PJM was able to make improvements to its process in order to continue meeting the Order No. 845<sup>64</sup> performance metrics requirements for its Feasibility Studies and System Impact Studies.<sup>65</sup> Given the growing delay in PJM's Facilities Study process, as noted in recent reports on interconnection study performance metrics,<sup>66</sup> PJM reprioritized its study workload to focus on its Facilities Study process. This workload reprioritization resulted in a temporary negative impact to PJM's performance in the Feasibility Study and System Impact Study processes. The benefits of the reprioritization are beginning to be realized, as new staff has been trained, significant retool work has been accomplished, and the number of Facilities Studies tendered increased in the second half of 2021 by approximately 20 percent.<sup>67</sup> However, the overall throughput has declined as PJM expends more resources to accommodate this volume.<sup>68</sup> As a result, PJM has had to seek waivers of deadlines,<sup>69</sup> has received multiple complaints in the past

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<sup>64</sup> *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *order on reh'g & clarification*, Order No. 845-A, 166 FERC ¶ 61,137, *order on reh'g & clarification*, Order No. 845-B, 168 FERC ¶ 61,092 (2019).

<sup>65</sup> See *PJM Interconnection, L.L.C.*, Informational Report on Interconnection Study Performance Metrics, Docket No. ER19-1958-003, at 15-19 (Feb. 14, 2022) ("February 2022 Informational Report") (describing multiple improvements to mitigate delayed Facilities Studies); *PJM Interconnection, L.L.C.*, Informational Report on Interconnection Study Performance Metrics, Docket No. ER19-1958-003 (Aug. 16, 2021) ("August 2021 Informational Report").

<sup>66</sup> See, e.g., February 2022 Informational Report at 6-7.

<sup>67</sup> Connell Aff. ¶ 15.

<sup>68</sup> The total number of PJM employee hours and third-party consultant hours expended towards interconnection studies increased from an already overpowering total of 241,933 hours in 2020 to a total of 262,295 hours in 2021. See February 2022 Informational Report at 20. However, these resources are not infinite, even if PJM's budget were—the pool of qualified engineers and consultants is limited.

<sup>69</sup> See *PJM Interconnection, L.L.C.*, Request of PJM Interconnection, L.L.C. for Waiver of Tariff Provisions, Docket No. ER21-1016-000 (Jan. 29, 2021); *PJM Interconnection, L.L.C.*, Request of PJM Interconnection, L.L.C. for Waiver of Tariff Provisions, Expedited Consideration, and Shortened Comment Period, Docket No. ER20-2914-000 (Sept. 17, 2020); *PJM Interconnection, L.L.C.*, Request of PJM Interconnection, L.L.C. for Waiver of Tariff Provisions, Expedited Consideration, and Shortened Comment Period, Docket No. ER20-1392-000 (Mar. 25, 2020).

two years for delayed interconnection processes,<sup>70</sup> and currently has difficulty meeting the Tariff-mandated timelines for processing its interconnection queue using reasonable efforts, as required.<sup>71</sup>

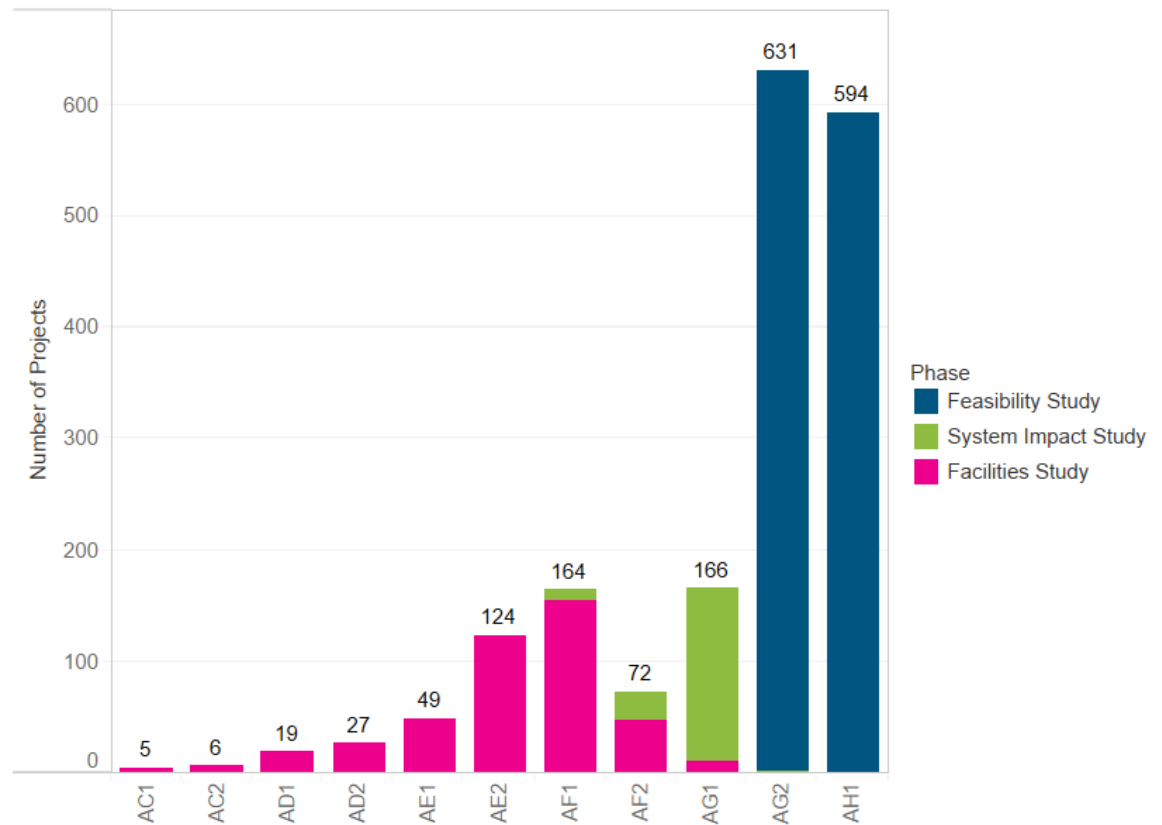
It is vital that PJM clear the Facilities Study backlog for older projects in order to improve actionable analyses results and cost certainty for new queued projects prior to issuance of their Feasibility Studies. At the Facilities Study stage, there is a focus on conceptual design by the Transmission Owners; stability analyses are conducted, and the delineation of the required Interconnection Facilities and Network Upgrades are refined. The Facilities Study duration and, consequently, the completion date, is dependent upon a number of moving parts. Significant aspects include the queue volume, specific complexities within the Transmission Owner zones, the demand for System Impact Study retool analyses, restudies due to withdrawn projects, additional studies as required to accommodate the type of technology proposed, proposed technological changes that are not otherwise Permissible Technological Advancements, and other Material Modification evaluations. Figure 8 below illustrates the volume of backlogged studies in need of completion.

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<sup>70</sup> See, e.g., Zack Hale, *HVDC transmission developer asks FERC to act on PJM interconnection study delays*, S&P Global (June 23, 2021), <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/hvdc-transmission-developer-asks-ferc-to-act-on-pjm-interconnection-study-delays-65140811>; Zack Hale, *Divided FERC grants waiver, highlighting PJM's interconnection woes*, SNL Renewable Energy Weekly (July 9, 2021); Zack Hale, *Clean energy group seeks FERC action on PJM, Duke interconnection 'paralysis'*, SNL Power Policy Week (Aug. 11, 2021); Zack Hale, *Solar developer adds to pile of complaints targeting PJM study delays*, S&P Global (Aug. 11, 2021), <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/solar-developer-adds-to-pile-of-complaints-targeting-pjm-study-delays-66010610>; Ethan Howland, *SOO Green transmission project faces PJM obstacles: Are grid operators hindering the energy transition?*, Utility Dive <https://www.utilitydive.com/news/soo-green-pjm-grid-operators-helping-or-hurting-energy-transition/616966/> (Jan. 13, 2022).

<sup>71</sup> See Tariff, Part IV, Subpart A, section 41.6; see also Order No. 845.

**FIGURE 8: BACKLOG OF PROJECTS IN STUDY PHASES, APRIL 2022<sup>72</sup>**



Further, existing cost responsibility procedures require an iterative process for determining the appropriate cost causer for necessary Network Upgrades.<sup>73</sup> The increased volume makes an iterative process more unwieldy and results in provision of less actionable cost information to New Service Customers.<sup>74</sup> The high volume of New Service Request submissions combined with PJM’s first-in first-out Tariff approach continues to have a detrimental cascading impact on PJM’s Facilities Study process and timing,

<sup>72</sup> These queue windows cover the period from May 1, 2016, through September 30, 2021. Refer to Figure 5, *supra*, for the time periods corresponding to these queue window designations.

<sup>73</sup> Connell Aff. ¶ 12.

<sup>74</sup> *Id.* ¶ 13.

generally.<sup>75</sup> The result is delayed completion of studies, which inhibits New Service Customers from proceeding to final agreements and beginning the implementation phase of their projects.

### **III. STAKEHOLDER PROCESS**

Beginning in the fall of 2020, PJM, through its Planning Committee, undertook with stakeholders a detailed review of its interconnection processes with the idea of potentially developing Tariff changes that would improve the interconnection process and could obviate the need for future waivers of the type PJM was then seeking.<sup>76</sup> In addition, PJM held a series of workshops with the stakeholders to provide education, document stakeholders' concerns and issues, and determine a clear set of objectives for the stakeholder process to address.

As a result of these workshops, the stakeholders identified 69 unique concerns and 135 unique suggestions for interconnection reform.<sup>77</sup> PJM established the Interconnection Process Reform Task Force ("IPRTF") in March 2021 to address the interconnection processing issues. Thus, this filing represents not only a massive and comprehensive revamp of the PJM interconnection process, but the immense cumulative effort by PJM staff and stakeholders. The proposed reforms set forth in this filing represent a collection of just and reasonable and not unduly discriminatory steps that are designed to reduce the current request backlog, increase process efficiency to prevent a future backlog; and decrease uncertainty for all affected entities—Project Developers, Transmission Owners,

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<sup>75</sup> See August 2021 Informational Report 6-9 (describing the cascading effect of study delays).

<sup>76</sup> See *supra* note 69.

<sup>77</sup> Connell Aff. ¶ 17.

the Transmission Provider, and other stakeholders—by inherently separating out projects that are not ready to proceed to commercial operation or that are otherwise too speculative to complete the interconnection process. This filing proposes the largest number of Tariff changes in decades, the implementation of which will require up to three Cycles. The implementation process will be a lengthy process and one that relies on each component part of this filing to administer properly. Once implemented, PJM’s interconnection process will be more workable for the long run for all parties involved.

PJM believes the stakeholder process framing the interconnection reform initiative was robust and thorough, and ensured a meaningful opportunity for all stakeholders to participate. In fact, the 20 IPRTF meetings, which occupied approximately 99 hours, represented significant stakeholder engagement, with 290 PJM Member Companies and 545 total companies participating in the December 2021 polling on the New Rules solution package.<sup>78</sup> The number of Members voting on the proposed interconnection reform package was also extremely high, and the votes themselves evidenced tremendous support for the reform package, with the proposed reforms endorsed on April 27, 2022, by a sector weighted vote of 4.368 out of a total of 5.00 by PJM’s Markets and Reliability Committee and a sector weighted vote of 4.518 out of a total of 5.00 by PJM’s Members Committee.<sup>79</sup>

Following the April 27, 2022 votes by the Markets and Reliability Committee and the Members Committee, two amendments to the approved interconnection reform proposal were presented and passed at the May 17, 2022 Members Committee meeting. The two amendments concerned:

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<sup>78</sup> *Id.* ¶¶ 18, 20.

<sup>79</sup> *Id.* ¶ 23.

- Removing a Transmission Owner as a party to the Network Upgrade Cost Responsibility Agreement; and
- Revisions to the Site Control requirements to address “non-standard” sites, such as bodies of water and submerged land (i.e., sites for offshore wind projects) and their unique permitting challenges.<sup>80</sup>

Notwithstanding the many areas of agreement and consensus support, because of the breadth of issues addressed it was impossible to achieve 100 percent consensus on the overall interconnection reform package presented in this filing. PJM believes that there is no set of procedures that will perfectly meet all stakeholders’ needs given the diversity of the stakeholders impacted by this massive interconnection reform initiative. Indeed, PJM is, in this single filing, proposing an entire overhaul of its interconnection process—a feat that took other RTOs years and multiple filings to achieve. As expected in a multi-party stakeholder process, not every party achieved their desired solutions; rather, the result of the interconnection reform stakeholder process is a negotiated, reasonable solution package that will take into account the concerns of all parties, will strive to balance divergent interests and public policy objectives, and will comprehensively reform and improve PJM’s interconnection process for all stakeholders—thereby benefiting the PJM interconnection process and the industry as a whole. In sum, the Commission should accept the filing as just and reasonable.<sup>81</sup> As the courts and the Commission have observed,

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<sup>80</sup> *Id.* ¶ 24.

<sup>81</sup> The Commission’s policy is to respect filings that are the result of an involved stakeholder process to address regional issues, with compromises made on all sides, and high level stakeholder support for the final package of reforms, and it should do so here. *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 118 FERC ¶ 61,119, at P 561 (“[R]egional solutions that garner the support of stakeholders, including affected state authorities, are preferable.”), *order on reh’g*, Order No. 890-A, 121 FERC ¶ 61,297 (2007), *order on reh’g & clarification*, Order No. 890-B, 123 FERC ¶ 61,229 (2008),

there can be more than one just and reasonable proposal, for “reasonableness is a zone, not a pinpoint.”<sup>82</sup>

#### **IV. NEW PARTS VII AND VIII ARE JUST AND REASONABLE**

##### **A. The Transition Period Rules and New Rules Will Establish a More Efficient and Effective Interconnection Process**

The new Part VII and Part VIII rules substantially reform and improve PJM’s interconnection procedures and are just and reasonable; therefore, they should be accepted by the Commission as filed. Similar to steps taken by MISO and SPP,<sup>83</sup> PJM is transitioning from a first-come, first-served serial study and interconnection process, to a first-ready, first-served three-stage Cycle study and interconnection process. This process will adopt readiness, Site Control, and other requirements that serve as means to reduce the number of speculative or non-ready projects in the Cycle; Decision Points at which a project can decide to move forward or withdraw; and accelerated procedures whereby a project that does not need to go through the full process can exit the study process and enter into an interconnected-related agreement. These elements apply under both the Transition Period Rules and the New Rules. Each Cycle is effectively isolated from prior Cycles to

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*order on reh’g and clarification*, Order No. 890-C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

<sup>82</sup> *Wis. Pub. Power, Inc. v. FERC*, 493 F.3d 239, 266 (D.C. Cir. 2007). Moreover, the fact that certain parties prefer a different approach does not mean this filing is not just and reasonable. *See id.* (stating (“[m]erely because petitioners can conceive of a refund allocation method that they believe would be superior to the one FERC approved does not mean that FERC erred in concluding the latter was just and reasonable”)); *Cities of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984) (“FERC has interpreted its authority to review rates under [the FPA] as limited to an inquiry into whether the rates proposed by a utility are reasonable -- and not to extend to determining whether a proposed rate schedule is more or less reasonable than alternative rate designs.”); *OXY USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) (“[T]he Commission may approve the methodology proposed in the settlement agreement if it is ‘just and reasonable’; it need not be the only reasonable methodology or even the most accurate.”).

<sup>83</sup> *See MISO 2008*, 124 FERC ¶ 61,183; *Sw. Power Pool, Inc.*, 128 FERC ¶ 61,114 (“SPP”), *order on compliance*, 129 FERC ¶ 61,226 (2009), *order on compliance*, 133 FERC ¶ 61,139 (2010); *see also Sw. Power Pool, Inc.*, 167 FERC ¶ 61,275 (2019).

provide more accurate and actionable cost and study information, reduce the impact of withdrawals from the interconnection process, and inherently prevent growing backlogs in the study process. The reforms also adopt consolidated sets of definitions that apply to the Parts VII and VIII rules and the Part IX interconnection-related agreements,<sup>84</sup> and consolidate the interconnection-related agreements in one part of the Tariff (Part IX). These last steps should facilitate PJM's administration of the Tariff and make it easier for Project Developers and others to understand and adhere to the Tariff.

Under its current procedures, PJM uses a three-step study process consisting of a Feasibility Study, System Impact Study and (where necessary) a Facilities Study, which generally are processed on a serial, i.e., first-come, first-served basis. PJM presently follows different interconnection procedures depending on the size and type of project, but will realize additional efficiencies in its proposed new interconnection process through the consolidation of processes for interconnection of both small and large generators.<sup>85</sup> Under the Transition Period Rules and New Rules, PJM will use a single application and study process that includes three System Impact Studies to evaluate New Service Requests on a unified, cluster basis. The new process also will include Facilities Studies in Phases II and III. To facilitate the processing of New Service Requests, all applications and required information, as well as all Readiness Deposits, must be submitted electronically.

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<sup>84</sup> Because Tariff, Parts VII and VIII will be in effect for different time periods, each Part includes its own definitional sections.

<sup>85</sup> See Connell Aff. ¶ 36.

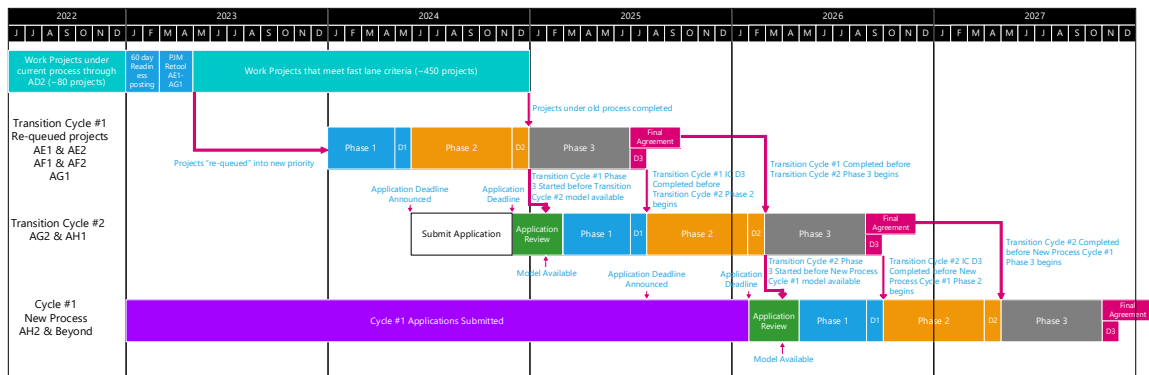


**B. The Proposed Transition Period Rules Will Allow PJM to Move to the New Rules Quickly and Efficiently While Also Respecting the Priority of Late-Stage Projects in the Existing Queue**

**1. Transition Period Eligibility and the Initial Sorting Process**

As mentioned above, the Part VII Transition Period Rules and Part VIII New Rules are similar in key respects, with the primary difference being that Part VII adopts a sorting mechanism whereby projects that require minimal Network Upgrades will be subject to PJM's Expedited Process under Part VII, while placing other projects in Transition Cycle #1, Transition Cycle #2 or the New Rules Cycles. This balanced approach is a key element of the negotiated stakeholder process. Figure 9 below shows the Transition Period sorting and sequencing process, with further information on the process found in the Connell and Shoemaker Affidavits.<sup>86</sup>

**FIGURE 9: TRANSITION PERIOD SEQUENCING AND PROCESS**



The Transition Period Rules themselves will apply to all projects in the AE1, AE2, AF1, AF2, AG1, AG2, and AH1 queue windows that have not been tendered or executed

<sup>86</sup> *Id.* ¶¶ 28-31; Shoemaker Aff. ¶¶ 14-20. As Mr. Shoemaker explains, both the Part VII and Part VIII rules adopt a gating mechanism will treat each Cycle as a discrete review, and will avoid PJM having to address a large number of requests in one Cycle while still undertaking the studies required for a prior Cycle. Shoemaker Aff. ¶ 14. It should simplify cost allocation and reduce uncertainty as to which facilities are needed for a specific Cycle, and further reduce the need for restudies and the resulting backlog. *Id.*

an ISA or wholesale market participant agreement as of the Transition Date.<sup>87</sup> Within sixty days of the Transition Date, a Project Developer that has submitted a valid New Service Request during these queue windows and has not been tendered or executed an ISA or wholesale market participation agreement must provide a Readiness Deposit of \$4,000 per MW.<sup>88</sup> In addition, the Project Developer must demonstrate Site Control over one or more parcels of land for the purpose of constructing a Generating Facility or Merchant Transmission Facility through a deed, lease, or option for at least a one-year term beginning from the Transition Date.<sup>89</sup> PJM will deem a Project Developer's New Service Request terminated and withdrawn if it fails to meet these requirements.<sup>90</sup> All projects in queue windows AE1 through AG1 that meet these requirements will be retooled and restudied to determine whether they share cost responsibility for one or more Network Upgrades.<sup>91</sup> These projects will be studied using the Base Case model that was used for their System Impact Study analysis prior to the effective date of Tariff, Part VII.<sup>92</sup> Using the existing study methods will allow developers to rely on current System Impact Study results to understand approximately where they will land in the sorting process. This method also

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<sup>87</sup> Tariff, Part VII, Subpart A, section 301(A)(2); Shoemaker Aff. ¶ 5. PJM will provide notice of the Transition Date either by posting the notice on its website or sending an email notice to stakeholders.

<sup>88</sup> Tariff, Part VII, Subpart B, section 303(A)(1); Shoemaker Aff. ¶ 6. This deposit is not at risk prior to the end of Decision Point I. Tariff, Part VII, Subpart B, section 303(A)(1).

<sup>89</sup> Tariff, Part VII, Subpart B, section 303(A)(2); Shoemaker Aff. ¶ 6. The Site Control requirements in both Parts VII and Part VIII only apply to Project Developers and not Eligible Customers, because an Eligible Customer does not have or require a Site as defined under Parts VII and VIII. Shoemaker Aff. ¶ 26.

<sup>90</sup> Tariff, Part VII, Subpart B, section 303(A)(3); Shoemaker Aff. ¶ 6.

<sup>91</sup> Tariff, Part VII, Subpart B, section 304(A)(1).

<sup>92</sup> *Id.*

allows PJM to quickly determine, using existing data and studies, the amount of projects that would qualify for the Expedited Process.

Projects in queue windows AE1 through AG1 that have met the requirements for the retool analysis and for which the retool analysis has identified no Network Upgrade requirements or no cost allocation for shared Network Upgrade(s) whose total cost is greater than \$5 million will be processed pursuant to the Transition Period Rules' Expedited Process.<sup>93</sup> Projects in queue windows AE1 through AG1 that meet the requirements for the retool analysis and the retool analysis has identified them as the first to cause a Network Upgrade that has a total estimated cost of greater than \$5 million or as having a cost allocation for shared Network Upgrade(s) that is greater than \$5 million will not be included in the Expedited Process; rather, such projects will be reprioritized by placing them in Transition Cycle #1.<sup>94</sup> The reprioritization will occur upon completion of the collective retool results and not on an iterative basis. Projects included in the Expedited Process do not have to provide any additional Readiness Deposits and are not subject to other readiness requirements.<sup>95</sup> These projects will have their Facilities Studies completed, and will be tendered an interconnection-related service agreement pursuant to Tariff, Part IX, and must pay all actual study costs.<sup>96</sup>

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<sup>93</sup> Tariff, Part VII, Subpart B, sections 304(A)(1)-(B); Shoemaker Aff. ¶ 7.

<sup>94</sup> Tariff, Part VII, Subpart B, section 304(A)(1); Shoemaker Aff. ¶ 7. Additionally, if a project is an uprate whose base project does not qualify for the expedited process, the uprate also will not qualify for the expedited process, regardless of analysis results. Furthermore, if a stability analysis or a sag study is completed during the expedited process, and it is determined that a project has an estimated Network Upgrade cost greater than \$5 million, the project will not be subject to the expedited process. Tariff, Part VII, Subpart B, section 304(B).

<sup>95</sup> Tariff, Part VII, Subpart B, section 304(B); Shoemaker Aff. ¶ 7.

<sup>96</sup> Tariff, Part VII, Subpart B, section 304(A)(1); Shoemaker Aff. ¶ 7.

## **2. Transition Cycles #1 and #2**

New Service Requests in Transition Cycle #1 and Transition Cycle #2 will be processed in three phases (Phase I, Phase II, and Phase III).<sup>97</sup> Each phase requires Readiness Deposits that become increasingly at-risk as the project proceeds, and each has a defined Decision Point under which a project must decide to move forward and either make additional Readiness Deposits or provide Security, or withdraw and potentially forfeit some or all of the Readiness Deposits already made.<sup>98</sup> These mechanisms are similar to those adopted by other RTOs<sup>99</sup> and should serve to deter immature or unready projects from entering into, or remaining in, the PJM interconnection process, while at the same time, not being overly burdensome to Project Developer and Eligible Customers.<sup>100</sup> These mechanisms will also provide a pool of dollars that will help protect Project Developers and Eligible Customers that move forward from the cost impact of underfunded Network Upgrades resulting from withdrawn New Service Requests.<sup>101</sup>

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<sup>97</sup> Tariff, Part VII, Subpart A, sections 301(A)(2)-(3) and Part VIII, Subpart A, section 401(D) and Subpart C, section 404(A).

<sup>98</sup> While the Project Developer or Eligible Customer may be able to receive a full or partial refund of its Readiness Deposits, its refund may be reduced to defray the costs of Network Upgrades left underfunded by its withdrawal.

<sup>99</sup> See *Sw. Power Pool, Inc.*, 178 FERC ¶ 61,015, at P 45 (2022) (stating “SPP’s proposals to increase financial commitments and require additional demonstrations of site control are reasonable because they may reduce the number of speculative or uncertain projects in SPP’s interconnection queue that are more likely to withdraw and therefore more likely to cause restudies”); *Midcontinent Indep. Sys. Operator*, 158 FERC ¶ 61,003, at P 43 (finding MISO’s proposed M2, M3, and M4 milestone payments to be just and reasonable and not unduly discriminatory, and therefore accept them); see also *PacifiCorp*, 171 FERC ¶ 61,112, at PP 112-13 (finding proposed withdrawal penalties to be consistent with or superior to FERC’s pro forma interconnection provisions and provide appropriate incentives).

<sup>100</sup> Shoemaker Aff. ¶ 22.

<sup>101</sup> *Id.*

PJM will also conduct a System Impact Study during each of the three phases to evaluate the impact of the cluster of New Service Requests in the Cycle and the need for, and costs of, upgrades to accommodate the New Service Requests.<sup>102</sup> A Project Developer or Eligible Customer will have the right to withdraw without forfeiting its Readiness Deposits at Decision Points II and III if the relevant System Impact Study shows an inordinate increase in interconnection costs from the prior System Impact Study or that the withdrawal will not adversely affect other projects.<sup>103</sup>

The studies in each phase will provide actionable information to the Project Developers earlier in the interconnection process, improving their ability to make decisions.<sup>104</sup> With all projects moving collectively through the Cycle and making project decisions at the same time, developers will have more cost certainty when proceeding from one phase to the next. Further, with increased Readiness Deposits, developers whose projects trigger many Network Upgrades and therefore may not be viable will be incentivized to withdraw these non-viable projects from the Cycle. This improved information, coupled with Decision Points at which all projects in the Cycle must decide whether to advance or withdraw, and—if the former—invest additional funds, is expected to reduce the number of late-stage withdrawals, thereby minimizing the disruptive effects

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<sup>102</sup> Tariff, Part VII, Subpart D, section 307(A) and Part VIII, Subpart C, section 404(A). Based on the results of the Phase I or Phase II System Impact Study, PJM may be able to accelerate the treatment of a New Service Request such that the Project Developer or Eligible Customer can enter into a final GIA or other agreement under Tariff, Part IX, without undergoing further studies. Tariff, Part VII, Subpart D, sections 309(A)(2) and 311(A)(2)(d) and Part VIII, sections 406(A)(1) and 408(A)(1).

<sup>103</sup> Tariff, Part VII, Subpart D, sections 311(B)(3) and 313(B)(4-5) and Part VIII, Subpart D, sections 408(B)(3)(b)(ii) and 401(D)(2)(c); Shoemaker Aff. ¶ 51.

<sup>104</sup> Although it is not part of the Tariff, PJM anticipates providing a prescreening portal beginning in early 2023. Connell Aff. ¶ 36. The portal, described in the Sims Affidavit, will give interested parties a preliminary view of the system impacts proposed projects would have on an individual basis, based on inputs provided by the users.

of cascading withdrawals. The fact that all projects must decide at the same time whether to advance or withdraw, and that PJM will perform retool studies on the remaining projects as a single group, is intended to dramatically reduce the time to process the Cycle as compared to the processing time under the current serial decision-making regime.

The use of multiple System Impact Studies, combined with the Decision Points, recognizes that projects may withdraw from the interconnection process. Whereas the current interconnection process allows Developers to withdraw at any point in time, the reformed interconnection process includes built-in check points to ensure withdrawals occur only at set points in the process. These pre-determined exit ramps from the reformed interconnection process protect the projects that remain. The exit ramps also streamline PJM's study process by allowing for systematic, scheduled studies and retools at defined points in the process, rather than requiring PJM to undertake restudies whenever any project withdraws. For these reasons, the proposal to use multiple System Impact Studies coupled with Decisions Points is expected to markedly improve the efficiency of PJM's interconnection process. Additionally, adopting a study process whereby subsequent Cycles are gated by the completion of prior Cycles, will also reduce uncertainty as to which facilities are needed for a specific Cycle.<sup>105</sup> The gating mechanism will also protect PJM from having to address a large number of requests in one Cycle while still undertaking the studies required for a prior Cycle.<sup>106</sup>

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<sup>105</sup> Shoemaker Aff. ¶¶ 14, 35.

<sup>106</sup> See *Cal. Indep. Sys Operator Corp.*, 176 FERC ¶ 61,207, at P 21 (2021); see also Shoemaker Aff. ¶¶ 14, 35.

The increased information required as part of the initial application, along with the Decision Points, will also ensure PJM has the appropriate technical information needed for its further studies. This additional information will also position PJM to provide more actionable information to developers of projects that are ready to move forward. Projects that do not have any network impacts after initial study or retools and do not require additional studies may proceed to the Final Agreement Negotiation Phase, further advancing projects that are ready.<sup>107</sup> The use of a defined Final Agreement Negotiation Phase commencing during Decision Point III should also facilitate the processing of New Service Requests and moving parties into final interconnection-related agreements.

Finally, PJM is an independent entity that it is not affiliated with any Market Participant,<sup>108</sup> and PJM has no incentive or reason to favor one class of stakeholder or Market Participant over another. Thus, to the extent the Tariff revisions depart from the Commission's *pro forma* interconnection procedures set forth in Order Nos. 2003, 845, and other rulemakings, these provisions should be evaluated under the independent entity standard. Under that standard, the RTO "must demonstrate that its proposed variations are just and reasonable and not unduly discriminatory, and that they would accomplish the

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<sup>107</sup> Tariff, Part VII, Subpart D, section 311(A)(2)(d); Tariff, Part VIII, Subpart C, sections 406(A)(1) and 408(A)(1); Shoemaker Aff. ¶¶ 18, 31.

<sup>108</sup> The Commission has found the use of that standard is appropriate for PJM and other RTOs, and should do the same here. *See PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,226, at PP 32, 34, 65-70 (2019) (accepting revisions on PJM's Order No. 845 compliance filing under the independent entity standard), *order on compliance & reh'g*, 171 FERC ¶ 61,145 (2020), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER19-1958-003 (Oct. 30, 2020); *see also Midcontinent Indep. Sys. Operator, Inc.*, 178 FERC ¶ 61,141, at P 3 (2022) (holding that "the Commission indicated that it would allow regional transmission organizations . . . to propose independent entity variations for pricing and non-pricing provisions" and that an RTO "is less likely to act in an unduly discriminatory manner than a transmission provider that is also a market participant"); *SPP*, 128 FERC ¶ 61,114, at P 15 (finding use of independent entity variant is appropriate for evaluating the interconnection reform filing submitted by SPP).

purposes of Order No. 2003.”<sup>109</sup> These reforms proposed herein will not only enable more efficient processing of New Service Requests and help address the existing queue backlog, but also serve to accomplish the goals in Order No. 2003. Finally, many of the proposed Tariff revisions build off PJM’s existing Tariff provisions, which have already been found just and reasonable by the Commission.

**a. Transition Cycle #1 and Transition Cycle #2 Timing and Process**

Transition Cycle #1 will start after Transmission Provider completes the eligibility review for the Expedited Process and no later than one year from the Transition Date, with Transition Cycle #1 to run simultaneously with the Expedited Process.<sup>110</sup> Critically, Phase III of Transition Cycle #1 will not begin until all Expedited Process projects have executed or been tendered Generator Interconnection Agreements.<sup>111</sup> There is no Application Review Phase in Transition Cycle #1 because Transition Cycle #1 will consist of projects reprioritized from queue windows AE1 through AG1 that did not satisfy the requirements for the Expedited Process.<sup>112</sup> Figure 9 above, and Mr. Shoemaker’s affidavit<sup>113</sup> illustrate and describe that the sequencing process for Transition Cycles #1 and #2.

Transition Cycle #2 will consist of valid projects submitted in the AG2 and AH1 queue windows, which ran from October 1, 2020, through September 30, 2021.<sup>114</sup> To move forward in Transition Cycle #2, the Project Developer or Eligible Customer must

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<sup>109</sup> *Midcontinent Indep. Sys. Operator*, 158 FERC ¶ 61,003, at P 21.

<sup>110</sup> Tariff, Part VII, Subpart B, section 304(C)(2)(a); Shoemaker Aff. ¶ 14.

<sup>111</sup> *Id.*

<sup>112</sup> Tariff, Part VII, Subpart B, sections 304(C)(2)(b)-(c).

<sup>113</sup> Shoemaker Aff. ¶¶ 14-20.

<sup>114</sup> Tariff, Part VII, Subpart C, section 305(A)(1); Shoemaker Aff. ¶ 9.



submit the detailed Application and Studies Agreement set forth in Tariff, Part IX, and provide the required Study and Readiness Deposits.<sup>115</sup> Notably, PJM has adopted a more streamlined and focused application process for Transition Cycle #2 and for all New Service Requests under the New Rules, which should benefit PJM as well as stakeholders.<sup>116</sup>

Rather than multiple forms of applications depending on the size of the project, PJM will now use one form of application for all New Service Requests, which is set forth in Subpart A of Tariff, Part IX.<sup>117</sup> All applications and required information must be submitted electronically, and all Study Deposits are to be made by wire transfer, while Readiness Deposits may be made by wire transfer or letter of credit.<sup>118</sup> This should facilitate the processing of applications and any required information and deposits, and make it easier for Project Developers and Eligible Customers to submit material and to do so within the required timeframes.<sup>119</sup>

To remain consistent with the projects as originally proposed in queue windows AG2 through AH1, a Project Developer or Eligible Customer cannot change its project's fuel type from that which it previously submitted, and cannot increase its requested Maximum Facility Output or Capacity Interconnection Rights.<sup>120</sup> PJM notes that under its existing procedures, an Interconnection Customer cannot change its fuel type without

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<sup>115</sup> Tariff, Part VII, Subpart C, section 305(A)(2); Shoemaker Aff. ¶ 9.

<sup>116</sup> Shoemaker Aff. ¶ 9.

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> *Id.*

<sup>120</sup> Tariff, Part VII, Subpart C, sections 305(A)(2)(a)-(b); Shoemaker Aff. ¶ 9.

triggering a Material Modification analysis, and cannot increase its proposed Maximum Facility Output.<sup>121</sup> While slightly different from the existing procedures, the Transition Period restrictions on changes are part of the stakeholder compromise for the AG2 and AH1 projects. Because these projects submitted their applications before the IPRTF coalesced around a transition proposal, they should have priority over new applications. In return for that priority, these projects agree to “lock in” their projects largely as submitted. However, a Project Developer can reduce its project’s Maximum Facility Output or Capacity Interconnection Rights by up to 100 percent, and must choose between its previously identified primary and second Points of Interconnection.<sup>122</sup> Eligible Customers can also reduce their requested transmission capacity by up to 100 percent, but cannot increase it.<sup>123</sup>

**b. There will be no block-out period under the Transition Period or New Rules**

Finally, PJM notes that there are no block-outs, i.e., no periods in which applications will not be accepted. Once the two Transition Cycles are completed, all applications submitted in queue window AH2 (which ran from October 1, 2021, through March 31, 2022) and after, up to the date when PJM provides notice that it will begin accepting applications for the first wholly new Cycle, will need to supplement and update their New Service Requests with additional items required by the New Rules, such as dynamic data, updated Site Control evidence, and updated Study Deposit and the Readiness

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<sup>121</sup> Tariff, Part IV, Subpart A, sections 36.2A-36.2A.3.

<sup>122</sup> Tariff, Part VII, Subpart C, sections 305(A)(2)(a)-(c); Shoemaker Aff. ¶ 9.

<sup>123</sup> Tariff, Part VII, Subpart C, section 305(A)(2)(d); Shoemaker Aff. ¶ 9.

Deposit. These projects will essentially be in the process but, by necessity, on hold while PJM processes the Transition Period Cycles. Nevertheless, PJM will continue to accept applications during this period as these submittals will then comprise the first projects to proceed under the New Rules as Cycle #1.

- c. **The proposed Transition Rules and sorting procedures appropriately balance the need for PJM to clear the study backlog as quickly as possible and start the Cycle process while at the same time allowing mature projects to proceed under the old rules (or, in the case of certain projects) subject to the Expedited Process**

PJM's Transition Rules are just and reasonable, and should be accepted by the Commission. As noted above, a project can be subject to different paths under the Part VII Transition Rules. Projects that submitted an Interconnection Request during AE1 through AH1 queue windows (April 1, 2018, through September 30, 2021), that as of the Transition Date, have been tendered or executed an ISA or a wholesale market participation agreement will proceed under PJM's existing procedures, as will projects submitted in earlier queue windows, regardless of whether they have been tendered or executed an ISA or a wholesale market participation agreement.<sup>124</sup> Projects that submitted an Interconnection Request during the AE1 through AG1 queue windows that, as of the Transition Date, have not been tendered or executed an ISA or a wholesale market participation agreement will be subject to either Transition Cycle #1 if it is determined to have a cost allocation eligibility or is identified as the first to cause a Network Upgrade which has a total estimated cost of greater than \$5 million or the Part VII Expedited Process

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<sup>124</sup> See Shoemaker Aff. ¶ 7.

if the relevant cost estimate is below this threshold.<sup>125</sup> Projects in the AG2-AH1 queue windows will be subject to Transition Cycle #2.<sup>126</sup> Any Interconnection Request or New Service Request submitted on or after the start of the AH2 queue window (October 1, 2021) will be subject to the Part VIII New Rules.<sup>127</sup>

The Transition Rules balance the need for PJM to clear the study backlog and to begin the Cycle process as soon as possible, while at the same time allowing Project Developers with mature projects that meet the criteria to complete the interconnection process and move to a final interconnection-related service agreement without being subject to full Transition Cycle procedures. These procedures are just and reasonable, and the Commission has approved other transition mechanisms designed to achieve this balance.<sup>128</sup> With regard to the use of a \$5 million or less eligibility cap for the Expedited

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<sup>125</sup> Tariff, Part VII, Subpart B, sections 304(A)-(B); Shoemaker Aff. ¶ 7.

<sup>126</sup> Shoemaker Aff. ¶ 9.

<sup>127</sup> See *id.* ¶ 3.

<sup>128</sup> See *Tri-State Generation & Transmission Assoc., Inc.*, 174 FERC ¶ 61,021, at PP 33, 60 (accepting proposed transition mechanism and finding that the “transition from a serial first-come, first-served approach to a clustered first[-]ready, first-served approach should allow ready projects to proceed on a more accelerated basis while allowing less-developed projects access to early information”), *order on reh’g*, 175 FERC ¶ 61,128, at P 14 (2021) (“*Tri-State*”) (stating “the fact that a particular project is not ready does not, in and of itself, render Tri-State’s new first-ready, first-served approach unjust and unreasonable, nor does it warrant a further extension of the transitional readiness window. . . . As explained in the PacifiCorp queue reform proceeding, while a specific proposed readiness cutoff ‘will exclude certain interconnection customers’ from participation in the transition cluster, ‘any cutoff date will inevitably have that effect’”); *PacifiCorp*, 171 FERC ¶ 61,112, at P 144 (finding proposed transition process is “a reasonable means . . . to implement the Queue Reform Proposal and resolve the interconnection queue backlog”), *order on clarification & reh’g*, 173 FERC ¶ 61,016 (affirming prior findings and also noting that a transition mechanism will invariably affect certain customers, and that delaying the transition mechanism date would exacerbate the problem the queue reform was intended to address); *Pub. Serv. Co. of Colo.*, 169 FERC ¶ 61,182, at P 67 (2019) (finding queue reform transition mechanism to be just and reasonable, stating given the challenges in delays in the applicant’s interconnection queue, “the proposed transition process is a reasonable means . . . to implement the Queue Reform Proposal and resolve the interconnection queue backlog. PSCo has adequately considered the interests of interconnection customers whose requests are far along in the process”); *Midwest Indep. Transmission Sys. Operator, Inc.*, 138 FERC ¶ 61,233, at P 106 (2012) (stating the Commission has “recognized that it may be necessary in some circumstances to apply reforms to late-stage interconnection requests to resolve current backlogs”).

Process, PJM's experience has been that the analysis of such projects is fairly straightforward once PJM performs the Facilities Study. Moreover, this requirement is consistent with the current Tariff provisions establishing \$5 million as the minimum threshold for inter-queue cost allocation, and will allow mature projects that do not have shared cost responsibility for significant Network Upgrades to complete the process quickly.<sup>129</sup> Additionally, the use of the sorting process, the Expedited Process, and the two Transition Cycles to be followed by the New Rules process, allows for some sense of honoring priority of older backlogged projects by studying them in Cycle groupings. This sorting process, which splits the AE1-AH1 projects into three groups, avoids creating a single, unmanageably large Cycle to start the New Rules process, as might occur if there was no Transition Period.<sup>130</sup>

Further, the question of a Transition process and how it should be structured involved the most compromise among stakeholders in order to achieve the consensus that was reached on the overall reform package. While some parties may favor a process that would allow more projects to enter the Transition process, or to remain under the existing procedures, any such expansion would not only be contrary to the results of the stakeholder process, but would delay implementation of PJM's Cycle process, and harm PJM's efforts to clear its interconnection backlog. In short, expanding the proposed "fast lane" for those projects with minimal impact on the grid would only slow down that fast lane and

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<sup>129</sup> See Tariff, Part VI, Subpart B, section 219(a).

<sup>130</sup> The Commission has accepted the use of transition mechanism to address these concerns. See *Midcontinent Indep. Sys. Operator*, 158 FERC ¶ 61,003, at P 59 (accepting transition mechanism subject to minor compliance filing requirement, stating "the proposed plan . . . avoids the creation of an unwieldy study group that may cause further backlog in the queue, and provides more precise information about the projects that will be grouped together for study and explains in more detail the timing of these studies").

undermine the entire concept of allowing projects with minimal grid impacts to proceed expeditiously.

While not all projects will qualify to move forward as part of the Transition process or pursuant to the new Cycle rules, the fact that a project is not able to do so does not, in and of itself, make PJM's new interconnection reform rules unjust or unreasonable, nor does it require an expansion of PJM's transition threshold requirements, as the Commission has found in the past.<sup>131</sup> Moreover, any cutoff date will impact certain projects differently than others; that is inherent in the nature of a cutoff date and does not mean a particular cutoff date is unfair or is not just and reasonable.<sup>132</sup>

### **3. Application Process**

To be considered in Transition Cycle #2 or pursuant to the New Rules under Part VIII, the party submitting a New Service Request or the Eligible Customer submitting a Long-Term Firm Transmission Service Request must submit a completed Application by the Application Deadline, with PJM to post notice of the Cycle's applicable deadline at the beginning of the Phase II of the prior Cycle, with at least 180 days' notice.<sup>133</sup> The Applicant must also provide a Study Deposit, which will range from \$75,000 to \$400,000 depending on the MW size of the project, with the Applicant responsible for paying the actual study costs.<sup>134</sup> Ten percent of this Study Deposit is non-refundable and can be used

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<sup>131</sup> See *Tri-State*, 175 FERC ¶ 61,128, at P 14 (recognizing that any cutoff date "inevitably will have" the effect of excluding certain customers); *PacifiCorp*, 173 FERC ¶ 61,016, at P 25 (same finding).

<sup>132</sup> See *supra* notes 128 and 131.

<sup>133</sup> Tariff, Part VII, Subpart C, section 306(A) and Part VIII, Subpart B, section 403(A). A form of Application and Studies Agreement is found in Tariff, Part IX, Subpart A.

<sup>134</sup> Tariff, Part VII, Subpart C, sections 306(A)(5)(a)(iii)-(iv) and Part VIII, Subpart B, section 403(A)(5)(a)(iv); Shoemaker Aff. ¶¶ 11, 49.

by PJM to fund any restudies that are required if the Applicant withdraws its New Service Request; the remaining amount after payment of actual study costs is refundable.<sup>135</sup> The Commission should accept the proposed single Study Deposit as just and reasonable. In support of this amount, PJM notes that under its existing procedures, it charges separate deposits for each of its interconnection studies; based on PJM's experience, this single Study Deposit represents a reasonable proxy for the cost of all three studies, and approximates the total amount that would be required for similar projects under PJM's existing procedures.<sup>136</sup> The Commission has also found that the use of a tiered deposit that reflects the expected study costs can serve to discourage interconnection requests that are not likely to achieve commercial operation, while at the same time allowing Interconnection Customers to better estimate their costs.<sup>137</sup> A Project Developer or Eligible Customer will be protected because it will ultimately pay the actual study costs, further showing these Study Deposit amounts are just and reasonable.<sup>138</sup>

The Applicant must also submit Readiness Deposit No. 1, which is to be the amount equal to \$4,000 per MW of energy or per MW of capacity, whichever is greater, as specified in the Application.<sup>139</sup> This Readiness Deposit amount is based that accepted by

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<sup>135</sup> Tariff, Part VII, Subpart C, section 306(A)(5)(a)(i) and Part VIII, Subpart B, sections 403(A)(5)(a)(i)-(ii); Shoemaker Aff. ¶¶ 11, 49. Under these provisions, the Project Developer or Eligible Customer must pay the actual studies costs even if they exceed the Study Deposit.

<sup>136</sup> Shoemaker Aff. ¶ 12.

<sup>137</sup> *MISO 2008*, 124 FERC ¶ 61,183, at P 56 (accepting MISO's tiered deposit structure under the independent entity standard).

<sup>138</sup> See *supra* note 135.

<sup>139</sup> Tariff, Part VII, Subpart C, section 306(A)(5)(b) and Part VIII, Subpart B, section 403(A)(5)(b).

the Commission the MISO and SPP.<sup>140</sup> Readiness Deposit No. 1 is a fixed per-MW rate based on project size that does not unfairly burden small generators but will discourage non-ready projects from entering the queue, and make sure there are some funds available to protect other Project Developers or Eligible Customers if a project withdraws.<sup>141</sup> The fixed per-MW rate also allows a Project Developer or Eligible Customer to know in advance what its initial Readiness Deposit will be.<sup>142</sup>

In each Cycle, PJM is to commence the Application Review Phase after the close of the Application Deadline.<sup>143</sup> In the case of an Application for a Generating Facility, the Application Review Phase will include a Site Control review for the Generating Facility. Specifically, the Applicant must provide Site Control evidence for at least a one-year term beginning from the Application Deadline for 100 percent<sup>144</sup> of the Generating Facility site

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<sup>140</sup> *Midcontinent Indep. Sys. Operator*, 158 FERC ¶ 61,003, at P 43; *Sw. Power Pool*, 178 FERC ¶ 61,015, at P 45 (finding adopting of \$4,000 MW increased readiness deposits were reasonable “because they may reduce the number of speculative or uncertain projects in SPP’s interconnection queue that are more likely to withdraw and therefore more likely to cause restudies”); *see also* Shoemaker Aff. ¶ 22.

<sup>141</sup> Shoemaker Aff. ¶ 22.

<sup>142</sup> *Id.*

<sup>143</sup> Tariff, Part VII, Subpart C, sections 306(B)(1)-(2) and Part VIII, Subpart B, sections 403(B)(1)-(2). This includes a deficiency review for Applications submitted by Project Developers, and a completeness review for Applications submitted by Eligible Customers under the deficiency review provisions. PJM is to use Reasonable Efforts to inform the Applicant of any Application deficiencies within 15 Business Days after the Application Deadline, with the Applicant then having 10 Business Days to respond and correct the deficiency. PJM is then to use Reasonable Efforts to review Applicant’s response within 15 Business Days, and then will either validate or reject the Application. Tariff, Part VIII, Subpart B, section 403(B)(1).

<sup>144</sup> The Commission has found that the use of more stringent Site Control requirements “may help to reduce the number of speculative, duplicative, and non-ready projects.” *See Midcontinent Indep. Sys. Operator, Inc.*, 169 FERC ¶ 61,173, at P 45 (2019). PJM’s experience has been that many projects lack adequate Site Control, and that this lack is indicative of a project that is not ready to move forward. As explained above, the Site Control requirements contained in the Transition Period Rules and the New Rules were a major issue of discussion in the stakeholder process, and were part of the give-and-take process that resulted in this filing.



including the location of the high-voltage side of the Generating Facility's main power transformer(s).<sup>145</sup>

In the case of an Application for connection of a Merchant Transmission Facility to the PJM Transmission System, the Application Review Phase will include a Site Control review for the site of the high-voltage, direct current converter station(s), phase angle regulator, and/or variable frequency transformer, as applicable, with the Applicant to provide Site Control evidence for at least a one-year term beginning from the Application Deadline, for 100 percent of the Site.<sup>146</sup> The Site Control requirements are intended to accommodate all types of New Service Requests, and currently formulated requirements were a key part of the negotiated stakeholder process. During the Application Review Phase, and at least thirty days prior to initiating Phase I of the Cycle, the Transmission Provider will post the Phase I Base Case data for review, subject to the Critical Energy Infrastructure Information protocols.<sup>147</sup>

In support of the proposed Site Control requirements, PJM notes that the existing Tariff provisions require 100 percent Site Control,<sup>148</sup> so the proposed requirements simply

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<sup>145</sup> Tariff, Part VII, Subpart C, section 306(B)(5) and Part VIII, Subpart B, section 403(B)(5); Shoemaker Aff. ¶ 28. The Site Control requirement in the Application includes an acreage requirement for the Generating Facility, as set forth in the PJM Manuals. The Applicant must also provide a certification executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Tariff, Part VII, Subpart C, section 302(A)(9); Tariff, Part VIII, Subpart B, section 402(A)(9); Shoemaker Aff. ¶ 28.

<sup>146</sup> Tariff, Part VII, Subpart C, section 306(B)(6) and Part VIII, Subpart B, section 403(B)(6). The Applicant must also provide a certification executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. *Id.*

<sup>147</sup> Tariff, Part VII, Subpart C, section 306(B)(4) and Part VIII, Subpart B, section 403(B)(4). The Tariff also establishes additional procedures for Eligible Customer New Service Requests.

<sup>148</sup> See, e.g., Tariff, Part IV, Subpart A, section 36.1.01(1)(b); Tariff, Part IV, Subpart G, sections 110.1(1)(a)(ii), 111.1(a)(ii), and 112.1.1(a)(ii).

build upon an approach that has already been found just and reasonable. Further, a project that has less than 100 percent, or no, Site Control may not be a viable project, but its position in the existing New Services Queue or in a new Cycle will tie up existing headroom on the Transmission System and thereby harm other projects that have done their due diligence to procure the necessary land to build their facility. With regard to the proposed requirement for Site Control of land on which generator tie lines and interconnection substations will be located, PJM aims to have a developer begin construction of its project within 6 months of the execution of the final interconnection-related service agreement(s). In order for that to happen, the developer should already have Site Control for all aspects of its project. At present, Interconnection Customers may proceed through the process without sufficient Site Control while they seek to sell or finance their projects. If they are not successful, they withdraw from the interconnection process. Unfortunately, while such Interconnection Customers go through the motions with non-viable projects they are occupying valuable headroom on the Transmission System that potentially could have been used for other, viable projects. Worse, the presence of the non-viable projects may have created inaccurate study results.

#### **4. The Three-Phase Study Process, Decision Points, and Additional Readiness Deposits**

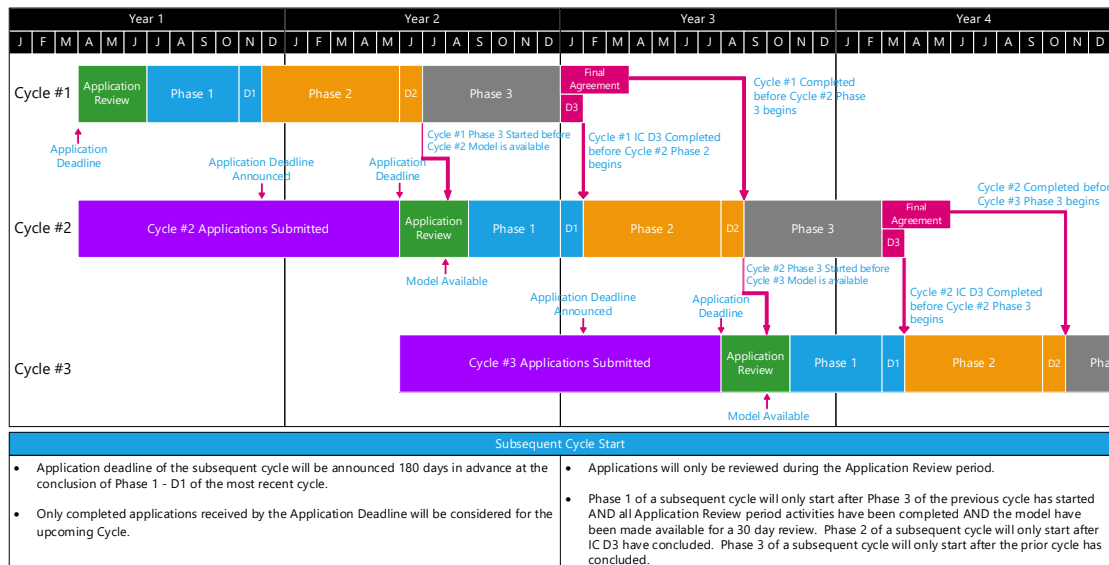
##### **a. Phase I, Decision Point I, and Readiness Deposit No. 2**

New Service Requests are subject to three System Impact Studies intended to identify the system constraints and provide cost estimates related to the New Service Requests.<sup>149</sup> Figure 10 below shows the New Rules sequencing and process:

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<sup>149</sup> Tariff, Part VII, Subpart D, sections 307(A)(1)-(2) and Part VIII, Subpart C, sections 404(A)(1)-(2). PJM, in connection with the applicable Transmission Owners, will also conduct Facilities Studies in Phases II

**FIGURE 10: NEW RULES SEQUENCING AND PROCESS**



The Phase I System Impact Study will be conducted on an aggregate basis within a New Service Request's Cycle, with the results to be provided in an electronically available aggregate (one per Cycle) format, rather than individual project-specific reports.<sup>150</sup> Phase I will start on the first Business Day immediately following the end of the Application Review Phase, but no earlier than thirty days following the distribution of the Phase I Base Case data, with PJM to use Reasonable Efforts to complete Phase I within 120 calendar days.<sup>151</sup> PJM will post during Phase I, and at least thirty days prior to initiating a Cycle's Decision Point I, an estimated start date for Decision Point I in order for Project Developers

and III to provide an estimate of the amount to be charged to each relevant New Service Customer for the Interconnection Facilities and Network Upgrades that are necessary to accommodate each New Service Request and document the necessary engineering design work. Tariff, Part VII, Subpart D, section 307(A)(7) and Part VIII, Subpart C, section 404(A)(7).

<sup>150</sup> Tariff, Part VII, Subpart D, section 308(A)(1)(a) and Part VIII, Subpart C, section 405(A)(1)(a).

<sup>151</sup> Tariff, Part VII, Subpart D, section 308(A)(1)(b)(i) and Part VIII, Subpart C, section 405(A)(1)(b)(i); Shoemaker Aff. ¶ 15.

and Eligible Customers to prepare to meet their Decision Point I requirements.<sup>152</sup> The Phase I System Impact Study will evaluate peak load flow, and will be the equivalent of a System Impact Study analysis at full commercial probability; it also will include planning estimates of the necessary Interconnection Facilities and Network Upgrades.<sup>153</sup> The results will be provided electronically and will be publicly available on PJM's website.<sup>154</sup>

Like Transition Cycles #1 and #2, PJM in its New Rules adopts a gating mechanism intended to will treat each Cycle as a discrete review, which will allow PJM to avoid having to address a large number of requests in one Cycle while still undertaking the studies required for a prior Cycle.<sup>155</sup> Decision Point I will commence on the first Business Day following the end of Phase I and will end with thirty calendar days thereafter.<sup>156</sup> The Project Developer or Eligible Customer must decide during Decision Point I whether to choose to remain in the Cycle or withdraw.<sup>157</sup> If the Project Developer or Eligible Customer elects to proceed, it must pay Readiness Deposit No. 2, which is the amount equal to: (a) the greater of 10 percent of the cost allocation for the Network Upgrades as

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<sup>152</sup> Tariff, Part VII, Subpart D, section 308(A)(1)(b)(ii) and Part VIII, Subpart C, section 405(A)(1)(b)(ii); Shoemaker Aff. ¶ 15.

<sup>153</sup> See Shoemaker Aff. ¶ 36.

<sup>154</sup> Tariff, Part VII, Subpart D, section 308(A)(1)(a) and Part VIII, Subpart C, section 405(A)(1)(a); Shoemaker Aff. ¶ 36.

<sup>155</sup> Shoemaker Aff. ¶¶ 14, 35. It should simplify cost allocation and reduce uncertainty as to which facilities are needed for a specific Cycle, and reduce the need for restudies and the backlog associated with such restudies. *Id.* ¶¶ 14, 33, 35.

<sup>156</sup> Tariff, Part VII, Subpart D, section 309(A) and Part VIII, Subpart C, section 406(A); Shoemaker Aff. ¶ 37.

<sup>157</sup> Tariff, Part VII, Subpart D, section 309(A) and Part VIII, Subpart C, section 406(A); Shoemaker Aff. ¶ 37. Based on the results of the Phase I or Phase II System Impact Study, PJM may be able to accelerate the treatment of a New Service Request such that the Project Developer or Eligible Customer may also be able to finalize the GIA or other agreement under Tariff, Part IX, without undergoing further studies. Tariff, Part VII, Subpart D, sections 309(A)(1) and 311(A)(1) and Part VIII, sections 406(A)(1) and 408(A)(1); Shoemaker Aff. ¶¶ 18, 37.

calculated in Phase I or the Readiness Deposit No. 1; minus (b) the Readiness Deposit No. 1 amount during the Application Phase.<sup>158</sup> A Project Developer must make an additional Site Control showing.<sup>159</sup> The Project Developer or Eligible Customer must also present evidence of having obtained air and water permits (as applicable) and satisfy other criteria; if it fails to demonstrate Site Control or satisfy the other requirements, its New Service Request will be deemed terminated.<sup>160</sup> If a New Service Request is withdrawn or deemed terminated, PJM will refund 50 percent of the Project Developer's or Eligible Customer's Readiness Deposit No. 1, with PJM to retain the remaining amounts until the end of the Cycle and final agreements entered into.<sup>161</sup>

**b. Phase II, Decision Point II, and Readiness Deposit No. 3**

Phase II commences the earlier of the end of Decision Point I or when Decision Point III of the immediately prior Cycle is completed.<sup>162</sup> The Phase II System Impact Study analysis is based on retooled load flow results based on the decisions made during Decision Point I by all relevant Cycle projects to either withdraw or move forward, and performs

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<sup>158</sup> Tariff, Part VII, Subpart D, section 309(A)(1)(a)(i) and Part VIII, Subpart C, section 406(A)(1)(a)(i); Shoemaker Aff. ¶¶ 21, 50. This amount can be zero, but cannot be less than zero. Tariff, Part VII, Subpart D, section 309(A)(1)(a)(i)(c) and Part VIII, Subpart C, section 406(A)(1)(a)(i)(c); Shoemaker Aff. ¶¶ 21, 50.

<sup>159</sup> Tariff, Part VII, Subpart D, section 309(A)(1)(b) and Part VIII, Subpart C, section 406(A)(1)(b); Shoemaker Aff. ¶ 37.

<sup>160</sup> Tariff, Part VII, Subpart D, sections 309(A)(1)(b)-(g) and Part VIII, Subpart C, sections 406(A)(1)(b)-(g); Shoemaker Aff. ¶¶ 16, 37. For state-level, non-jurisdictional interconnection projects (Whole Sale Market Participation Agreements or "WMPAs"), the Project Developer must provide evidence of participation in the state-level interconnection process with the applicable entity. Tariff, Part VII, Subpart D, section 309(A)(1)(e) and Part VIII, Subpart C, section 406(A)(1)(e).

<sup>161</sup> Tariff, Part VII, Subpart D, section 309(A)(4)(c)(i) and Part VIII, Subpart C, section 406(A)(4)(c)(i); Shoemaker Aff. ¶ 23. PJM will either refund or retain the Readiness Deposit amounts at the end of the Cycle as set forth in the Tariff.

<sup>162</sup> Tariff, Part VII, Subpart D, section 310(A)(1) and Part VIII, Subpart C, section 407(A)(1); Shoemaker Aff. ¶¶ 17, 38.

short circuit and stability analyses as required, and identifies Affected Systems.<sup>163</sup> PJM will use Reasonable Efforts to complete Phase II within 180 days.<sup>164</sup> Decision Point II commences on the first Business Day following the end of Phase II, with the Project Developer or Eligible Customer to decide whether to continue to Phase III or withdraw its project.<sup>165</sup> If the Project Developer or Eligible Customer elects to proceed, it must provide Readiness Deposit No. 3,<sup>166</sup> and is subject to additional informational requirements and a deficiency review.<sup>167</sup> Readiness Deposit No. 3 is equal to (a) 20 percent of the cost allocation for the Network Upgrades as calculated in Phase II or the Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase plus the Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I; minus (b) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase, plus the Readiness Deposit No. 2 amount

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<sup>163</sup> Tariff, Part VII, Subpart D, section 310(A)(1)(a) and Part VIII, Subpart C, section 407(A)(1)(a); Shoemaker Aff. ¶¶ 17, 38. PJM will notify the Project Developer or Eligible Customer if an Affected System Study Agreement is required, prior to the end of Phase II. Tariff, Part VII, Subpart D, section 310(A)(1)(b) and Part VIII, Subpart C, section 407(A)(1)(b).

<sup>164</sup> Tariff, Part VII, Subpart D, section 310(A)(1)(e) and Part VIII, Subpart C, section 407(A)(1)(e); Shoemaker Aff. ¶¶ 17, 38.

<sup>165</sup> Tariff, Part VII, Subpart D, section 311(A) and Part VIII, Subpart C, section 408(A); Shoemaker Aff. ¶¶ 18, 39.

<sup>166</sup> Tariff, Part VII, Subpart D, sections 311(A)(1)(b) and Part VIII, Subpart C, section 408(a)(1)(b); Shoemaker Aff. ¶¶ 18, 39.

<sup>167</sup> Tariff, Part VII, Subpart D, sections 311(A)(1)(c)-(j) and Part VIII, Subpart C, sections 408(A)(1)(c)-(j); Shoemaker Aff. ¶¶ 18, 39. There are no additional Site Control requirements at this point.

paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I.<sup>168</sup>

If a New Service Request is withdrawn or deemed terminated at Decision Point II, the Project Developer or Eligible Customer may be able to receive up to 100 percent of its Readiness Deposit No. 1 after all Cycle New Service Requests have either entered into final agreements and met the Decision Point III Site Control requirements, or have withdrawn; however, the amount to be refunded is reduced by the costs of underfunded Network Upgrades associated with the withdrawal.<sup>169</sup> Notwithstanding these provisions, a Project Developer or Eligible Customer can receive a refund of all of its Readiness Deposits if its Network Upgrade costs increase from Phase I to Phase II by 25 percent or more, and by more than \$10,000 per MW.<sup>170</sup>

With regard to both Readiness Deposit No. 1 and Readiness Deposit No. 2, such deposits, which can be used to offset the cost of underfunded Network Upgrades in the event a New Service Request withdraws or is terminated, combined with the lack of inter-Cycle cost allocation (i.e., there will be no allocation of costs from projects in one Cycle to another), will provide greater cost certainty to Project Developers and Eligible Customers. The following process describes how the Readiness Deposit refunds will be determined and repositioned under both Parts VII and VIII and are described in

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<sup>168</sup> Tariff, Part VII, Subpart D, section 311(A)(1)(b) and Part VIII, Subpart C, section 408(A)(1)(b); Shoemaker Aff. ¶¶ 21, 50. This amount can be zero, but cannot be less than zero. Shoemaker Aff. ¶¶ 21, 50.

<sup>169</sup> Tariff, Part VII, Subpart D, section 311(B)(3)(a) and Part VIII, Subpart C, section 408(B)(3)(a); Shoemaker Aff. ¶¶ 23-24.

<sup>170</sup> Tariff, Part VII, Subpart D, section 311(B)(3)(c) and Part VIII, Subpart C, section 408(B)(3)(b)(ii); Shoemaker Aff. ¶ 51.

paragraph 24 of Mr. Shoemaker's affidavit. When all Cycle New Service Requests have either entered into final agreements and the Decision Point III Site Control requirements have been met, or have been withdrawn, PJM will undertake a retool to provide a final determination of the Network Upgrades that are required for the Cycle. Once Cycle New Service Requests have either entered into final agreements and met the Decision Point III Site Control requirements, or have withdrawn, Readiness Deposits will be handled as follows: underfunded Network Upgrades will be identified as those where one or more withdrawn New Service Requests that were identified as having a cost allocation in the Phase III analysis results, with all Readiness Deposits to be refunded if there are no underfunded Network Upgrades. Readiness Deposits will be applied to underfunded Network Upgrades on a pro rata share of funds missing from the Phase III cost allocation, with the remaining Readiness Deposits are made whole relative to the withdrawn New Service Requests.<sup>171</sup>

The Commission should accept the proposed Readiness Deposits as just and reasonable. Their use will protect Project Developers and Eligible Customers against costs arising from the withdrawal of speculative projects by providing a pool of dollars that can be used to pay the costs of underfunded Network Upgrades resulting from such withdrawals.<sup>172</sup> Moreover, they are consistent with those approved for other RTOs.<sup>173</sup> The use of Readiness Deposits strikes a reasonable balance between discouraging speculative projects from entering or remaining in a Cycle and allowing those projects that are ready

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<sup>171</sup> Tariff, Part VII, Subpart A, section 301(A)(3)(b)(iii) and Part VIII, Subpart A, section 401(D)(2)(c).

<sup>172</sup> Shoemaker Aff. ¶ 22.

<sup>173</sup> See *supra* note 99; see also Shoemaker Aff. ¶ 22.



to proceed to do so, while at the same time not overly burdening Project Developers or Eligible Customers that elect to remain in the Cycle.<sup>174</sup> This balance is consistent with the Commission’s recognition that “that it may be appropriate to increase the requirements for obtaining and keeping a queue position.”<sup>175</sup> While the Transition Period Rules and the New Rules are a significant change from the existing procedures, these changes are necessary to alleviate the congestion that is negatively affecting PJM’s interconnection process, and potentially frustrating federal and state public policy objectives. Much of the congestion and resulting delays are caused by the presence in the interconnection process of projects that are not ready to move forward. The Commission has found that the use of a multi-phased cluster study approach with the use of appropriate at-risk Readiness Deposits can be effective in addressing these problems.<sup>176</sup>

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<sup>174</sup> *MISO 2008*, 124 FERC ¶ 61,183, at P 77; *see also PacifiCorp*, 171 FERC ¶ 61,112, at P 112 (finding proposed withdrawal penalties to be consistent with or superior to FERC’s *pro forma* interconnection requirements because they “strike[] a reasonable balance between increasing the requirements for keeping a queue position and minimizing barriers to entry” and that the subject provisions “provide an incentive to interconnection customers to ensure that their interconnection-related decisions take into account the costs associated with an interconnection customer withdrawing from the queue”). The Commission found such provisions “encourage efficient siting and the timely acquisition of permit.” *Id.* at P 113 (further demonstrating that the Readiness Deposits proposed by PJM will incent proper behavior and make sure that withdrawing Project Developers and Eligible Customers bear the costs associated with their withdrawals).

<sup>175</sup> *SPP*, 128 FERC ¶ 61,114, at P 61 (stating “that it may be appropriate to increase the requirements for obtaining and keeping a queue position” (citing *Interconnection Queueing Practices*, 122 FERC ¶ 61,252, at P 16 (2008))); *see also Midwest Indep. Transmission Sys. Operator*, 138 FERC ¶ 61,233, at P 64 (Commission stating that “[w]e believe that requiring interconnection customers to put more money at risk, earlier in the interconnection process, will help ensure that projects that do advance through the DPP will be more likely to reach commercial operation”) and P 68 (also indicating that the large number of late-stage et-stage projects withdrawals “is indicative of it being too easy for projects that are not ready to proceed or that are not commercially viable from being able to enter the interconnection queue”); *Interconnection Queueing Practices*, 122 FERC ¶ 61,252, at P 16 (Commission stating “it may be appropriate to increase the requirements for getting and keeping a queue position”).

<sup>176</sup> *MISO 2008*, 124 FERC ¶ 61,183, at PP 56-61.

**c. Phase III, Decision Point III, and the Obligation to Provide Security**

Phase III commences the earlier of the first Business Day immediately following the end of Decision Point II or when the Final Agreement Negotiation Phase of the immediately preceding Cycle is completed.<sup>177</sup> PJM will use Reasonable Efforts to complete Phase III within 180 days of commencement.<sup>178</sup> Phase III System Impact Study analysis will retool load flow, short circuit, and stability results based on decisions made in Decision Point II, and will include any required final Affected System studies.<sup>179</sup> PJM will also provide the interconnection-related agreement(s) to the relevant parties during Phase III.<sup>180</sup>

Unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open, Decision Point III will commence on the first Business Day immediately following the end of Phase II, and run concurrently with the Final Agreement Negotiation Phase.<sup>181</sup> In order to remain in the Cycle, a Project Developer or Eligible Customer must provide the required Security for its project (based upon the Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results), notify PJM of its intent to proceed, and comply with the additional applicable Site Control and other informational

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<sup>177</sup> Tariff, Part VII, Subpart D, section 312(A)(1)(e)(i) and Part VIII, Subpart C, section 409(A)(1)(e)(i); Shoemaker Aff. ¶¶ 19, 40.

<sup>178</sup> Tariff, Part VII, Subpart D, section 312(A)(1)(e)(ii) and Part VIII, Subpart C, section 409(A)(1)(e)(ii); Shoemaker Aff. ¶¶ 19, 40.

<sup>179</sup> Tariff, Part VII, Subpart D, sections 312(A)(1)(a)-(b) and Part VIII, Subpart C, sections 409(A)(1)(a)-(b); Shoemaker Aff. ¶¶ 19, 40.

<sup>180</sup> Tariff, Part VII, Subpart D, section 312(A)(1)(f) and Part VIII, Subpart C, section 409(A)(1)(f); Shoemaker Aff. ¶¶ 19, 40.

<sup>181</sup> Tariff, Part VII, Subpart D, section 313(A) and Part VIII, Subpart C, section 410(A); Shoemaker Aff. ¶¶ 20, 41.

requirements—failure to do so will mean its New Service Request will be deemed terminated and withdrawn. PJM will then provide a deficiency review.<sup>182</sup> If a New Service Request is withdrawn or is deemed terminated, the Readiness Deposit will be refunded in accordance with the timelines and procedures described in section above and Mr. Shoemaker's affidavit.<sup>183</sup>

Additionally, a Project Developer or Eligible Customer that elects to move forward at Decision Point III must provide Security that is equal to 100 percent of Network Upgrades costs allocated to the Project Developer or Eligible Customer, and will receive a refund of its Readiness Deposits and any unspent portion of their Study Deposit if it successfully enters into final service agreements and meets Decision Point III Site Control requirements.<sup>184</sup> This amount of Security is provided for the benefit of the relevant Transmission Owner, but will also mean that funds are available to ensure that such upgrades are constructed if a Project Developer or Eligible Customer withdraws.<sup>185</sup> The Security can also be applied to unpaid Cancellation Costs and for completion of some or all of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, including Common Use Upgrades—Network Upgrades that are needed for the interconnection of Generating Facilities or Merchant Transmission Facilities by

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<sup>182</sup> Tariff, Part VII, Subpart D, sections 313(A)(1)-(B) and Part VIII, Subpart C, sections 410(A)(1)-410(B); Shoemaker Aff. ¶¶ 20, 41. If the Project Developer fails to provide the required Site Control evidence, it must provide evidence acceptable to PJM demonstrating that it is in negotiations with appropriate entities to meet the Site Control requirements, with PJM to add a milestone into its interconnection-related agreement to satisfy the Site Control requirements 180 days after execution of such agreement. Tariff, Part VII, Subpart D, section 313(A)(1)(c)(iv) and Part VIII, Subpart C, section 410(A)(1)(c)(iv).

<sup>183</sup> Shoemaker Aff. ¶¶ 23-24.

<sup>184</sup> Tariff, Part VIII, Subpart C, section 410(A)(1)(a); Shoemaker Aff. ¶¶ 20, 24, 54.

<sup>185</sup> Shoemaker Aff. ¶ 54.

more than one Project Developer or Eligible Customer and are the shared responsibility of each Project Developer or Eligible Customer, that are subject to a Network Upgrade Cost Responsibility Agreement.<sup>186</sup> This will not only protect Project Developers or Eligible Customers in the Cycle who are relying on those upgrades being constructed, but also will protect those in subsequent Cycles from the costs and delays that might otherwise result if the upgrades were not built.<sup>187</sup>

**d. Final Agreement Negotiation Phase**

The Final Agreement Negotiation Phase allows for the negotiation of the relevant interconnection-related agreement(s). It commences on the first Business Day immediately following the end of Phase III, to run concurrently with Decision Point III, with PJM to use Reasonable Efforts to complete this phase within sixty days of its start.<sup>188</sup> PJM is to provide the parties with a draft agreement; parties then have twenty Business Days to provide comments to PJM, with PJM to respond within ten Business Days.<sup>189</sup> PJM is to provide the final interconnection-related agreement(s) to the parties in electronic form five Business Days following the end of negotiations within the Final Agreement Negotiation Phase; parties then have the option of executing the agreement(s), requesting dispute resolution, or requesting that the agreement(s) be filed with the Commission on an unexecuted basis.<sup>190</sup>

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<sup>186</sup> Shoemaker Aff. ¶ 54.

<sup>187</sup> *Id.*

<sup>188</sup> Tariff, Part VII, Subpart D, section 314(A) and Part VIII, Subpart D, section 411(A); Shoemaker Aff. ¶ 55.

<sup>189</sup> Tariff, Part VII, Subpart D, sections 314(B)(2)-(3) and Part VIII, Subpart D, sections 411(B)(1)-(3); Shoemaker Aff. ¶ 55.

<sup>190</sup> Tariff, Part VII, Subpart D, section 314(B)(4) and Part VIII, Subpart D, section 411(B)(4).

## **5. Analyses Included in System Impact Studies**

As discussed in detail in Mr. Sims' affidavit, PJM has revised its interconnection study process to align with the proposed three phase framework. Mr. Sims explains that although the substance of the study process remains largely the same, the revised study process is intended to better align Project Developers' level of risk with the financial commitments necessary to ensure commitment to timely completion of the interconnection process.

As an initial matter, PJM proposes to eliminate the Feasibility Study currently required in Tariff, Part IV, Subpart A, section 36.2, because the Feasibility Study is a more rudimentary analysis that provides no cost allocation information and therefore does not function as intended to cull out speculative projects. In its place, PJM will perform the first of three System Impact Studies, aligning with each of the three phases of the new interconnection framework. The Phase I, Phase II, and Phase III System Impact Studies are a regional analysis of the effect of adding to the Transmission System the new facilities and services proposed by valid New Service Requests and an evaluation of their impact on deliverability to the aggregate of PJM Network Load. These studies identify the system constraints, identified with specificity by transmission element or flowgate, relating to New Service Requests and any resulting Interconnection Facilities, Network Upgrades, and/or Contingent Facilities required to accommodate such New Service Requests. These studies also provide estimates of cost responsibility and construction lead times for new facilities required to interconnect the project and system upgrades.

During Phase I, the System Impact Study analysis will include peak load flow, equivalent to a Feasibility Study analysis under the current interconnection process at full

commercial probability.<sup>191</sup> The Phase I System Impact Study will also include planning desk-side estimates of the identified necessary Interconnection Facilities and Network Upgrades. The results of the Phase I System Impact Study will be provided electronically to Project Developers in a single aggregate report for the entire Cycle, such as a spreadsheet, as well as posted on the PJM website.<sup>192</sup> As Mr. Sims explains, the Phase I System Impact Study is similar to the Feasibility Study utilized in the current interconnection process in that it identifies high-level reliability issues caused by the proposed project, as well as performance issues identified by the relevant Transmission Owner, with the aim of identifying those items that are expected to generate the greatest cost to the Project Developer. Providing this information prior to the Phase I Decision Point will allow Project Developers to have a clear projection of anticipated costs and better inform their decision whether to proceed to Phase II.

The Phase II System Impact Study includes the bulk of analytical simulations performed by PJM in the current interconnection study process. PJM will perform a retool of its initial load flow results study, as well as an assessment of project-related short circuit duty issues, and a detailed assessment of project related system stability issues.<sup>193</sup> PJM will also conduct its Affected Systems analysis as part of the Phase II System Impact Study and, if applicable, notify the Project Developer of its obligation to enter into an Affected System Study Agreement.<sup>194</sup> PJM will also perform an interconnection Facilities Study

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<sup>191</sup> Sims Aff. ¶ 7; *see also* Shoemaker Aff. ¶ 36.

<sup>192</sup> *Id.*

<sup>193</sup> Sims Aff. ¶ 9; *see also* Shoemaker Aff. ¶ 38.

<sup>194</sup> Sims Aff. ¶ 10; *see also* Shoemaker Aff. ¶ 38. As Mr. Sims explains, the Affected System analysis in the Phase II System Impact Study will be conducted in essentially the same sequence as it is conducted under the current interconnection process. *See* Sims Aff. ¶ 10. PJM will continue to work with neighboring systems

jointly with the Transmission Owner. Finally, the Phase II System Impact Study will include an analysis to determine cost allocation responsibility for required facilities and upgrades. As Mr. Sims explains, these analyses provide Project Developers with almost the entire picture of what it will cost to interconnect and provide the best available benchmark for Project Developers to evaluate whether to proceed to Phase III.

As Mr. Sims describes, the Phase III System Impact Study assumes that projects are serious and committed, as Project Developers are fully aware of the potential financial exposure associated with required Network Upgrades and Interconnection Facilities. The Phase III System Impact Study includes a final retool of all analyses performed in the Phase II System Impact Study, as well as a final Affected System Study, if applicable. Target back-feed dates for Interconnection Facilities are established. The Transmission Owner will also perform a Facilities Study jointly with PJM to identify final system upgrade issues associated with the project, and final cost allocation analyses are provided.<sup>195</sup>

## **6. Cost Allocation**

Transition Cycles #1 and #2 and the New Rules adopt a cluster approach to cost allocation.<sup>196</sup> Specifically, each Project Developer and Eligible Customer will be required to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary

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to improve Affected System coordination. However, such work should not hold up the needed reforms proposed here.

<sup>195</sup> Sims Aff. ¶ 11; *see also* Shoemaker Aff. ¶ 40.

<sup>196</sup> PJM recognizes that the Commission is reconsidering its overall participant funding approach. Although these proposals do not change that paradigm, PJM notes that the improvements proposed herein to the interconnection process will work well with whatever cost allocation mechanism the Commission otherwise approves coming out of its Notice of Proposed Rulemaking (“NOPR”) process. For this reason, although PJM has maintained the status quo participant funding mechanisms, the interconnection process reforms proposed herein are entirely severable from any changes to participant funding the Commission might otherwise determine. Any such changes can be addressed through compliance filings to the NOPR process without disturbing the fundamental interconnection processing reforms outlined herein.

to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request.<sup>197</sup> Except for projects subject to the Expedited Process, PJM is to determine the minimum amount of required Network Upgrades required to resolve each reliability criteria violation in each Cycle, by studying the impact of the projects in the Cycle in their entirety, and not incrementally, and will identify the New Service Requests in the Cycle contributing to the need for the required Network Upgrades within the Cycle.<sup>198</sup> All New Service Requests subject to Transition Cycle #1 and #2 or the New Rules that contribute to the need for a Network Upgrade will receive cost allocation for that upgrade pursuant to each New Service Request's contribution to the reliability violation identified on the Transmission System in accordance with PJM Manuals.<sup>199</sup> There will be no allocation of costs from one Cycle to another or from individual projects in one Cycle to one or more projects in another Cycle—all such costs shall be allocated to New Service Requests in the relevant Cycle.<sup>200</sup>

## **7. PJM Will Adopt a Parallel Process for Upgrade Requests**

Upgrade Requests—requests for Incremental Auction Revenue Rights pursuant to Schedule 1, section 7.8 of the Operating Agreement and the parallel provisions of Tariff, Attachment K-Appendix, as well as Merchant Network Upgrades that either upgrade

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<sup>197</sup> Tariff, Part VII, Subpart C, section 307(A)(5)(a), and Part VIII, Subpart C, section 404(A)(5)(a); Shoemaker Aff. ¶¶ 25, 60. There are also separate provisions that apply when a New Service Request requires accelerating the construction of Network Upgrades that are included in the Regional Transmission Expansion Plan. Tariff, Part VII, Subpart C, section 307(A)(5)(b) and Part VIII, section 404(A)(5)(b).

<sup>198</sup> Tariff, Part VII, Subpart D, section 307(A)(5)(c) and Part VIII, Subpart C, section 404(A)(5)(c); Shoemaker Aff. ¶¶ 25, 60.

<sup>199</sup> *Id.*

<sup>200</sup> Tariff, Part VII, Subpart C, section 307(A)(5)(c), and Part VIII, Subpart C, section 404(A)(5)(c); Shoemaker Aff. ¶¶ 25, 60.



facilities or advance existing Network Upgrades—will be subject to separate procedures.<sup>201</sup>

PJM's experience has been that it only receives a small number of these requests, which are submitted by Upgrade Customers, pursuant to current Tariff, Attachment EE, requesting incremental rights.<sup>202</sup> The proposed revisions remove the ability of Interconnection Customers, including those with controllable Merchant Transmission Facilities, and Eligible Customers that fund Network Upgrades to support their requested service, to receive these incremental rights for those Network Upgrades.

With no priority among a group of New Service Requests within a Cycle, an issue arises between Upgrade Request customers and Project Developers and Eligible Customers needing the same upgrade, as to who receives the incremental rights to the upgrade.<sup>203</sup> In addition, the current process, with Upgrade Customers part of the current New Services Queue, introduces cost uncertainty for Project Developers as it may be unclear if the Upgrade Request project is moving forward and who will build the upgrade.<sup>204</sup> PJM will be able to use this separate process because the analyses required for these types of requests do not overlap the analyses that will be required to study the Project Developer and Eligible Customers New Service Requests under the Transition procedures and the New Rules, and will allow Upgrade Requests to be evaluated without affecting projects subject to the Transition Period Rules or New Rules.<sup>205</sup> Project Developers and Eligible Customers who are responsible for Network Upgrades to support their requested service in the Cycle

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<sup>201</sup> Shoemaker Aff. ¶ 61.

<sup>202</sup> *Id.* ¶ 62.

<sup>203</sup> *Id.*

<sup>204</sup> *Id.*

<sup>205</sup> *Id.*

process can still request incremental rights for those Network Upgrades by submitting an Upgrade Application and Studies Agreement.<sup>206</sup> In addition, the Upgrade Requests can now be evaluated and processed more quickly compared to being a part of the new Cycle process.<sup>207</sup>

Under the Transition Procedures and the New Rules, an Upgrade Customer must submit an application in the form set forth in Tariff, Part IX, Subpart K.<sup>208</sup> Upgrade Requests are to be processed serially, based on the order in which PJM receives them.<sup>209</sup> PJM addresses Upgrade Requests on a serial basis because the first-come first-served process continues to make sense when the Upgrade Customer is requesting financial rights, rather than a physical interconnection. The Upgrade Customer must pay a separate Study Deposit of \$150,000, 10 percent of which is non-refundable, and pay a Readiness Deposit equal to 20 percent of the cost of the Network Upgrades identified in its System Impact Study.<sup>210</sup> Each Upgrade Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its Upgrade Request and that would not have been incurred under the Regional Transmission

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<sup>206</sup> *Id.* ¶ 62.

<sup>207</sup> *Id.* ¶ 62.

<sup>208</sup> *See* Tariff, Part VII, Subpart H, section 337(B)(1) and Part VIII, Subpart H, section 435(B)(1); Shoemaker Aff. ¶ 63.

<sup>209</sup> Tariff, Part VII, Subpart H, section 337(B)(1)(a) and Part VIII, Subpart H, section 435(B)(1)(a); Shoemaker Aff. ¶ 63.

<sup>210</sup> Tariff, Part VII, Subpart H, sections 337(B)(2)(a)-(b) and Part VIII, Subpart H, sections 435(B)(2)(a)-(b); Shoemaker Aff. ¶ 64.

Expansion Plan but for such Upgrade Request, and net of benefits resulting from the construction of the upgrades, such costs not to be less than zero.<sup>211</sup>

**8. PJM's Proposal to Eliminate the Ability of Project Developers to Suspend Their Projects After Execution of a Generator Interconnection Agreement or WMPA Is Just and Reasonable, as a Balanced Approach That Protects the Interconnection Process as Well as the Project Developers**

The Commission should also accept PJM's proposal to eliminate suspension under the GIA, and to afford Project Developers a one-time option to extend their milestones (other than any milestone related to Site Control) for a total period of one year regardless of cause.<sup>212</sup> PJM's concern is that Interconnection Customers have been able to use the current suspension provisions to enter the interconnection process with non-ready projects, and then enter suspension while they attempt to arrange financing or otherwise determine whether and how to move forward with their projects.<sup>213</sup> The bulk of projects that enter into suspension immediately after signing an ISA ultimately withdraw from the queue, with recent data showing that 52 percent of projects that suspended ultimately withdrew. In addition, the existing suspension provisions have been difficult to administer, as disputes continually arise over PJM's determinations that projects must exit suspension because they represent Material Modifications and over other suspension timing and time limit

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<sup>211</sup> Tariff, Part VII, Subpart H, section 337(B)(8) and Part VIII, Subpart H, sections 435(B)(8); Shoemaker Aff. ¶ 69.

<sup>212</sup> See Tariff, Part IX, Subpart B (Form of GIA), section 6.4. PJM may also reasonably extend any such milestone dates, in the event of delays that the Project Developer did not cause and could not have remedied through the exercise of due diligence. *Id.* Under the PJM's *pro forma* CSA, an Interconnection Customer can request one or more suspensions of up to three years if PJM determines that such suspension would not be deemed a Material Modification, or one year if it determines that such suspension would be deemed a Material Modification. Tariff, Attachment P, Appendix 2, section 3.4.

<sup>213</sup> Shoemaker Aff. ¶ 53.

issues. Eliminating these disputes and the ensuing waiver requests, while allowing some flexibility with regard to the one-time option to extend milestones, further justifies removing the ability for projects to suspend.

In *SPP*, the Commission accepted a proposal to reduce the existing suspension period as an independent entity variation, given the fact that “the number of pending interconnection requests in the queue is at an all-time high, . . . making it impossible for SPP effectively manage the queue and efficiently study the requests.”<sup>214</sup> The Commission has allowed stricter suspension provisions in other instances, recognizing that such provisions may be needed to address significant interconnection process delays.<sup>215</sup> PJM has balanced the elimination of suspension with the one-time milestone extension option in order to preserve flexibility for Project Developers,<sup>216</sup> and in an effort to eliminate waiver requests for missed deadlines thereby helping to reduce the burden on the Commission and PJM of handling such waiver requests. The Commission should accept PJM’s proposed suspension elimination as an appropriate independent entity variation, as it accepted SPP’s and MISO’s revisions to the suspension provisions on that basis.

## **V. NEW PART IX IS JUST AND REASONABLE**

### **A. Part IX Promotes Clarity and Administrative Efficiency**

New Part IX provides for both informational clarity and administrative efficiency in processing interconnection-related service agreements. Under the current Tariff, *pro*

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<sup>214</sup> *SPP*, 128 FERC ¶ 61,114, at PP 80-81.

<sup>215</sup> *MISO 2008*, 124 FERC ¶ 61,183, at P 106 (finding “there are serious problems with the queue, problems that do not benefit customers or generators whose projects are likely to come to fruition,” approving MISO’s more limited suspension provisions under independent entity variation standard, and finding that “[t]he balance Midwest ISO has struck is reasonable under the present circumstances”).

<sup>216</sup> *Shoemaker Aff.* ¶ 53.

*forma* service agreements are housed in multiple, scattered attachments to the Tariff that are wholly unrelated to the interconnection service provisions governing those agreements.<sup>217</sup> Common service agreements (most notably the WMPA) and study-related agreements are not currently set forth in the Tariff at all, thereby necessitating a filing with the Commission each time one of these agreements is executed.<sup>218</sup> Other agreements that are integral components of the interconnection process, such as study agreements, are contained in various locations on the PJM website. Part IX of the Tariff eliminates these administrative inefficiencies by setting forth all agreements relevant to the interconnection process in one location within the Tariff.

Under new Part IX, parties seeking to reference a particular *pro forma* service agreement will readily be able to locate that agreement in one place. Further, agreements that previously were not included in the Tariff, but are filed with the Commission pursuant to its jurisdiction over wholesale sales of electric energy and related products in PJM's markets or are otherwise integral to the interconnection process, will now be included in the Tariff. Proposed Part IX is therefore just and reasonable and will serve to streamline

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<sup>217</sup> Compare Tariff, Attachment O, Attachment P, Attachment RR (interconnection service agreements), with Tariff, Part IV (housing interconnection requirements).

<sup>218</sup> See, e.g., *PJM Interconnection, L.L.C.*, Letter Order, Wholesale Market Participant Agreement No. 5966, Docket No. ER21-1084-000 (Apr. 7, 2021); *PJM Interconnection, L.L.C.*, Letter Order, Wholesale Market Participation Agreement, Service Agreement No. 5855, Docket No. ER21-614-000 (Jan. 27, 2021); *PJM Interconnection, L.L.C.*, Letter Order, Original Service Agreement No. 5857, Docket No. ER21-535-000 (Jan. 25, 2021).

the interconnection agreement process by serving as a one-stop shop for all agreements that affect the processing of New Services Requests.<sup>219</sup>

Part IX also includes several new agreements that will underpin and ease administration of the new interconnection process.

**B. The Components of Part IX Provide Transparency and Will Help Streamline the Application, Study, and Contracting Processes**

PJM has:

- Included an introductory section in Part IX that provides deadlines for execution of interconnection-related agreements and expands rights for PJM to file agreements on an unexecuted basis if parties are in disagreement or if one party will not execute the agreement.
- Developed a new, streamlined Form of Application and Studies Agreement<sup>220</sup> to be used in connection with a New Service Request.
- Revised its existing ISA and titled it a GIA, which also incorporates provisions from existing ICSA; PJM made this change to facilitate the issuance of an ICSA when required in connection with a GIA and better link what are now two separate agreements.<sup>221</sup>
- Retained a stand-alone form of the ICSA as Tariff, Part IX, Subpart J for use in certain circumstances, including when an Affected System Customer requires Network Upgrades on the PJM System or a Project Developer

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<sup>219</sup> See also Shoemaker Aff. ¶¶ 57, 59.

<sup>220</sup> This agreement appears in Tariff, Part IX, Subpart A.

<sup>221</sup> Shoemaker Aff. ¶ 56.

requires Network Upgrades to the system of a Transmission Owner with which its Generation Facility or Merchant Transmission Facility does not directly interconnect.<sup>222</sup>

- Updated and renamed its Interim Interconnection Service Agreement as the Engineering and Procurement Agreement (Tariff, Part IX, Subpart D).<sup>223</sup>
- Developed a form of Upgrade Construction Service Agreement (Tariff, Part IX, Subpart E) that is based on Attachment GG under the existing Tariff.<sup>224</sup>
- Updated the Form of Surplus Interconnection Service Study Agreement (Tariff, Part IX, Subpart I) that appears in Attachment RR of the currently effective Tariff.

In addition, there are a number of other interconnection-related agreements (WMPA, Cost Responsibility Agreements (“CRA”), and Necessary Study Agreements (“NSA”)) that PJM commonly enters into and files with the Commission, for which there is no form of agreement under the currently effective Tariff.<sup>225</sup> PJM has developed standard forms of agreements (Tariff, Part IX, Subparts C, F, and G, respectively) for each of these. This will provide *pro forma* agreements for these frequently needed agreements, which will reduce the filing and administrative burden on PJM and the Commission.<sup>226</sup>

PJM also has modified its interconnection-related agreements to update their terms and conditions to conform to the Transition Period Rules and the New Rules and associated

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<sup>222</sup> *Id.* ¶ 57.

<sup>223</sup> *Id.* ¶ 59.

<sup>224</sup> *Id.* ¶ 58.

<sup>225</sup> *Id.* ¶ 59.

<sup>226</sup> *Id.* ¶¶ 57, 59.

terminology. With respect to the Interim ISA, PJM has renamed this agreement the Engineering and Procurement Agreement, which better reflects its scope and purpose—to allow engineering and procurement of long lead-time items necessary for the establishment of an interconnection.<sup>227</sup> The existing Interim ISA was not intended to be used for the construction but has often been mistaken for a construction agreement. Therefore, the new Engineering and Procurement Agreement makes clear that it “is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades.”<sup>228</sup>

PJM is also adding a form of WMPA to its Tariff. While PJM has been entering into WMPAs with customers interconnecting to non-jurisdictional facilities for years, there is presently no form of WMPA under the Tariff.<sup>229</sup> Adding one will reduce the burden on PJM to file such agreements, and the burden on the Commission to review such filings.<sup>230</sup> A WMPA is not intended to accommodate physical interconnection of Generating Facilities, but to facilitate wholesale sales into PJM markets by a wholesale market participant that is seeking to physically interconnect its Generating Facility with local distribution or sub-transmission facilities. In order to qualify to use a WMPA, a Project Developer must demonstrate no later than Decision Point III that it has entered into a two-party interconnection agreement with the relevant Transmission Owner to address issues of physical interconnection, local upgrades, and local charges associated with the

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<sup>227</sup> *Id.* ¶ 59.

<sup>228</sup> Tariff, Part IX, Subpart D (Form of Engineering and Procurement Agreement), section 3.0; *see also* Tariff, Part VIII, Subpart A, section 400 (definition of Engineering and Procurement Agreement) and Subpart A, section 401(G)(3)(b).

<sup>229</sup> Shoemaker Aff. ¶ 57.

<sup>230</sup> *Id.* ¶ 57.



Generating Facility.<sup>231</sup> PJM is adding this requirement because in its experience, over two-thirds of wholesale market participant projects do not complete construction and instead have been withdrawn.<sup>232</sup> While PJM initially proposed to require such evidence as part of a wholesale market participant's initial Application, PJM agreed to move this requirement to no later than Decision Point III as part of the compromises reached during the stakeholder process. The requirement as drafted serves as a balanced middle-ground approach that will reduce the amount of speculative or non-ready projects in the interconnection process, while at the same time allowing wholesale market participants a reasonable amount of time to enter into a two-party interconnection agreement.

PJM has also developed three additional forms of agreements. These include: (1) the Network Upgrade Cost Responsibility Agreement (Tariff, Part IX, Subpart H), to be used in connection with funding of Common Use Upgrades, and to securitize the interests of Project Developers that are responsible for the costs of Common Use Upgrades;<sup>233</sup> (2) the Upgrade Application and Studies Agreement (Tariff, Part IX, Subpart K), which will be used when an Upgrade Customer submits a request to fund Network Upgrades and seeks certain Incremental Auction Revenue Rights; and (3) an Affected System Customer Facilities Study Application and Agreement (Tariff, Part IX,

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<sup>231</sup> Tariff, Part VII, Subpart F, section 335(D) and Part VIII, Subpart F, section 433(D).

<sup>232</sup> Connell Aff. ¶ 37.

<sup>233</sup> As Mr. Shoemaker explains, the Network Upgrade Cost Responsibility Agreement will be developed during the Final Agreement Negotiation Phase along with the GIA. A GIA might identify multiple Network Upgrades, some of which will be Common Use Upgrades that are subject to Network Upgrade Cost Responsibility as well as Network Upgrades whose costs are allocated to only one Project Developer, and are not subject to a separate Network Upgrade Cost Responsibility. Shoemaker Aff. ¶ 58.

Subpart L) that will apply when an interconnection on an adjacent transmission system causes an impact on the PJM Transmission System.<sup>234</sup>

**VI. THE PROPOSED REVISIONS TO PARTS II, III, IV, AND VI ARE JUST AND REASONABLE**

PJM proposes a number of revisions to the Tariff, Parts II, III, IV, and VI, all of which are necessary for the proper interaction of these parts of the Tariff with new Parts VII, VIII, and IX, and therefore should be accepted as just and reasonable.

- Changes have been made to Parts II and III of the Tariff to use the New Rules' nomenclature for the studies PJM performs in connection with long-term firm transmission service requests and incorporate the application and priority provisions of new Parts VII and VIII into Parts II and III as appropriate.
- Changes have been made to existing Parts II and III to remove from the part of the Tariff covering long-term firm transmission service requests provisions that duplicate Order No. 845 study and reporting metrics.
- Sunset provisions have been added to the preambles of Parts IV and VI to make it clear that New Service Requests received on or after April 1, 2018, for which Interconnection Customers have not received an Interconnection Service Agreement or wholesale market participation agreement for execution will be subject to Tariff, Parts VII or VIII rather than to Parts IV and VI.

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<sup>234</sup> Shoemaker Aff. ¶ 58.

In addition, PJM proposes non-substantive revisions to Parts II, III, IV, and VI to correct and standardize the language of the Tariff references—for example, the sentence in Part II, section 13.7 has been revised to read, “The Transmission Customer will be billed for its Reserved Capacity under the terms of Tariff, Schedule 7.” These changes are needed for the links in the web version of the Tariff on PJM’s website to function properly. Finally, PJM has corrected minor typographical and other errors and has updated the Tariff Table of Contents to reflect what the Tariff contents will be once the Tariff revisions being filed here become effective. These housekeeping changes improve the function of the web version of PJM’s Tariff and lend clarity to the Tariff. The Commission should therefore accept these revisions.

**A. The Proposed Revisions to Parts II and III Are Just and Reasonable**

The studies used to evaluate Eligible Customers’ long-term firm transmission service requests are the same studies that are used to evaluate New Service Requests and are performed by the Interconnection Analysis department using the same procedures that apply to New Service Requests. As those studies and procedures are being revised and reorganized as part of this filing, PJM proposes changes to Parts II and III to make the study references and application and processing requirements for long-term firm transmission service requests consistent with new Parts VII and VIII of the Tariff. The Commission should accept these changes because they create a coherent framework for Planning studies throughout the Tariff and are therefore just and reasonable.

Further, because PJM’s Interconnection Analysis department is responsible for studies associated with long-term firm transmission service requests, Order No. 845 metrics and reporting requirements to which these departments are subject apply also to

the transmission service studies.<sup>235</sup> PJM therefore proposes to remove from Tariff, Parts II and III, sections 19.8 and 32.5. Tariff, Part II, section 19.8 currently requires PJM to use due diligence in studying requests for long-term firm transmission service, sets forth metrics for reporting study delays to the Commission, and provides for penalties applicable to PJM if its Interconnection Projects and Interconnection Analysis departments fail to complete a certain percentage of studies in a certain time frame; Tariff, Part III, section 32.5 incorporates the same diligence, reporting, and penalty provisions to service under Part III of the Tariff. PJM proposes to remove both sections because they have effectively been superseded by Order No. 845 interconnection study metrics and reporting requirements.

As Mr. Connell explains, the reporting provisions of sections 19.8 and 32.5 have been triggered less than a handful of times, and the penalty provisions of sections 19.8 and 32.5 have not been triggered even once since they were added to the Tariff.<sup>236</sup> Further, because studies of long-term firm transmission service requests are subject to Order No. 845 metrics and reporting requirements that the Interconnection Projects and Interconnection Analysis departments must follow, any future failure to meet the long-term firm transmission service study deadlines would result in a report to the Commission that would be publicly available.<sup>237</sup> Either the Commission or an interested party could initiate

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<sup>235</sup> Connell Aff. ¶ 32. To date, however, the PJM metrics reports have not broken the transmission request-related studies out from all other New Service Requests. *Id.*

<sup>236</sup> *Id.* ¶ 34.

<sup>237</sup> *Id.* ¶ 35.

a proceeding under section 206 of the FPA if they believe PJM is not exercising due diligence in performing these studies, based on its reporting.

PJM respectfully requests that the Commission grant it an independent entity variation to allow it to remove Tariff, Part II, section 19.8, and Tariff, Part III, section 32.5. These provisions are no longer needed to ensure PJM studies long-term firm transmission service requests with due diligence and on a non-discriminatory basis. Moreover, having overlapping and potentially inconsistent requirements in the Tariff for the same activity may cause compliance issues. Finally, because Order No. 845 metrics and reporting requirements ensure full transparency into PJM's study performance, there will be no loss of Commission oversight of PJM's long-term firm transmission service request processing. For all these reasons, PJM's proposal to remove sections 19.8 and 32.5 from the Tariff strikes a just and reasonable balance between transparency and oversight of PJM's long-term firm transmission service request studies and avoiding inconsistent and potentially overlapping compliance requirements. The Commission should accept the proposed removal of these sections under an independent entity variation.

**B. The Proposed Minor Revisions to Part IV and VI Are Just and Reasonable**

The proposed revisions to Parts IV and VI provide clarity as to the applicability of new Parts VII and VIII as opposed to Parts IV and VI, with cut off dates for projects that will remain subject to Parts IV and VI while later projects will be subject to Parts VII, VIII, and IX PJM will continue to work with its neighbors to improve affected system coordination. However, such work should not hold up these needed reforms. Such

revisions enhance understanding of the Tariff and facilitate use of the Tariff by interested parties and therefore should be approved.

**C. The Commission Should Accept the Minor Non-Substantive Revisions Proposed in This Filing**

The proposed Tariff sheets being filed here include minor, non-substantive revisions to correct typographical and other types of errors, and to standardize the manner in which Tariff cross-references are stated. Correcting errors improves the comprehensibility of the Tariff and should be encouraged. The standardization of the format of cross-references is needed so that PJM's web version of its Tariff contain working links among the various sections of the Tariff. These links enhance the user experience with the Tariff and should also be promoted.

**VII. EFFECTIVE DATE AND REQUESTED DATE FOR COMMISSION ACTION**

PJM requests an effective date of January 3, 2023, for the Tariff revisions contained in Parts II, III, IV, VI, VII, and IX, requests an "indefinite" effective date of "12/31/9998" for the new Part VIII, and requests Commission action on this filing by no later than October 3, 2022. While these requested effective dates are more than 120 days after this filing, they will provide a clear demarcation between the existing interconnection procedures and the interconnection procedures being filed herein. It also provides parties with adequate notice of the proposed revisions well in advance of their effective dates. The use of the January 3, 2023 effective date for Part VII, as well as for Parts II, III, IV, VI, and IX, will also permit these parts to become effective the first full Business Day of the next calendar year.

In addition, the requested order date will provide all interested persons with notice that this filing has been accepted, and will allow PJM to submit any necessary compliance filings prior to the effective date.

Finally, while the PJM stakeholder process has provided interested parties with information and awareness of this filing, including opportunities to review draft versions of the proposed Tariff sheets, given the length of the filing, PJM proposes an extended comment period of 30 days, rather than the standard 21-day comment period, for this filing.

#### **VIII. REQUIREMENTS OF SECTION 35.13 OF COMMISSION'S REGULATIONS, INCLUDING DOCUMENTS INCLUDED WITH FILING**

**1. List of Documents Submitted, Section 35.13(b)(1)**

*See supra* page iii.

**2. Requested Effective Date, Section 35.13(b)(2)**

*See supra* Section VII.

**3. Names and Addresses of Persons to Whom a Copy of this Filing Has Been Provided, Section 35.13(b)(3)**

*See infra* Section IX.

**4. Description of the Tariff Revisions, Section 35.13(b)(4)**

*See supra* Sections IV through VI.

**5. Statement of Reasons for the Tariff Revisions, Section 35.13(b)(5)**

*See supra* Sections IV, V, and VI.

## **IX. COMMUNICATIONS**

Correspondence and communications with respect to this filing should be sent to, and PJM requests the Secretary include on the official service list, the following:<sup>238</sup>

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## **X. SERVICE**

PJM has served a copy of this filing on all PJM Members and on the affected state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations,<sup>239</sup> PJM will post a copy of this filing to the FERC filings section on its internet site, <https://pjm.com/library/filing-order>, and will send an email on the same date as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region,<sup>240</sup> alerting them that this filing has been made

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<sup>238</sup> To the extent necessary, PJM requests waiver of Rule 203(b)(3) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.203(b)(3), to permit all of the persons listed to be placed on the official service list for this proceeding.

<sup>239</sup> See *id.* §§ 35.2(e) and 385.2010(f)(3).

<sup>240</sup> PJM already maintains, updates, and regularly uses email lists for all PJM Members and affected state commissions.



by PJM and is available by following such link. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within twenty-four hours of the filing.

## **XI. CONCLUSION**

For the reasons stated above, PJM requests that the Commission issue an order by October 3, 2022, accepting this filing to be effective as of the dates requested herein, without modification or condition.

Respectfully submitted,

/s/ Wendy B. Warren

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## APPENDIX 1

### GLOSSARY

Term	Definition
Affected System	“Affected System” shall mean an electric system other than the Transmission Provider’s Transmission System that may be affected by a proposed interconnection or on which a proposed interconnection or addition of facilities or upgrades may require modifications or upgrades to the Transmission System.
Affected System Customer	“Affected System Customer” shall mean the developer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider’s Transmission System.
Affected System Study Agreement	“Affected System Study Agreement” shall mean the agreement set forth in Tariff, Part IX, Subpart N.
Applicant	“Applicant” shall mean an entity desiring to become a PJM Member, become a Market Participant, engage in market activities, or to take Transmission Service that has submitted the PJMSettlement credit application, PJMSettlement credit agreement and other required submittals as set forth in Tariff, Attachment Q.
Application	“Application” shall mean a request by an Eligible Customer for transmission service pursuant to the provisions of the Tariff.
Application and Studies Agreement	“Application and Studies Agreement” shall mean the application that must be submitted by a Project Developer or Eligible Customer that seeks to initiate a New Service Request, a form of which is set forth in Tariff, Part VII, Subpart A. An Application and Studies Agreement must be submitted electronically through PJM’s web site in accordance with PJM’s Manuals.
Business Day	“Business Day” shall mean a day ending at 5 pm Eastern prevailing time in which the Federal Reserve System is open for business and is not a scheduled PJM holiday.
Cancellation Costs	“Cancellation Costs” shall mean costs and liabilities incurred in connection with: (a) cancellation of supplier and contractor written orders and agreements entered into to design, construct and install Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, and/or (b) completion of some or all

Term	Definition
	of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, or specific unfinished portions and/or removal of any or all of such facilities which have been installed, to the extent required for the Transmission Provider and/or Transmission Owner(s) to perform their respective obligations under the Tariff, Part VII. Cancellation costs may include costs for Customer-Funded Upgrades assigned to Project Developer or Eligible Customer, in accordance with the Tariff and as reflected in this GIA, that remain the responsibility of Project Developer or Eligible Customer under the Tariff, even if such New Service Request is terminated or withdrawn.
Capacity Interconnection Rights	“Capacity Interconnection Rights” shall mean the rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection.
Common Use Upgrade	“Common Use Upgrade” or “CUU” shall mean a Network Upgrade that is needed for the interconnection of Generating Facilities or Merchant Transmission Facilities of more than one Project Developer or Eligible Customer and which is the shared responsibility of each Project Developer or Eligible Customer.
Completed Application	“Completed Application” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit.
Construction Service Agreement	“Construction Service Agreement” shall mean either an Interconnection Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.
Contingent Facilities	“Contingent Facilities” shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

<b>Term</b>	<b>Definition</b>
Cost Responsibility Agreement	“Cost Responsibility Agreement” shall mean a form of agreement between Transmission Provider and a Project Developer with an existing generating facility, intended to provide the terms and conditions for the Transmission Provider to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner. A form of the Cost Responsibility Agreement is set forth in Tariff, Part IX, Subpart F.
Customer-Funded Upgrade	“Customer-Funded Upgrade” shall mean any Network Upgrade, Distribution Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on a Project Developer or Eligible Customer pursuant to Tariff, Part VII, Subpart D, section 307(A)(5), or (ii) is voluntarily undertaken by an Upgrade Customer in fulfillment of an Upgrade Request. No Network Upgrade, Distribution Upgrade or Merchant Network Upgrade or other transmission expansion or enhancement shall be a Customer-Funded Upgrade if and to the extent that the costs thereof are included in the rate base of a public utility on which a regulated return is earned.
Cycle	“Cycle” shall mean that period of time between the start of an Application phase and conclusion of the corresponding Final Agreement Negotiation Phase. The Cycle consists of the Application Phase, Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.
Decision Point I	“Decision Point I” shall mean the time period that commences on the first Business Day immediately following Phase I of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.
Decision Point II	“Decision Point II” shall mean the time period that commences on the first Business Day immediately following Phase II of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

Term	Definition
Decision Point III	<p>“Decision Point III” shall mean the time period that commences on the first Business Day immediately following Phase III of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.</p>
Eligible Customer	<p>“Eligible Customer” shall mean:</p> <p>(i) Any electric utility (including any Transmission Owner and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner.</p> <p>(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff. As used in Tariff, Part VII, Eligible Customer shall mean only those Eligible Customers that have submitted an Application and Study Agreement.</p>
Engineering and Procurement Agreement	<p>“Engineering and Procurement Agreement” shall mean an agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request. An Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. A form of the Engineering and Procurement Agreement is set forth in Tariff, Part IX, Subpart D. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.</p>

<b>Term</b>	<b>Definition</b>
Facilities Study	“Facilities Study” shall be an engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to: (1) determine the required modifications to the Transmission Provider's Transmission System necessary to implement the conclusions of the System Impact Studies; and (2) complete any additional studies or analyses documented in the System Impact Studies or required by PJM Manuals, and determine the required modifications to the Transmission Provider's Transmission System based on the conclusions of such additional studies.
Federal Power Act	“Federal Power Act” shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a, et seq.
FERC or Commission	“FERC” or “Commission” shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.
Final Agreement Negotiation Phase	“Final Agreement Negotiation Phase” shall mean the phase set forth in Tariff, Part VII, Subpart D, section 314 to tender, negotiate, and execute any service agreement in Tariff, Part IX.
Generating Facility	“Generating Facility” shall mean Project Developer's device for the production and/or storage for later injection of electricity identified in the New Service Request, but shall not include the Project Developer's Interconnection Facilities. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.
Generation Interconnection Agreement (“GIA”):	“Generation Interconnection Agreement” (“GIA”) shall mean the form of interconnection agreement applicable to a Generation Interconnection Request or Transmission Interconnection Request. A form of the GIA is set forth in Tariff, Part IX, Subpart B.
Generation Interconnection Request	“Generation Interconnection Request” shall mean a request by a Generation Project Developer pursuant to Tariff, Part VII, Subpart C, section 306(A)(1), to interconnect a generating unit with the Transmission

<b>Term</b>	<b>Definition</b>
	System or to increase the capacity of a generating unit interconnected with the Transmission System in the PJM Region.
Incremental Auction Revenue Rights	“Incremental Auction Revenue Rights” shall mean the additional Auction Revenue Rights, not previously feasible, created by the addition of Incremental Rights-Eligible Required Transmission Enhancements, Merchant Transmission Facilities, or of one or more Customer-Funded Upgrades.
Interconnection Construction Service Agreement	“Interconnection Construction Service Agreement” shall mean the agreement entered into by an Project Developer, Transmission Owner and the Transmission Provider pursuant to this Tariff, Part VII in the form set forth in Tariff, Part IX, Subpart J or Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades, Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades and/or Transmission Owner Interconnection Facilities and coordination of the construction and interconnection of an associated Generating Facility.
Interconnection Customer	“Interconnection Customer” shall mean a Generation Interconnection Customer and/or a Transmission Interconnection Customer.
Interconnection Facilities	“Interconnection Facilities” shall mean the Transmission Owner’s Interconnection Facilities and the Project Developer’s Interconnection Facilities. Collectively Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modifications, additions, or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades, or Network Upgrades.
Interconnection Process Reform Task Force (“IPRTF”)	“Interconnection Process Reform Task Force” or “IPRTF” shall mean the stakeholder task force established by PJM in March 2021 to address issues concerning PJM’s interconnection process.
Interconnection Request	“Interconnection Request” shall mean a Generation Interconnection Request, a Transmission

<b>Term</b>	<b>Definition</b>
	Interconnection Request and/or an IDR Transfer Agreement.
Interconnection Service	“Interconnection Service” shall mean the physical and electrical interconnection of the Generating Facility with the Transmission System pursuant to the terms of this Tariff, Part VII and the Generation Interconnection Agreement entered into pursuant thereto by Project Developer, the Transmission Owner and Transmission Provider.
Material Modification	“Material Modification” shall mean, as determined through a Necessary Study, any modification to a Generation Interconnection Agreement that has a material adverse effect on the cost or timing of Interconnection Studies related to, or any Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades or Transmission Owner Interconnection Facilities needed to accommodate, any Interconnection Request with a later Cycle.
Maximum Facility Output	“Maximum Facility Output” shall mean the maximum (not nominal) net electrical power output in megawatts, specified in the Generation Interconnection Agreement, after supply of any parasitic or host facility loads, that a Generation Project Developer’s Generating Facility is expected to produce, provided that the specified Maximum Facility Output shall not exceed the output of the proposed Generating Facility that Transmission Provider utilized in the System Impact Study.
Member	“Member” shall have the meaning provided in the Operating Agreement.
Merchant Network Upgrades	“Merchant Network Upgrades” shall mean additions to, or modifications or replacements of, or advancement of additions to, or modifications or replacement of, physical facilities of the Transmission Owner that, on the date of the pertinent Upgrade Customer’s Upgrade Request, are part of the Transmission System or are included in the Regional Transmission Expansion Plan, but that are not already subject to an already existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.



Term	Definition
Merchant Transmission Facilities	<p>“Merchant Transmission Facilities” shall mean A.C. or D.C. transmission facilities that are interconnected with or added to the Transmission System pursuant to the Tariff, Part VII and that are so identified in Tariff, Attachment T, provided, however, that Merchant Transmission Facilities shall not include (i) any Project Developer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20, 2003 ; (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Tariff, Attachment T, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.</p>
Necessary Study Agreement	<p>“Necessary Study Agreement” shall mean the form of agreement for preparation of one or more Necessary Studies, as set forth in Tariff, Part IX, Subpart G.</p>
Network Upgrade Cost Responsibility Agreement	<p>“Network Upgrade Cost Responsibility Agreement” shall mean the agreement entered into by the Project Developer Parties and the Transmission Provider pursuant to this GIP, and in the form set forth in Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades and coordination of the construction and interconnection of associated Generating Facilities. In regard to Common Use Upgrades, a separate Network Upgrade Cost Responsibility Agreement will be executed for each set of Common Use Upgrades on the system of a specific Transmission Owner that is associated with the interconnection of a Generating Facility.</p>
Network Upgrades	<p>“Network Upgrades” shall mean modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System. Network Upgrades shall include Stand Alone Network Upgrades which are Network Upgrades that are not part of an Affected System; only serve the Generating Facility or Merchant Transmission Facility; and have no impact or potential impact on the Transmission System until the final tie-in is complete. Both Transmission Provider and Project Developer must agree as to what constitutes</p>

<b>Term</b>	<b>Definition</b>
	Stand Alone Network Upgrades and identify them in the GIA, Schedule L or in the Interconnection Construction Service Agreement, Schedule D. If the Transmission Provider and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Project Developer a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.
New Rules	The Tariff revisions set forth in proposed Tariff, Part VIII.
New Service Queue	“New Services Queue” shall mean all Interconnection Requests, Completed Applications, and Upgrade Requests that are received within each six-month period ending on March 31 and September 30 of each year shall collectively comprise a New Services Queue.
New Service Request	“New Service Request” shall mean an Interconnection Request or a Completed Application.
Operating Agreement of the PJM Interconnection, L.L.C., Operating Agreement or PJM Operating Agreement	“Operating Agreement of the PJM Interconnection, L.L.C.,” “Operating Agreement” or “PJM Operating Agreement” shall mean the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. dated as of April 1, 1997 and as amended and restated as of June 2, 1997, including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time thereafter, among the Members of the PJM Interconnection, L.L.C., on file with the Commission.
Part I	“Part I” shall mean the Tariff Definitions and Common Service Provisions contained in Tariff, Part I, sections 1 through 12A.
Part II	“Part II” shall mean Tariff, Part II, sections 13 through 27A pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.
Part III	“Part III” shall mean Tariff, Part III, sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common

<b>Term</b>	<b>Definition</b>
	Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.
Part IV	“Part IV” shall mean Tariff, Part IV, sections 36 through 112C pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.
Part VI	“Part VI” shall mean Tariff, Part VI, sections 200 through 237 pertaining to the queuing, study, and agreements relating to New Service Requests, and the rights associated with Customer-Funded Upgrades in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.
Part VII	“Part VII” shall mean Tariff, Part VII, sections 300 through 337 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.
Part VIII	“Part VIII” shall mean Tariff, Part VIII, sections 400 through 435 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.
Part IX	“Part IX” shall mean Tariff, Part IX, section 500 and Subparts A through L pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.
Parties	“Parties” shall mean the Transmission Provider, as administrator of the Tariff, and the Transmission Customer receiving service under the Tariff. PJMSettlement shall be the Counterparty to Transmission Customers.
Permissible Technological Advancement	“Permissible Technological Advancement” shall mean a proposed technological change such as an advancement to turbines, inverters, plant supervisory controls or other similar advancements to the

<b>Term</b>	<b>Definition</b>
	technology proposed in the Interconnection Request that is submitted to the Transmission Provider no later than the end of Decision Point II. Provided such change may not: (i) increase the capability of the Generating Facility or Merchant Transmission Facility as specified in the original Interconnection Request; (ii) represent a different fuel type from the original Interconnection Request; or (iii) cause any material adverse impact(s) on the Transmission System with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response. If the proposed technological advancement is a Permissible Technological Advancement, no additional study will be necessary and the proposed technological advancement will not be considered a Material Modification.
Phase I	“Phase I” shall start on the first Business Day immediately after the close of the Application Phase of a Cycle, but no earlier than 30 calendar days following the distribution of the Phase I System Impact Study Base Case Data. During Phase I, Transmission Provider shall conduct the Phase I System Impact Study.
Phase I System Impact Study	“Phase I System Impact Study” shall mean System Impact Study conducted during the Phase I System Impact Study Phase.
Phase II	“Phase II” shall start on the first Business Day immediately after the close of Decision Point I Phase unless the Decision Point III of the immediately preceding Cycle is still open. In no event, shall Phase II of a Cycle commence before the conclusion of Decision Point III of the immediately preceding Cycle. During Phase II, Transmission Provider shall conduct the Phase II System Impact Study.
Phase II System Impact Study	“Phase II System Impact Study” shall mean System Impact Study conducted during the Phase II System Impact Study Phase.
Phase III	“Phase III” shall start on the first Business Day immediately after the close of Decision Point II, unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase

<b>Term</b>	<b>Definition</b>
	of the immediately preceding Cycle. During Phase III, Transmission Provider shall conduct the Phase III System Impact Study.
Phase III System Impact Study	“Phase III System Impact Study” shall mean System Impact Study conducted during Phase III.
PJM	“PJM” shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.
PJM Manuals	“PJM Manuals” shall mean the instructions, rules, procedures and guidelines established by the Office of the Interconnection for the operation, planning, and accounting requirements of the PJM Region and the PJM Interchange Energy Market.
PJM Region	“PJM Region” shall have the meaning specified in the Operating Agreement.
PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff	“PJM Tariff,” “Tariff,” “O.A.T.T.,” “OATT,” or “PJM Open Access Transmission Tariff” shall mean that certain PJM Open Access Transmission Tariff, including any schedules, appendices or exhibits attached thereto, on file with FERC and as amended from time to time thereafter.
Point of Interconnection	“Point of Interconnection” shall mean the point or points where the Interconnection Facilities connect with the Transmission System.
Project Developer	“Project Developer” shall mean a Generation Project Developer and/or a Transmission Project Developer.
Provisional Interconnection Service	“Provisional Interconnection Service” shall mean interconnection service provided by Transmission Provider associated with interconnecting the Project Developer’s Generating Facility to Transmission Provider’s Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

<b>Term</b>	<b>Definition</b>
Readiness Deposit	“Readiness Deposit” shall mean the deposit or deposits required by Tariff, Part VII, Subpart A, section 301(A)(3)(b).
Reasonable Efforts	“Reasonable Efforts” shall mean, with respect to any action required to be made, attempted, or taken by an Interconnection Party under the Tariff, Part VII, a Generation Interconnection Agreement, or a Construction Service Agreement, such efforts as are timely and consistent with Good Utility Practice and with efforts that such party would undertake for the protection of its own interests.
Regional Transmission Expansion Plan	“Regional Transmission Expansion Plan” shall mean the plan prepared by the Office of the Interconnection pursuant to Operating Agreement, Schedule 6 for the enhancement and expansion of the Transmission System in order to meet the demands for firm transmission service in the PJM Region.
Reserved Capacity	“Reserved Capacity” shall mean the maximum amount of capacity and energy that the Transmission Provider agrees to transmit for the Transmission Customer over the Transmission Provider's Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Tariff, Part II. Reserved Capacity shall be expressed in terms of whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.
Security	“Security” shall mean the financial guaranty provided by the Project Developer, Eligible Customer or Upgrade Customer pursuant to Tariff, Part VII, Subpart D, sections 309(A)(2)(i), 309(A)(3)(a), 311(a)(2)(d)(i)(a), 311(A)(2)(h), and 313(A)(1)(a), to secure the Project Developer's, Eligible Customer's or Upgrade Customer responsibility for Costs under an interconnection-related agreement set forth in Tariff, Part IX.
Service Agreement	“Service Agreement” shall mean the initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.
Site	“Site” shall mean all of the real property including, but not limited to, any owned or leased real property, bodies of water and/or submerged land, and easements, or

<b>Term</b>	<b>Definition</b>
	other forms of property rights acceptable to PJM, on which the Generating Facility or Merchant Transmission Facility is situated and/or on which the Project Developer Interconnection Facilities are to be located.
Site Control	“Site Control” shall mean the evidentiary documentation provided by Project Developer in relation to a New Service Request demonstrating the requirements as set forth in the following Tariff, Part VII, Subpart A, section 302, and Tariff, Part VII, Subpart C, section 306, and Subpart D, sections 309 and 313.
Study Deposit	“Study Deposit” shall mean the payment in the form of cash required to initiate and fund any study provided for in Tariff, Part VII, Subpart A, section 301(A)(3)(a).
Surplus Interconnection Service	“Surplus Interconnection Service” shall mean any unneeded portion of Interconnection Service established in a Generation Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.
System Impact Study	“System Impact Study” shall mean an assessment(s) by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a New Service Request, (ii) whether any additional costs may be incurred in order to provide such transmission service or to accommodate a New Service Request, and (iii) an estimated date that the New Service Requests can be interconnected with the Transmission System and an estimate of the cost responsibility for the interconnection of the New Service Request; and (iv) with respect to an Upgrade Request, the estimated cost of the requested system upgrades or expansion, or of the cost of the system upgrades or expansion, necessary to provide the requested incremental rights.
Transition Cycle	One of the two Cycles set forth in Tariff, Part VII.
Transition Date	“Transition Date” shall mean the later of: (i) the effective date of Transmission Provider’s Docket No. ER22-XXXX transition cycle filing seeking FERC acceptance of this Tariff, Part VII or (ii) the date by which all AD2 and prior queue window Interconnection

<b>Term</b>	<b>Definition</b>
	Service Agreements or wholesale market participation agreements have been executed or filed unexecuted.
Transition Period Rules	The Tariff revisions set forth in proposed Tariff, Part VII.
Transmission Facilities	“Transmission Facilities” shall have the meaning set forth in the Operating Agreement.
Transmission Owner	“Transmission Owner” shall mean a Member that owns or leases with rights equivalent to ownership Transmission Facilities and is a signatory to the PJM Transmission Owners Agreement. Taking transmission service shall not be sufficient to qualify a Member as a Transmission Owner.
Transmission Owner Interconnection Facilities	“Transmission Owner Interconnection Facilities” shall mean all Interconnection Facilities that are not Project Developer Interconnection Facilities and that, after the transfer under Appendix 2, section 23.3.5 of the GIA to the Transmission Owner of title to any Transmission Owner Interconnection Facilities that the Project Developer constructed, are owned, controlled, operated and maintained by the Transmission Owner on the Transmission Owner’s side of the Point of Change of Ownership identified in appendices to the Generation Interconnection Agreement and if applicable, the Interconnection Construction Service Agreement, including any modifications, additions or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System or interconnected distribution facilities.
Transmission Provider	<p>The “Transmission Provider” shall be the Office of the Interconnection for all purposes, provided that the Transmission Owners will have the responsibility for the following specified activities:</p> <p>(a) The Office of the Interconnection shall direct the operation and coordinate the maintenance of the Transmission System, except that the Transmission Owners will continue to direct the operation and maintenance of those transmission facilities that are not listed in the PJM Designated Facilities List contained in the PJM Manual on Transmission Operations;</p>



Term	Definition
	<p>(b) Each Transmission Owner shall physically operate and maintain all of the facilities that it owns; and</p> <p>(c) When studies conducted by the Office of the Interconnection indicate that enhancements or modifications to the Transmission System are necessary, the Transmission Owners shall have the responsibility, in accordance with the applicable terms of the Tariff, Operating Agreement and/or the Consolidated Transmission Owners Agreement to construct, own, and finance the needed facilities or enhancements or modifications to facilities.</p>
Transmission Service	“Transmission Service” shall mean Point-To-Point Transmission Service provided under Tariff, Part II on a firm and non-firm basis.
Transmission System	“Transmission System” shall mean the facilities controlled or operated by the Transmission Provider within the PJM Region that are used to provide transmission service under Tariff, Part II and Part III.
Upgrade Construction Service Agreement	“Upgrade Construction Service Agreement” shall mean that agreement entered into by an Eligible Customer, Upgrade Customer or Interconnection Customer proposing Merchant Network Upgrades, a Transmission Owner, and the Transmission Provider, pursuant to Tariff, Part VI, Subpart B, and in the form set forth in Tariff, Attachment GG.
Upgrade Customer	“Upgrade Customer” shall mean an entity that submits an Upgrade Request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8, or that submits an Upgrade Request for Merchant Network Upgrades (including accelerating the construction of any transmission enhancement or expansion, other than Merchant Transmission Facilities, that is included in the Regional Transmission Expansion Plan prepared pursuant to Operating Agreement, Schedule 6).
Upgrade Request	“Upgrade Request” shall mean a request submitted in the form prescribed in Tariff, Part IX, Subpart K, for evaluation by the Transmission Provider of the

Term	Definition
	feasibility and estimated costs of (a) a Merchant Network Upgrade or (b) the Customer-Funded Upgrades that would be needed to provide Incremental Auction Revenue Rights specified in a request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8.
Wholesale Market Participation Agreement (“WMPA”)	“Wholesale Market Participation Agreement” (“WMPA”) shall mean the form of agreement intended to allow a Project Developer to effectuate in wholesale sales in the PJM markets. A form of the WMPA is set forth in Tariff, Part IX, Subpart C.

## APPENDIX 2

### PJM INTERCONNECTION PROCESS FILINGS

Since the establishment of Order No. 2003, PJM has maintained its compliance with the Commission's *pro forma* interconnection procedures, while also introducing minor process improvements. The Commission has accepted the following interconnection-related updates to PJM's Tariff:

- Docket Nos. ER06-28-000, -001, -002, in which PJM filed revised tariff provisions in regard to definitions, security, clarifying terms of various agreements, and transfer of queue positions.<sup>1</sup>
- Docket Nos. ER06-199-000, -001, -002, -003, addressing compliance with Order No. 2006<sup>2</sup> and rules pertaining to small generator interconnection procedures and agreements.<sup>3</sup>
- Docket Nos. ER06-499-000, -001, -002, -003, -004, addressing compliance with Order No. 661<sup>4</sup> pertaining to the interconnection of large wind facilities.<sup>5</sup>
- Docket Nos. EL06-67-001 and ER07-344-000, in which PJM filed tariff provisions to reorganize existing terms and procedures regarding studies

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<sup>1</sup> *PJM Interconnection, L.L.C.*, Letter Order, Docket Nos. ER06-28-000, -001, (Jan. 26, 2006), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER06-28-002 (Mar. 16, 2006).

<sup>2</sup> *Standardization of Small Generator Interconnection Agreements and Procedures*, Order No. 2006, 111 FERC ¶ 61,220, *order on reh'g*, Order No. 2006-A, 113 FERC ¶ 61,195 (2005), *order on clarification*, Order No. 2006-B, 116 FERC ¶ 61,046 (2006).

<sup>3</sup> *PJM Interconnection, L.L.C.*, 116 FERC ¶ 61,021 (2006), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket Nos. ER06-199-001, -002, -003 (Oct. 31, 2006).

<sup>4</sup> *Interconnection for Wind Energy*, Order No. 661, 111 FERC ¶ 61,353, *order on reh'g & clarification*, Order No. 661-A, 113 FERC ¶ 61,254 (2005).

<sup>5</sup> *PJM Interconnection, L.L.C.*, 116 FERC ¶ 61,021 (2006), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket Nos. ER06-499-002, -003, -004 (Oct. 31, 2006).

and agreements that may result in participant-funded upgrades, which included Generation Interconnection Requests, Merchant Transmission interconnection requests, new firm transmission service, and Incremental Auction Revenue Rights, into a new Part VI.<sup>6</sup>

- Docket No. ER08-280-000, in which PJM filed revised tariff provisions to harmonize the time period for performing a System Impact Study for both New Service Requests and Eligible Customers, increase the number of System Impact Studies per year to four, and implement conforming revisions to the Feasibility Study, for the purpose of keeping pace with an increase in Interconnection Requests.<sup>7</sup>
- Docket No. EL08-36-001, in which PJM filed revised tariff provisions concerning study deposits, scoping meetings, and cost allocation with the aim of encouraging the early submission of Interconnection Requests, ensuring that projects are commercially viable, and reducing the time required to process each request.<sup>8</sup>
- Docket Nos. ER14-381-000, -001, addressing compliance with Order No. 764<sup>9</sup> pertaining to the provision of meteorological and forced outage data to the Transmission Provider to facilitate power production forecasting.<sup>10</sup>

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<sup>6</sup> *PJM Interconnection, L.L.C.*, Letter Order, Docket Nos. EL06-67-001 & ER07-344-000 (Feb. 8, 2007).

<sup>7</sup> *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER08-280-000 (Jan. 25, 2008).

<sup>8</sup> *PJM Interconnection, L.L.C.*, Letter Order, Docket No. EL08-36-001 (Aug. 19, 2008).

<sup>9</sup> *Integration of Variable Energy Resources*, Order No. 764, 139 FERC ¶ 61,246, *order on reh'g & clarification*, Order No. 764-A, 141 FERC ¶ 61,232 (2012), *order on clarification & reh'g*, Order No. 764-B, 144 FERC ¶ 61,222 (2013).

<sup>10</sup> *PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,045 (2014), *order on compliance*, *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER14-381-001 (June 30, 2014).

- Docket Nos. ER14-2590-000, -001, addressing compliance with Order No. 792<sup>11</sup> concerning provisions related to small generators including pre-application reports, availability of the fast-track process, new supplemental review screens, and inclusion of storage devices.<sup>12</sup>
- Docket Nos. ER16-2518-000, -001, in which PJM filed revised tariff provisions to address delays in the interconnection process by revising how study deposits are used, enhanced Site Control requirements, and revised application deficiency rules, all designed to increase efficiency and shorten the time for an Interconnection Customer to receive a Queue Position.<sup>13</sup>
- Docket No. ER17-108-000, addressing compliance with Order No. 827<sup>14</sup> and Order No. 828<sup>15</sup> pertaining to the provision of reactive power as a condition of interconnection.<sup>16</sup>
- Docket No. ER18-1629-000, addressing compliance with Order No. 842<sup>17</sup> pertaining to the capability of synchronous and non-synchronous generation facilities to provide primary frequency response.<sup>18</sup>

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<sup>11</sup> *Small Generator Interconnection Agreements and Procedures*, Order No. 792, 145 FERC ¶ 61,159 (2013), *order on clarification*, Order No. 792-A, 146 FERC ¶ 61,214 (2014).

<sup>12</sup> *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,265 (2014), *order on compliance*, *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER14-2590-001 (Mar. 13, 2015).

<sup>13</sup> *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER16-2518-000 (Oct. 7, 2016, *order on compliance*, *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER16-2518-001 (Dec. 20, 2016).

<sup>14</sup> *Reactive Power Requirements for Non-Synchronous Generation*, Order No. 827, 155 FERC ¶ 61,277, *order on clarification & reh'g*, 157 FERC ¶ 61,003 (2016).

<sup>15</sup> *Requirements for Frequency and Voltage Ride Through Capability of Small Generating Facilities*, Order No. 828, 156 FERC ¶ 61,062 (2016).

<sup>16</sup> *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER17-108-000 (Jan. 5, 2017).

<sup>17</sup> *Essential Reliability Services and the Evolving Bulk-Power System—Primary Frequency Response*, Order No. 842, 162 FERC ¶ 61,128, *order on clarification & reh'g*, 164 FERC ¶ 61,135 (2018).

<sup>18</sup> *PJM Interconnection, L.L.C.*, 164 FERC ¶ 61,224 (2018).

- Docket Nos. ER19-1958-000, -001, -002, -003, addressing compliance with Order No. 845<sup>19</sup> pertaining to provisions related to the option to build, dispute resolution, contingent facilities, definition of Generating Facility, study performance reporting requirements, Provisional Interconnection Service, surplus interconnection service, and technology changes.<sup>20</sup>
- Docket No. ER19-2030-000, in which PJM filed revised tariff provisions to give all Interconnection Customers 10 Business Days to resolve deficiencies in otherwise complete and timely interconnection requests.<sup>21</sup>
- Docket No. ER21-2203-000, in which PJM filed revised tariff provisions to extend the time available to PJM to perform deficiency reviews of New Service Requests.<sup>22</sup>

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<sup>19</sup> *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *errata notice*, 167 FERC ¶ 61,123, *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137, *order on reh'g*, Order No. 845-B, 168 FERC ¶ 61,092 (2019).

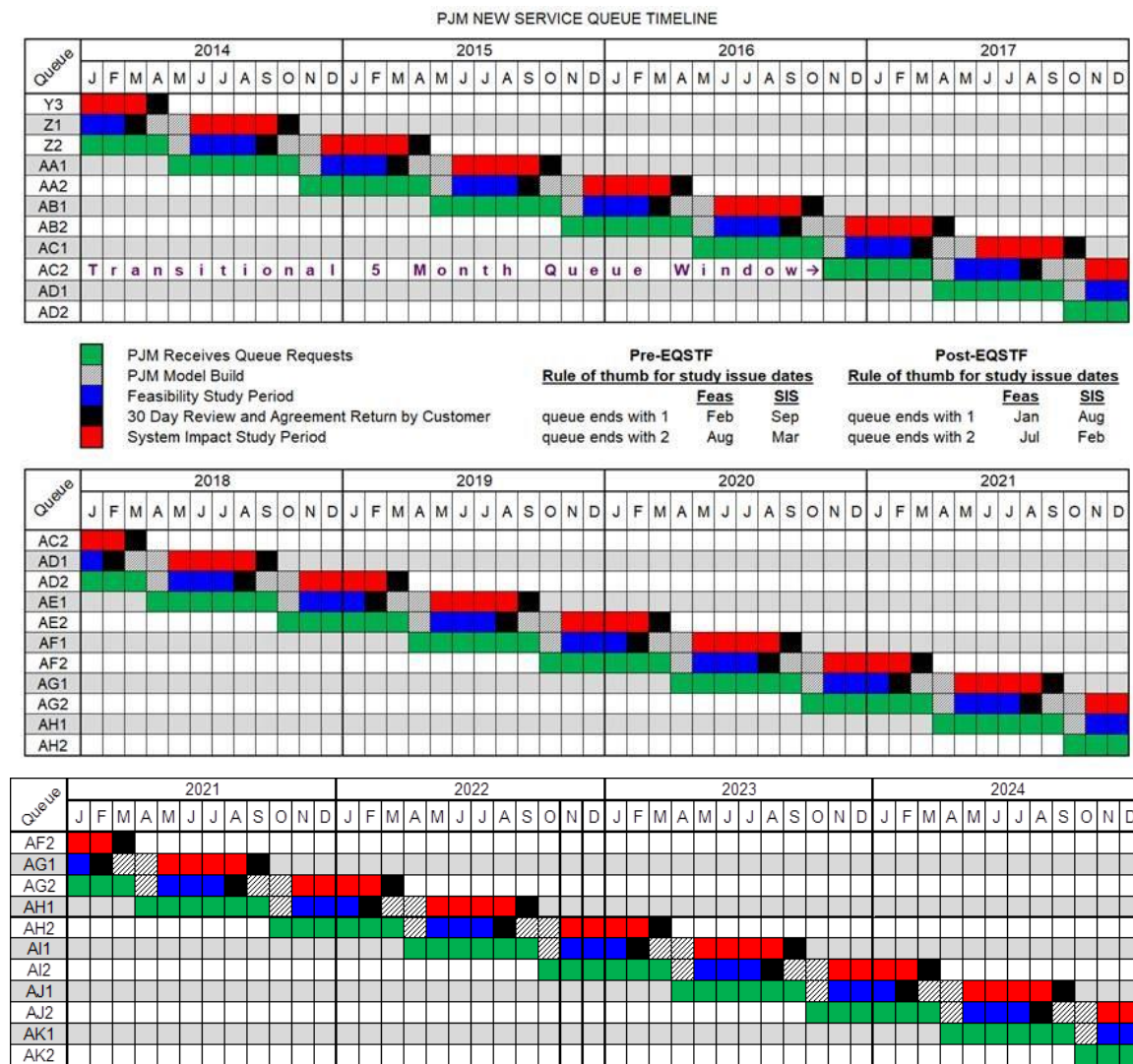
<sup>20</sup> *PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,226 (2019), *order on compliance & reh'g*, 171 FERC ¶ 61,145 (2020), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER19-1958-003 (Oct. 30, 2020).

<sup>21</sup> *PJM Interconnection, L.L.C.*, 168 FERC ¶ 61,064 (2019).

<sup>22</sup> *PJM Interconnection, L.L.C.*, 176 FERC ¶ 61,117 (2021).

## PROCESSING TIME FOR INTERCONNECTION REQUESTS

The table below illustrates the processing time for interconnection requests by queue window, based on the timelines in the Tariff (actual timelines and backlogs are more accurately depicted in Figure 7: Study Volume and On Time Rate as of December 31, 2021). The green blocks represent the six-month period that the queue window is open,<sup>1</sup> the grey blocks represent the Feasibility Study model build, and blue blocks represent the period for completing the Feasibility Study.<sup>2</sup> As is depicted in the below table, pursuant to the present serial, first-ready, first-served interconnection process, in any given month, the PJM Interconnection Project and Analysis teams are working on multiple Feasibility, System Impact, and Facilities studies, as well as retools.



<sup>1</sup> See Tariff, Part I, Definitions (definition of New Services Queue).

<sup>2</sup> Tariff, Part VI, Subpart A, section 36.2.

# Attachment A

Revisions to the  
PJM Open Access Transmission Tariff

(Identified by Additional Cover Pages)

(Marked/Redline Format)



Effective January 3, 2023

(Marked/Redline Format)

## TABLE OF CONTENTS

### **I. COMMON SERVICE PROVISIONS**

- 1**     **Definitions**
  - OATT Definitions – A – B**
  - OATT Definitions – C – D**
  - OATT Definitions – E – F**
  - OATT Definitions – G – H**
  - OATT Definitions – I – J – K**
  - OATT Definitions – L – M – N**
  - OATT Definitions – O – P – Q**
  - OATT Definitions – R – S**
  - OATT Definitions – T – U – V**
  - OATT Definitions – W – X – Y – Z**
- 2**     **Initial Allocation and Renewal Procedures**
- 3**     **Ancillary Services**
- 3B**    **PJM Administrative Service**
- 3C**    **Mid-Atlantic Area Council Charge**
- 3D**    **Transitional Market Expansion Charge**
- 3E**    **Transmission Enhancement Charges**
- 3F**    **Transmission Losses**
- 4**     **Open Access Same-Time Information System (OASIS)**
- 5**     **Local Furnishing Bonds**
- 6**     **Reciprocity**
- 6A**    **Counterparty**
- 7**     **Billing and Payment**
- 8**     **Accounting for a Transmission Owner's Use of the Tariff**
- 9**     **Regulatory Filings**
- 10**    **Force Majeure and Indemnification**
- 11**    **Creditworthiness**
- 12**    **Dispute Resolution Procedures**
- 12A**   **PJM Compliance Review**

### **II. POINT-TO-POINT TRANSMISSION SERVICE**

#### **Preamble**

- 13**    **Nature of Firm Point-To-Point Transmission Service**
- 14**    **Nature of Non-Firm Point-To-Point Transmission Service**
- 15**    **Service Availability**
- 16**    **Transmission Customer Responsibilities**
- 17**    **Procedures for Arranging Firm Point-To-Point Transmission Service**
- 18**    **Procedures for Arranging Non-Firm Point-To-Point Transmission Service**
- 19**    **~~Firm-Transmission~~[System Impact](#) Feasibility Study Procedures For Long-Term Firm Point-To-Point Transmission Service Requests**
- 20**    **[Reserved]**

- 21 [Reserved]
- 22 Changes in Service Specifications
- 23 Sale or Assignment of Transmission Service
- 24 Metering and Power Factor Correction at Receipt and Delivery Points(s)
- 25 Compensation for Transmission Service
- 26 Stranded Cost Recovery
- 27 Compensation for New Facilities and Redispatch Costs
- 27A Distribution of Revenues from Non-Firm Point-to-Point Transmission Service

### III. NETWORK INTEGRATION TRANSMISSION SERVICE

#### Preamble

- 28 Nature of Network Integration Transmission Service
- 29 Initiating Service
- 30 Network Resources
- 31 Designation of Network Load
- 32 ~~Firm Transmission Feasibility~~ System Impact Study Procedures ~~f~~For Network Integration Transmission Service Requests
- 33 Load Shedding and Curtailments
- 34 Rates and Charges
- 35 Operating Arrangements

### IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM

#### Preamble

#### Subpart A –INTERCONNECTION PROCEDURES

- 36 Interconnection Requests
- 37 Additional Procedures
- 38 Service on Merchant Transmission Facilities
- 39 Local Furnishing Bonds
- 40 Non-Binding Dispute Resolution Procedures
- 41 Interconnection Study Statistics
- 42 -108 [Reserved]

#### Subpart B – [Reserved]

#### Subpart C – [Reserved]

#### Subpart D – [Reserved]

#### Subpart E – [Reserved]

#### Subpart F – [Reserved]

#### Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE

#### Preamble

- 109 Pre-application Process
- 110 Permanent Capacity Resource Additions Of 20 MW Or Less
- 111 Permanent Energy Resource Additions oOf 20 MW oOr Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)
- 112 Temporary Energy Resource Additions oOf 20 MW oOr Less bBut Greater tThan 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)

- 112A ~~Screens Process for~~ Permanent or Temporary Energy Resources of 2 MW or Less (Synchronous) or 5 MW or Less (Inverter-based)  
112B Certified Inverter-Based Small Generating Facilities No Larger than 10 kW  
112C [Reserved]

V. **GENERATION DEACTIVATION**

Preamble

- 113 Notices  
114 Deactivation Avoidable Cost Credit  
115 Deactivation Avoidable Cost Rate  
116 Filing and Updating of Deactivation Avoidable Cost Rate  
117 Excess Project Investment Required  
118 Refund of Project Investment Reimbursement  
118A Recovery of Project Investment  
119 Cost of Service Recovery Rate  
120 Cost Allocation  
121 Performance Standards  
122 Black Start Units  
123-199 [Reserved]

VI. **ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; RIGHTS ASSOCIATED WITH CUSTOMER-FUNDED UPGRADES**

Preamble

- 200 Applicability  
201 Queue Position  
— Subpart A – SYSTEM IMPACT STUDIES AND FACILITIES STUDIES  
— FOR NEW SERVICE REQUESTS

- 202 Coordination with Affected Systems  
203 System Impact Study Agreement  
204 Tender of System Impact Study Agreement  
205 System Impact Study Procedures  
206 Facilities Study Agreement  
207 Facilities Study Procedures  
208 Expedited Procedures for Part II Requests  
209 Optional Interconnection Studies  
210 Responsibilities of the Transmission Provider and Transmission Owners

Subpart B– AGREEMENTS AND COST RESponsibility for CUSTOMER-FUNDED UPGRADES

- 211 Interim Interconnection Service Agreement  
212 Interconnection Service Agreement  
213 Upgrade Construction Service Agreement  
214 Filing/Reporting of Agreementss  
215 Transmission Service Agreements  
216 Interconnection Requests Designated as Market Solutions  
217 Cost Responsibility for Necessary Facilities and Upgrades

- 218 New Service Requests Involving Affected Systems
- 219 Inter-queue Allocation of Costs of Transmission Upgrades
- 220 Advance Construction of Certain Network Upgrades
- 221 Transmission Owner Construction Obligation for Necessary Facilities
- [a](#) And Upgrades
- 222 Confidentiality
- 223 Confidential Information
- 224 – 229 [Reserved]
- Subpart C – RIGHTS RELATED TO CUSTOMER-FUNDED UPGRADES
- 230 Capacity Interconnection Rights
- 231 Incremental Auction Revenue Rights
- 232 Transmission Injection Rights and Transmission Withdrawal Rights
- 233 Incremental Available Transfer Capability Revenue Rights
- 234 Incremental Capacity Transfer Rights
- 235 Incremental Deliverability Rights
- 236 Interconnection Rights for Certain Transmission Interconnections
- 237 IDR Transfer Agreements
- [238 – 299 \[Reserved\]](#)

## VII. TRANSITION CYCLE, GENERATION INTERCONNECTION PROCEDURE

### Subpart A – INTRODUCTION

- [300 Definitions](#)
- [301 Transition Introduction](#)
- [302 Site Control](#)

### Subpart B – AE1-AG1 TRANSITION CYCLE #1

- [303 Transition Eligibility](#)
- [304 AE1-AG1 Expedited Process Eligibility](#)

### Subpart C – AG2-AH1 TRANSITION CYCLE #2

- [305 Introduction, Overview and Eligibility](#)
- [306 Application Rules](#)

### Subpart D – PHASES AND DECISION POINTS

- [307 Introduction](#)
- [308 Phase I](#)
- [309 Decision Point I](#)
- [310 Phase II](#)
- [311 Decision Point II](#)
- [312 Phase III](#)
- [313 Decision Point III](#)

### 314 Final Agreement Negotiation Phase

### Subpart E – MISCELLANEOUS

- [315 Assignment of Project Identifier](#)
- [316 Service Below The Meter Generator](#)
- [317 Behind The Meter Generation](#)
- [318 Base Case Data](#)
- [319 Service on Merchant Transmission Facilities](#)

<u>320</u>	<u>Local Furnishing Bonds</u>
<u>321</u>	<u>Internal Dispute Resolution Procedures</u>
<u>322</u>	<u>Responsibilities of Transmission Provider and Transmission Owner</u>
<u>323</u>	<u>Additional Upgrades</u>
<u>324</u>	<u>IDR Transfer Agreement</u>
<u>325</u>	<u>Regional Transmission Expansion Plan</u>
<u>326</u>	<u>Transmission Owner Construction Obligation for Necessary Facilities and Upgrade</u>
<u>327</u>	<u>Confidentiality</u>
<u>328</u>	<u>Capacity Interconnection Rights</u>
<u>329</u>	<u>Incremental Rights</u>
<u>330</u>	<u>Rights for Transmission Interconnections</u>
<u>331</u>	<u>Milestones</u>
<u>332</u>	<u>Winter Capacity Interconnection Rights</u>
<u>333</u>	<u>Interconnection Studies Processing Time and Metrics</u>
<u>334</u>	<u>Transmission Provider Website Postings</u>
<u>Subpart F – WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL AGREEMENTS</u>	
<u>335</u>	<u>Wholesale Market Participation Agreement/Non-Jurisdictional Agreements</u>
<u>Subpart G – AFFECTED SYSTEM RULES</u>	
<u>336</u>	<u>Affected System Rules</u>
<u>Subpart H – UPGRADE REQUESTS</u>	
<u>337</u>	<u>Upgrade Requests</u>
<u>338 – 399 [Reserved]</u>	

VIII. 400 – 499 [Reserved]

IX. FORMS OF INTERCONNECTION-RELATED AGREEMENTS

<u>500</u>	<u>Execution Deadlines</u>
<u>Subpart A – FORM OF APPLICATION AND STUDIES AGREEMENT</u>	
<u>Subpart B – FORM OF GENERATION INTERCONNECTION AGREEMENT COMBINED WITH CONSTRUCTION SERVICE AGREEMENT</u>	
<u>Subpart C – FORM OF WHOLESALE MARKET PARTICIPATION AGREEMENT</u>	
<u>Subpart D – FORM OF ENGINEERING AND PROCUREMENT AGREEMENT</u>	
<u>Subpart E – FORM OF UPGRADE CONSTRUCTION SERVICE AGREEMENT</u>	
<u>Subpart F – FORM OF COST RESPONSIBILITY AGREEMENT</u>	
<u>Subpart G – FORM OF NECESSARY STUDIES AGREEMENT</u>	
<u>Subpart H – FORM OF NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT</u>	
<u>Subpart I – FORM OF SURPLUS INTERCONNECTION SERVICE STUDY AGREEMENT</u>	
<u>Subpart J – FORM OF CONSTRUCTION SERVICE AGREEMENT</u>	
<u>Subpart K – FORM OF UPGRADE APPLICATION AND STUDIES AGREEMENT</u>	

**Subpart L – FORM OF AFFECTED SYSTEM CUSTOMER FACILITIES STUDY  
APPLICATION AND AGREEMENT**

**SCHEDULE 1**

**Scheduling, System Control and Dispatch Service**

**SCHEDULE 1A**

**Transmission Owner Scheduling, System Control and Dispatch Service**

**SCHEDULE 2**

**Reactive Supply and Voltage Control from Generation Sources Service**

**SCHEDULE 3**

**Regulation and Frequency Response Service**

**SCHEDULE 4**

**Energy Imbalance Service**

**SCHEDULE 5**

**Operating Reserve – Synchronized Reserve Service**

**SCHEDULE 6**

**Operating Reserve - Supplemental Reserve Service**

**SCHEDULE 6A**

**Black Start Service**

**SCHEDULE 7**

**Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service**

**SCHEDULE 8**

**Non-Firm Point-To-Point Transmission Service**

**SCHEDULE 9**

**PJM Interconnection L.L.C. Administrative Services**

**SCHEDULE 9-1**

**Control Area Administration Service**

**SCHEDULE 9-2**

**Financial Transmission Rights Administration Service**

**SCHEDULE 9-3**

**Market Support Service**

**SCHEDULE 9-4**

**Regulation and Frequency Response Administration Service**

**SCHEDULE 9-5**

**Capacity Resource and Obligation Management Service**

**SCHEDULE 9-6**

**Management Service Cost**

**SCHEDULE 9-FERC**

**FERC Annual Charge Recovery**

**SCHEDULE 9-OPSI**

**OPSI Funding**

**SCHEDULE 9-CAPS**

**CAPS Funding**

**SCHEDULE 9-FINCON**

**Finance Committee Retained Outside Consultant**

**SCHEDULE 9-MMU**

**MMU Funding**  
**SCHEDULE 9 – PJM SETTLEMENT**  
**SCHEDULE 10 - [Reserved]**  
**SCHEDULE 10-NERC**  
**North American Electric Reliability Corporation Charge**  
**SCHEDULE 10-RFC**  
**Reliability First Corporation Charge**  
**SCHEDULE 11**  
**[Reserved for Future Use]**  
**SCHEDULE 11A**  
**Additional Secure Control Center Data Communication Links and Formula Rate**  
**SCHEDULE 12**  
**Transmission Enhancement Charges**  
**SCHEDULE 12 APPENDIX**  
**SCHEDULE 12-A**  
**SCHEDULE 13**  
**Expansion Cost Recovery Change (ECRC)**  
**SCHEDULE 14**  
**Transmission Service on the Neptune Line**  
**SCHEDULE 14 - Exhibit A**  
**SCHEDULE 15**  
**Non-Retail Behind The Meter Generation Maximum Generation Emergency Obligations**  
**SCHEDULE 16**  
**Transmission Service on the Linden VFT Facility**  
**SCHEDULE 16 Exhibit A**  
**SCHEDULE 16 – A**  
**Transmission Service for Imports on the Linden VFT Facility**  
**SCHEDULE 17**  
**Transmission Service on the Hudson Line**  
**SCHEDULE 17 - Exhibit A**  
**ATTACHMENT A**  
**Form of Service Agreement For Firm Point-To-Point Transmission Service**  
**ATTACHMENT A-1**  
**Form of Service Agreement For The Resale, Reassignment or Transfer of Point-to-Point Transmission Service**  
**ATTACHMENT B**  
**Form of Service Agreement For Non-Firm Point-To-Point Transmission Service**  
**ATTACHMENT C**  
**Methodology To Assess Available Transfer Capability**  
**ATTACHMENT C-1**  
**Conversion of Service in the Dominion and Duquesne Zones**  
**ATTACHMENT C-2**  
**Conversion of Service in the Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc, (“DEOK”) Zone**  
**ATTACHMENT C-4**



**Conversion of Service in the OVEC Zone**  
**ATTACHMENT D**  
**Methodology for Completing a System Impact Study**  
**ATTACHMENT E**  
**Index of Point-To-Point Transmission Service Customers**  
**ATTACHMENT F**  
**Service Agreement For Network Integration Transmission Service**  
**ATTACHMENT F-1**  
**Form of Umbrella Service Agreement for Network Integration Transmission Service**  
**Under State Required Retail Access Programs**  
**ATTACHMENT G**  
**Network Operating Agreement**  
**ATTACHMENT H-1**  
**Annual Transmission Rates -- Atlantic City Electric Company for Network**  
**Integration Transmission Service**  
**ATTACHMENT H-1A**  
**Atlantic City Electric Company Formula Rate Appendix A**  
**ATTACHMENT H-1B**  
**Atlantic City Electric Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-2**  
**Annual Transmission Rates -- Baltimore Gas and Electric Company for Network**  
**Integration Transmission Service**  
**ATTACHMENT H-2A**  
**Baltimore Gas and Electric Company Formula Rate**  
**ATTACHMENT H-2B**  
**Baltimore Gas and Electric Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-3**  
**Annual Transmission Rates -- Delmarva Power & Light Company for Network**  
**Integration Transmission Service**  
**ATTACHMENT H-3A**  
**Delmarva Power & Light Company Load Power Factor Charge Applicable to Service**  
**the Interconnection Points**  
**ATTACHMENT H-3B**  
**Delmarva Power & Light Company Load Power Factor Charge Applicable to Service**  
**the Interconnection Points**  
**ATTACHMENT H-3C**  
**Delmarva Power & Light Company Under-Frequency Load Shedding Charge**  
**ATTACHMENT H-3D**  
**Delmarva Power & Light Company Formula Rate – Appendix A**  
**ATTACHMENT H-3E**  
**Delmarva Power & Light Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-3F**  
**Old Dominion Electric Cooperative Formula Rate – Appendix A**  
**ATTACHMENT H-3G**  
**Old Dominion Electric Cooperative Formula Rate Implementation Protocols**  
**ATTACHMENT H-4**

**Annual Transmission Rates -- Jersey Central Power & Light Company for Network Integration Transmission Service**  
**ATTACHMENT H-4A**  
**Other Supporting Facilities - Jersey Central Power & Light Company**  
**ATTACHMENT H-4B**  
**Jersey Central Power & Light Company – [Reserved]**  
**ATTACHMENT H-5**  
**Annual Transmission Rates -- Metropolitan Edison Company for Network Integration Transmission Service**  
**ATTACHMENT H-5A**  
**Other Supporting Facilities -- Metropolitan Edison Company**  
**ATTACHMENT H-6**  
**Annual Transmission Rates -- Pennsylvania Electric Company for Network Integration Transmission Service**  
**ATTACHMENT H-6A**  
**Other Supporting Facilities Charges -- Pennsylvania Electric Company**  
**ATTACHMENT H-7**  
**Annual Transmission Rates -- PECO Energy Company for Network Integration Transmission Service**  
**ATTACHMENT H-7A**  
**PECO Energy Company Formula Rate Template**  
**ATTACHMENT H-7B**  
**PECO Energy Company Monthly Deferred Tax Adjustment Charge**  
**ATTACHMENT H-7C**  
**PECO Energy Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-8**  
**Annual Transmission Rates – PPL Group for Network Integration Transmission Service**  
**ATTACHMENT H-8A**  
**Other Supporting Facilities Charges -- PPL Electric Utilities Corporation**  
**ATTACHMENT 8C**  
**UGI Utilities, Inc. Formula Rate – Appendix A**  
**ATTACHMENT 8D**  
**UGI Utilities, Inc. Formula Rate Implementation Protocols**  
**ATTACHMENT 8E**  
**UGI Utilities, Inc. Formula Rate – Appendix A**  
**ATTACHMENT H-8G**  
**Annual Transmission Rates – PPL Electric Utilities Corp.**  
**ATTACHMENT H-8H**  
**Formula Rate Implementation Protocols – PPL Electric Utilities Corp.**  
**ATTACHMENT H-9**  
**Annual Transmission Rates -- Potomac Electric Power Company for Network Integration Transmission Service**  
**ATTACHMENT H-9A**  
**Potomac Electric Power Company Formula Rate – Appendix A**  
**ATTACHMENT H-9B**

**Potomac Electric Power Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-9C**  
**Annual Transmission Rate – Southern Maryland Electric Cooperative, Inc. for**  
**Network Integration Transmission Service**

**ATTACHMENT H-10**  
**Annual Transmission Rates -- Public Service Electric and Gas Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-10A**  
**Formula Rate -- Public Service Electric and Gas Company**

**ATTACHMENT H-10B**  
**Formula Rate Implementation Protocols – Public Service Electric and Gas Company**

**ATTACHMENT H-11**  
**Annual Transmission Rates -- Allegheny Power for Network Integration**  
**Transmission Service**

**ATTACHMENT 11A**  
**Other Supporting Facilities Charges - Allegheny Power**

**ATTACHMENT H-12**  
**Annual Transmission Rates -- Rockland Electric Company for Network Integration**  
**Transmission Service**

**ATTACHMENT H-13**  
**Annual Transmission Rates – Commonwealth Edison Company for Network**  
**Integration Transmission Service**

**ATTACHMENT H-13A**  
**Commonwealth Edison Company Formula Rate – Appendix A**

**ATTACHMENT H-13B**  
**Commonwealth Edison Company Formula Rate Implementation Protocols**

**ATTACHMENT H-14**  
**Annual Transmission Rates – AEP East Operating Companies for Network**  
**Integration Transmission Service**

**ATTACHMENT H-14A**  
**AEP East Operating Companies Formula Rate Implementation Protocols**

**ATTACHMENT H-14B Part 1**

**ATTACHMENT H-14B Part 2**

**ATTACHMENT H-15**  
**Annual Transmission Rates -- The Dayton Power and Light Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-16**  
**Annual Transmission Rates -- Virginia Electric and Power Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-16A**  
**Formula Rate - Virginia Electric and Power Company**

**ATTACHMENT H-16B**  
**Formula Rate Implementation Protocols - Virginia Electric and Power Company**

**ATTACHMENT H-16C**  
**Virginia Retail Administrative Fee Credit for Virginia Retail Load Serving**  
**Entities in the Dominion Zone**

**ATTACHMENT H-16D – [Reserved]**

**ATTACHMENT H-16E – [Reserved]**

**ATTACHMENT H-16AA**

**Virginia Electric and Power Company**

**ATTACHMENT H-17**

**Annual Transmission Rates -- Duquesne Light Company for Network Integration  
Transmission Service**

**ATTACHMENT H-17A**

**Duquesne Light Company Formula Rate – Appendix A**

**ATTACHMENT H-17B**

**Duquesne Light Company Formula Rate Implementation Protocols**

**ATTACHMENT H-17C**

**Duquesne Light Company Monthly Deferred Tax Adjustment Charge**

**ATTACHMENT H-18**

**Annual Transmission Rates – Trans-Allegheny Interstate Line Company**

**ATTACHMENT H-18A**

**Trans-Allegheny Interstate Line Company Formula Rate – Appendix A**

**ATTACHMENT H-18B**

**Trans-Allegheny Interstate Line Company Formula Rate Implementation Protocols**

**ATTACHMENT H-19**

**Annual Transmission Rates – Potomac-Appalachian Transmission Highline, L.L.C.**

**ATTACHMENT H-19A**

**Potomac-Appalachian Transmission Highline, L.L.C. Summary**

**ATTACHMENT H-19B**

**Potomac-Appalachian Transmission Highline, L.L.C. Formula Rate Implementation  
Protocols**

**ATTACHMENT H-20**

**Annual Transmission Rates – AEP Transmission Companies (AEPTCo) in the AEP  
Zone**

**ATTACHMENT H-20A**

**AEP Transmission Companies (AEPTCo) in the AEP Zone - Formula Rate  
Implementation Protocols**

**ATTACHMENT H-20A APPENDIX A**

**Transmission Formula Rate Settlement for AEPTCo**

**ATTACHMENT H-20B - Part I**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-20B - Part II**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-21**

**Annual Transmission Rates – American Transmission Systems, Inc. for Network  
Integration Transmission Service**

**ATTACHMENT H-21A - ATSI**

**ATTACHMENT H-21A Appendix A - ATSI**

**ATTACHMENT H-21A Appendix B - ATSI**

**ATTACHMENT H-21A Appendix C - ATSI**  
**ATTACHMENT H-21A Appendix C - ATSI [Reserved]**  
**ATTACHMENT H-21A Appendix D – ATSI**  
**ATTACHMENT H-21A Appendix E - ATSI**  
**ATTACHMENT H-21A Appendix F – ATSI [Reserved]**  
**ATTACHMENT H-21A Appendix G - ATSI**  
**ATTACHMENT H-21A Appendix G – ATSI (Credit Adj)**  
**ATTACHMENT H-21B ATSI Protocol**  
**ATTACHMENT H-22**  
    **Annual Transmission Rates – DEOK for Network Integration Transmission Service**  
    **and Point-to-Point Transmission Service**  
**ATTACHMENT H-22A**  
    **Duke Energy Ohio and Duke Energy Kentucky (DEOK) Formula Rate Template**  
**ATTACHMENT H-22B**  
    **DEOK Formula Rate Implementation Protocols**  
**ATTACHMENT H-22C**  
    **Additional provisions re DEOK and Indiana**  
**ATTACHMENT H-23**  
    **EP Rock springs annual transmission Rate**  
**ATTACHMENT H-24**  
    **EKPC Annual Transmission Rates**  
**ATTACHMENT H-24A APPENDIX A**  
    **EKPC Schedule 1A**  
**ATTACHMENT H-24A APPENDIX B**  
    **EKPC RTEP**  
**ATTACHMENT H-24A APPENDIX C**  
    **EKPC True-up**  
**ATTACHMENT H-24A APPENDIX D**  
    **EKPC Depreciation Rates**  
**ATTACHMENT H-24-B**  
    **EKPC Implementation Protocols**  
**ATTACHMENT H-25 - [Reserved]**  
**ATTACHMENT H-25A - [Reserved]**  
**ATTACHMENT H-25B - [Reserved]**  
**ATTACHMENT H-26**  
    **Transource West Virginia, LLC Formula Rate Template**  
**ATTACHMENT H-26A**  
    **Transource West Virginia, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-27**  
    **Annual Transmission Rates – Silver Run Electric, LLC**  
**ATTACHMENT H-27A**  
    **Silver Run Electric, LLC Formula Rate Template**  
**ATTACHMENT H-27B**  
    **Silver Run Electric, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-28**

**Annual Transmission Rates – Mid-Atlantic Interstate Transmission, LLC for  
Network Integration Transmission Service**  
**ATTACHMENT H-28A**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Template**  
**ATTACHMENT H-28B**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-29**  
**Annual Transmission Rates – Transource Pennsylvania, LLC**  
**ATTACHMENT H-29A**  
**Transource Pennsylvania, LLC Formula Rate Template**  
**ATTACHMENT H-29B**  
**Transource Pennsylvania, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-30**  
**Annual Transmission Rates – Transource Maryland, LLC**  
**ATTACHMENT H-30A**  
**Transource Maryland, LLC Formula Rate Template**  
**ATTACHMENT H-30B**  
**Transource Maryland, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-31**  
**Annual Transmission Revenue Requirement – Ohio Valley Electric Corporation for  
Network Integration Transmission Service**  
**ATTACHMENT H-32**  
**Annual Transmission Revenue Requirements and Rates - AMP Transmission, LLC**  
**ATTACHMENT H-32A**  
**AMP Transmission, LLC - Formula Rate Template**  
**ATTACHMENT H-32B**  
**AMP Transmission, LLC - Formula Rate Implementation Protocols**  
**ATTACHMENT H-32C**  
**Annual Transmission Revenue Requirement and Rates - AMP Transmission, LLC  
for Network Integration Transmission Service**  
**ATTACHMENT H-33**  
**Annual Transmission Rates – NextEra Energy Transmission MidAtlantic Indiana,  
Inc.**  
**ATTACHMENT H-33A**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate  
Implementation Protocols**  
**ATTACHMENT H-33B**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate Template**  
**ATTACHMENT H-A**  
**Annual Transmission Rates -- Non-Zone Network Load for Network Integration  
Transmission Service**  
**ATTACHMENT I**  
**Index of Network Integration Transmission Service Customers**  
**ATTACHMENT J**  
**PJM Transmission Zones**  
**ATTACHMENT K**

# **Transmission Congestion Charges and Credits**

## **Preface**

### **ATTACHMENT K -- APPENDIX**

#### **Preface**

#### **1. MARKET OPERATIONS**

- 1.1 Introduction
- 1.2 Cost-Based Offers
- 1.2A Transmission Losses
- 1.3 [Reserved for Future Use]
- 1.4 Market Buyers
- 1.5 Market Sellers
- 1.5A Economic Load Response Participant
- 1.6 Office of the Interconnection
- 1.6A PJM Settlement
- 1.7 General
- 1.8 Selection, Scheduling and Dispatch Procedure Adjustment Process
- 1.9 Prescheduling
- 1.10 Scheduling
- 1.11 Dispatch
- 1.12 Dynamic Transfers

#### **2. CALCULATION OF LOCATIONAL MARGINAL PRICES**

- 2.1 Introduction
- 2.2 General
- 2.3 Determination of System Conditions Using the State Estimator
- 2.4 Determination of Energy Offers Used in Calculating
- 2.5 Calculation of Real-time Prices
- 2.6 Calculation of Day-ahead Prices
- 2.6A Interface Prices
- 2.7 Performance Evaluation

#### **3. ACCOUNTING AND BILLING**

- 3.1 Introduction
- 3.2 Market Buyers
- 3.3 Market Sellers
  - 3.3A Economic Load Response Participants
- 3.4 Transmission Customers
- 3.5 Other Control Areas
- 3.6 Metering Reconciliation
- 3.7 Inadvertent Interchange
- 3.8 Market-to-Market Coordination

#### **4. [Reserved For Future Use]**

#### **5. CALCULATION OF CHARGES AND CREDITS FOR TRANSMISSION CONGESTION AND LOSSES**

- 5.1 Transmission Congestion Charge Calculation
- 5.2 Transmission Congestion Credit Calculation
- 5.3 Unscheduled Transmission Service (Loop Flow)
- 5.4 Transmission Loss Charge Calculation
- 5.5 Distribution of Total Transmission Loss Charges

- 5.6 Transmission Constraint Penalty Factors
- 6. **“MUST-RUN” FOR RELIABILITY GENERATION**
  - 6.1 Introduction
  - 6.2 Identification of Facility Outages
  - 6.3 Dispatch for Local Reliability
  - 6.4 Offer Price Caps
  - 6.5 [Reserved]
  - 6.6 Minimum Generator Operating Parameters –  
Parameter-Limited Schedules
- 6A. **[Reserved]**
  - 6A.1 [Reserved]
  - 6A.2 [Reserved]
  - 6A.3 [Reserved]
- 7. **FINANCIAL TRANSMISSION RIGHTS AUCTIONS**
  - 7.1 Auctions of Financial Transmission Rights
  - 7.1A Long-Term Financial Transmission Rights Auctions
  - 7.2 Financial Transmission Rights Characteristics
  - 7.3 Auction Procedures
  - 7.4 Allocation of Auction Revenues
  - 7.5 Simultaneous Feasibility
  - 7.6 New Stage 1 Resources
  - 7.7 Alternate Stage 1 Resources
  - 7.8 Elective Upgrade Auction Revenue Rights
  - 7.9 Residual Auction Revenue Rights
  - 7.10 Financial Settlement
  - 7.11 PJM Settlement as Counterparty
- 8. **EMERGENCY AND PRE-EMERGENCY LOAD RESPONSE PROGRAM**
  - 8.1 Emergency Load Response and Pre-Emergency Load Response Program Options
  - 8.2 Participant Qualifications
  - 8.3 Metering Requirements
  - 8.4 Registration
  - 8.5 Pre-Emergency Operations
  - 8.6 Emergency Operations
  - 8.7 Verification
  - 8.8 Market Settlements
  - 8.9 Reporting and Compliance
  - 8.10 Non-Hourly Metered Customer Pilot
  - 8.11 Emergency Load Response and Pre-Emergency Load Response Participant  
Aggregation

## **ATTACHMENT L**

### **List of Transmission Owners**

## **ATTACHMENT M**

### **PJM Market Monitoring Plan**

## **ATTACHMENT M – APPENDIX**

### **PJM Market Monitor Plan Attachment M Appendix**

#### **I Confidentiality of Data and Information**



- II Development of Inputs for Prospective Mitigation
- III Black Start Service
- IV Deactivation Rates
- V Opportunity Cost Calculation
- VI FTR Forfeiture Rule
- VII Forced Outage Rule
- VIII Data Collection and Verification

**ATTACHMENT M-1 (FirstEnergy)**

**Energy Procedure Manual for Determining Supplier Total Hourly Energy Obligation**

**ATTACHMENT M-2 (First Energy)**

**Energy Procedure Manual for Determining Supplier Peak Load Share**

**Procedures for Load Determination**

**ATTACHMENT M-2 (ComEd)**

**Determination of Capacity Peak Load Contributions and Network Service Peak Load Contributions**

**ATTACHMENT M-2 (PSE&G)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Atlantic City Electric Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Duke Energy Ohio, Inc.)**

**Procedures for Determination of Peak Load Contributions, Network Service Peak Load and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-3**

**Additional Procedures for Planning of Supplemental Projects**

**ATTACHMENT N**

**Form of Generation Interconnection Feasibility Study Agreement**

**ATTACHMENT N-1**

**Form of System Impact Study Agreement**

**ATTACHMENT N-2**

**Form of Facilities Study Agreement**

**ATTACHMENT N-3**

**Form of Optional Interconnection Study Agreement**

**ATTACHMENT O**

**Form of Interconnection Service Agreement**

- 1.0 Parties
- 2.0 Authority
- 3.0 Customer Facility Specifications
- 4.0 Effective Date

- 5.0 Security
- 6.0 Project Specific Milestones
- 7.0 Provision of Interconnection Service
- 8.0 Assumption of Tariff Obligations
- 9.0 Facilities Study
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 11.0 Interconnection Specifications
- 12.0 Power Factor Requirement
- 12.0A RTU
- 13.0 Charges
- 14.0 Third Party Benefits
- 15.0 Waiver
- 16.0 Amendment
- 17.0 Construction With Other Parts Of The Tariff
- 18.0 Notices
- 19.0 Incorporation Of Other Documents
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 21.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 22.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 23.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

**Specifications for Interconnection Service Agreement**

- 1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the  
Customer Facility) to be Interconnected with the Transmission System in the PJM  
Region
- 2.0 Rights
- 3.0 Construction Responsibility and Ownership of Interconnection Facilities
- 4.0 Subject to Modification Pursuant to the Negotiated Contract Option
- 4.1 Attachment Facilities Charge
- 4.2 Network Upgrades Charge
- 4.3 Local Upgrades Charge
- 4.4 Other Charges
- 4.5 Cost breakdown
- 4.6 Security Amount Breakdown

**ATTACHMENT O APPENDIX 1: Definitions**

**ATTACHMENT O APPENDIX 2: Standard Terms and Conditions for Interconnections**

**1 Commencement, Term of and Conditions Precedent to  
Interconnection Service**

- 1.1 Commencement Date
- 1.2 Conditions Precedent
- 1.3 Term
- 1.4 Initial Operation
- 1.4A Other Interconnection Options
- 1.5 Survival

- 2 Interconnection Service**
  - 2.1 Scope of Service
  - 2.2 Non-Standard Terms
  - 2.3 No Transmission Services
  - 2.4 Use of Distribution Facilities
  - 2.5 Election by Behind The Meter Generation
- 3 Modification Of Facilities**
  - 3.1 General
  - 3.2 Interconnection Request
  - 3.3 Standards
  - 3.4 Modification Costs
- 4 Operations**
  - 4.1 General
  - 4.2 [Reserved]
  - 4.3 Interconnection Customer Obligations
  - 4.4 Transmission Interconnection Customer Obligations
  - 4.5 Permits and Rights-of-Way
  - 4.6 No Ancillary Services
  - 4.7 Reactive Power
  - 4.8 Under- and Over-Frequency and Under- and Over- Voltage Conditions
  - 4.9 System Protection and Power Quality
  - 4.10 Access Rights
  - 4.11 Switching and Tagging Rules
  - 4.12 Communications and Data Protocol
  - 4.13 Nuclear Generating Facilities
- 5 Maintenance**
  - 5.1 General
  - 5.2 [Reserved]
  - 5.3 Outage Authority and Coordination
  - 5.4 Inspections and Testing
  - 5.5 Right to Observe Testing
  - 5.6 Secondary Systems
  - 5.7 Access Rights
  - 5.8 Observation of Deficiencies
- 6 Emergency Operations**
  - 6.1 Obligations
  - 6.2 Notice
  - 6.3 Immediate Action
  - 6.4 Record-Keeping Obligations
- 7 Safety**
  - 7.1 General
  - 7.2 Environmental Releases
- 8 Metering**
  - 8.1 General
  - 8.2 Standards
  - 8.3 Testing of Metering Equipment

- 8.4 Metering Data
- 8.5 Communications
- 9 Force Majeure**
  - 9.1 Notice
  - 9.2 Duration of Force Majeure
  - 9.3 Obligation to Make Payments
  - 9.4 Definition of Force Majeure
- 10 Charges**
  - 10.1 Specified Charges
  - 10.2 FERC Filings
- 11 Security, Billing And Payments**
  - 11.1 Recurring Charges Pursuant to Section 10
  - 11.2 Costs for Transmission Owner Interconnection Facilities
  - 11.3 No Waiver
  - 11.4 Interest
- 12 Assignment**
  - 12.1 Assignment with Prior Consent
  - 12.2 Assignment Without Prior Consent
  - 12.3 Successors and Assigns
- 13 Insurance**
  - 13.1 Required Coverages for Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 13.1A Required Coverages for Generation Resources Of 20 Megawatts Or Less
  - 13.2 Additional Insureds
  - 13.3 Other Required Terms
  - 13.3A No Limitation of Liability
  - 13.4 Self-Insurance
  - 13.5 Notices; Certificates of Insurance
  - 13.6 Subcontractor Insurance
  - 13.7 Reporting Incidents
- 14 Indemnity**
  - 14.1 Indemnity
  - 14.2 Indemnity Procedures
  - 14.3 Indemnified Person
  - 14.4 Amount Owing
  - 14.5 Limitation on Damages
  - 14.6 Limitation of Liability in Event of Breach
  - 14.7 Limited Liability in Emergency Conditions
- 15 Breach, Cure And Default**
  - 15.1 Breach
  - 15.2 Continued Operation
  - 15.3 Notice of Breach
  - 15.4 Cure and Default
  - 15.5 Right to Compel Performance
  - 15.6 Remedies Cumulative

- 16 Termination**
  - 16.1 Termination
  - 16.2 Disposition of Facilities Upon Termination
  - 16.3 FERC Approval
  - 16.4 Survival of Rights
- 17 Confidentiality**
  - 17.1 Term
  - 17.2 Scope
  - 17.3 Release of Confidential Information
  - 17.4 Rights
  - 17.5 No Warranties
  - 17.6 Standard of Care
  - 17.7 Order of Disclosure
  - 17.8 Termination of Interconnection Service Agreement
  - 17.9 Remedies
  - 17.10 Disclosure to FERC or its Staff
  - 17.11 No Interconnection Party Shall Disclose Confidential Information
  - 17.12 Information that is Public Domain
  - 17.13 Return or Destruction of Confidential Information
- 18 Subcontractors**
  - 18.1 Use of Subcontractors
  - 18.2 Responsibility of Principal
  - 18.3 Indemnification by Subcontractors
  - 18.4 Subcontractors Not Beneficiaries
- 19 Information Access And Audit Rights**
  - 19.1 Information Access
  - 19.2 Reporting of Non-Force Majeure Events
  - 19.3 Audit Rights
- 20 Disputes**
  - 20.1 Submission
  - 20.2 Rights Under The Federal Power Act
  - 20.3 Equitable Remedies
- 21 Notices**
  - 21.1 General
  - 21.2 Emergency Notices
  - 21.3 Operational Contacts
- 22 Miscellaneous**
  - 22.1 Regulatory Filing
  - 22.2 Waiver
  - 22.3 Amendments and Rights Under the Federal Power Act
  - 22.4 Binding Effect
  - 22.5 Regulatory Requirements
- 23 Representations And Warranties**
  - 23.1 General
- 24 Tax Liability**
  - 24.1 Safe Harbor Provisions

- 24.2. Tax Indemnity
- 24.3 Taxes Other Than Income Taxes
- 24.4 Income Tax Gross-Up
- 24.5 Tax Status

**ATTACHMENT O - SCHEDULE A**

**Customer Facility Location/Site Plan**

**ATTACHMENT O - SCHEDULE B**

**Single-Line Diagram**

**ATTACHMENT O - SCHEDULE C**

**List of Metering Equipment**

**ATTACHMENT O - SCHEDULE D**

**Applicable Technical Requirements and Standards**

**ATTACHMENT O - SCHEDULE E**

**Schedule of Charges**

**ATTACHMENT O - SCHEDULE F**

**Schedule of Non-Standard Terms & Conditions**

**ATTACHMENT O - SCHEDULE G**

**Interconnection Customer's Agreement to Conform with IRS Safe Harbor**

**Provisions for Non-Taxable Status**

**ATTACHMENT O - SCHEDULE H**

**Interconnection Requirements for a Wind Generation Facility**

**ATTACHMENT O – SCHEDULE I**

**Interconnection Specifications for an Energy Storage Resource**

**ATTACHMENT O – SCHEDULE J**

**Schedule of Terms and Conditions for Surplus Interconnection Service**

**ATTACHMENT O – SCHEDULE K**

**Requirements for Interconnection Service Below Full Electrical Generating Capability**

**ATTACHMENT O-1**

**Form of Interim Interconnection Service Agreement**

**ATTACHMENT O-2**

**Form of Network Upgrade Funding Agreement**

**ATTACHMENT P**

**Form of Interconnection Construction Service Agreement**

- 1.0 Parties
- 2.0 Authority
- 3.0 Customer Facility
- 4.0 Effective Date and Term
  - 4.1 Effective Date
  - 4.2 Term
  - 4.3 Survival
- 5.0 Construction Responsibility
- 6.0 [Reserved.]
- 7.0 Scope of Work
- 8.0 Schedule of Work
- 9.0 [Reserved.]

- 10.0 Notices
- 11.0 Waiver
- 12.0 Amendment
- 13.0 Incorporation Of Other Documents
- 14.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 15.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 16.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 17.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

## **ATTACHMENT P - APPENDIX 1 – DEFINITIONS**

## **ATTACHMENT P - APPENDIX 2 – STANDARD CONSTRUCTION TERMS AND CONDITIONS**

### **Preamble**

#### **1 Facilitation by Transmission Provider**

#### **2 Construction Obligations**

- 2.1 Interconnection Customer Obligations
- 2.2 Transmission Owner Interconnection Facilities and Merchant  
Network Upgrades
- 2.2A Scope of Applicable Technical Requirements and Standards
- 2.3 Construction By Interconnection Customer
- 2.4 Tax Liability
- 2.5 Safety
- 2.6 Construction-Related Access Rights
- 2.7 Coordination Among Constructing Parties

#### **3 Schedule of Work**

- 3.1 Construction by Interconnection Customer
- 3.2 Construction by Interconnected Transmission Owner
  - 3.2.1 Standard Option
  - 3.2.2 Negotiated Contract Option
  - 3.2.3 Option to Build
- 3.3 Revisions to Schedule of Work
- 3.4 Suspension
  - 3.4.1 Costs
  - 3.4.2 Duration of Suspension
- 3.5 Right to Complete Transmission Owner Interconnection  
Facilities
- 3.6 Suspension of Work Upon Default
- 3.7 Construction Reports
- 3.8 Inspection and Testing of Completed Facilities
- 3.9 Energization of Completed Facilities
- 3.10 Interconnected Transmission Owner's Acceptance of  
Facilities Constructed by Interconnection Customer

#### **4 Transmission Outages**

- 4.1 Outages; Coordination

- 5 Land Rights; Transfer of Title**
  - 5.1 Grant of Easements and Other Land Rights
  - 5.2 Construction of Facilities on Interconnection Customer Property
  - 5.3 Third Parties
  - 5.4 Documentation
  - 5.5 Transfer of Title to Certain Facilities Constructed By Interconnection Customer
  - 5.6 Liens
- 6 Warranties**
  - 6.1 Interconnection Customer Warranty
  - 6.2 Manufacturer Warranties
- 7 [Reserved.]**
- 8 [Reserved.]**
- 9 Security, Billing And Payments**
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10 Assignment**
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11 Insurance**
  - 11.1 Required Coverages For Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 11.1A Required Coverages For Generation Resources of 20 Megawatts Or Less
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.3A No Limitation of Liability
  - 11.4 Self-Insurance
  - 11.5 Notices; Certificates of Insurance
  - 11.6 Subcontractor Insurance
  - 11.7 Reporting Incidents
- 12 Indemnity**
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing
  - 12.5 Limitation on Damages
  - 12.6 Limitation of Liability in Event of Breach
  - 12.7 Limited Liability in Emergency Conditions
- 13 Breach, Cure And Default**
  - 13.1 Breach



	13.2	Notice of Breach
	13.3	Cure and Default
	13.3.1	Cure of Breach
	13.4	Right to Compel Performance
	13.5	Remedies Cumulative
<b>14</b>		<b>Termination</b>
	14.1	Termination
	14.2	[Reserved.]
	14.3	Cancellation By Interconnection Customer
	14.4	Survival of Rights
<b>15</b>		<b>Force Majeure</b>
	15.1	Notice
	15.2	Duration of Force Majeure
	15.3	Obligation to Make Payments
	15.4	Definition of Force Majeure
<b>16</b>		<b>Subcontractors</b>
	16.1	Use of Subcontractors
	16.2	Responsibility of Principal
	16.3	Indemnification by Subcontractors
	16.4	Subcontractors Not Beneficiaries
<b>17</b>		<b>Confidentiality</b>
	17.1	Term
	17.2	Scope
	17.3	Release of Confidential Information
	17.4	Rights
	17.5	No Warranties
	17.6	Standard of Care
	17.7	Order of Disclosure
	17.8	Termination of Construction Service Agreement
	17.9	Remedies
	17.10	Disclosure to FERC or its Staff
	17.11	No Construction Party Shall Disclose Confidential Information of Another Construction Party 17.12 Information that is Public Domain
	17.13	Return or Destruction of Confidential Information
<b>18</b>		<b>Information Access And Audit Rights</b>
	18.1	Information Access
	18.2	Reporting of Non-Force Majeure Events
	18.3	Audit Rights
<b>19</b>		<b>Disputes</b>
	19.1	Submission
	19.2	Rights Under The Federal Power Act
	19.3	Equitable Remedies
<b>20</b>		<b>Notices</b>
	20.1	General
	20.2	Operational Contacts
<b>21</b>		<b>Miscellaneous</b>

21.1	Regulatory Filing
21.2	Waiver
21.3	Amendments and Rights under the Federal Power Act
21.4	Binding Effect
21.5	Regulatory Requirements
<b>22</b>	<b>Representations and Warranties</b>
22.1	General
<b>ATTACHMENT P - SCHEDULE A</b>	
	<b>Site Plan</b>
<b>ATTACHMENT P - SCHEDULE B</b>	
	<b>Single-Line Diagram of Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE C</b>	
	<b>Transmission Owner Interconnection Facilities to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE D</b>	
	<b>Transmission Owner Interconnection Facilities to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE E</b>	
	<b>Merchant Network Upgrades to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE F</b>	
	<b>Merchant Network Upgrades to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE G</b>	
	<b>Customer Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE H</b>	
	<b>Negotiated Contract Option Terms</b>
<b>ATTACHMENT P - SCHEDULE I</b>	
	<b>Scope of Work</b>
<b>ATTACHMENT P - SCHEDULE J</b>	
	<b>Schedule of Work</b>
<b>ATTACHMENT P - SCHEDULE K</b>	
	<b>Applicable Technical Requirements and Standards</b>
<b>ATTACHMENT P - SCHEDULE L</b>	
	<b>Interconnection Customer's Agreement to Confirm with IRS Safe Harbor Provisions For Non-Taxable Status</b>
<b>ATTACHMENT P - SCHEDULE M</b>	
	<b>Schedule of Non-Standard Terms and Conditions</b>
<b>ATTACHMENT P - SCHEDULE N</b>	
	<b>Interconnection Requirements for a Wind Generation Facility</b>
<b>ATTACHMENT Q</b>	
	<b>PJM Credit Policy</b>
<b>ATTACHMENT R</b>	
	<b>Lost Revenues Of PJM Transmission Owners And Distribution of Revenues Remitted By MISO, SECA Rates to Collect PJM Transmission Owner Lost Revenues Under Attachment X, And Revenues From PJM Existing Transactions</b>
<b>ATTACHMENT S</b>	

**Form of Transmission Interconnection Feasibility Study Agreement**  
**ATTACHMENT T**  
**Identification of Merchant Transmission Facilities**  
**ATTACHMENT U**  
**Independent Transmission Companies**  
**ATTACHMENT V**  
**Form of ITC Agreement**  
**ATTACHMENT W**  
**COMMONWEALTH EDISON COMPANY**  
**ATTACHMENT X**  
**Seams Elimination Cost Assignment Charges**  
**NOTICE OF ADOPTION OF NERC TRANSMISSION LOADING RELIEF**  
**PROCEDURES**  
**NOTICE OF ADOPTION OF LOCAL TRANSMISSION LOADING RELIEF**  
**PROCEDURES**  
**SCHEDULE OF PARTIES ADOPTING LOCAL TRANSMISSION LOADING**  
**RELIEF PROCEDURES**  
**ATTACHMENT Y**  
**Forms of Screens Process Interconnection Request (For Generation Facilities of 2**  
**MW or less)**  
**ATTACHMENT Z**  
**Certification Codes and Standards**  
**ATTACHMENT AA**  
**Certification of Small Generator Equipment Packages**  
**ATTACHMENT BB**  
**Form of Certified Inverter-Based Generating Facility No Larger Than 10 kW**  
**Interconnection Service Agreement**  
**ATTACHMENT CC**  
**Form of Certificate of Completion**  
**(Small Generating Inverter Facility No Larger Than 10 kW)**  
**ATTACHMENT DD**  
**Reliability Pricing Model**  
**ATTACHMENT EE**  
**Form of Upgrade Request**  
**ATTACHMENT FF**  
**[Reserved]**  
**ATTACHMENT GG**  
**Form of Upgrade Construction Service Agreement**  
**Article 1 – Definitions And Other Documents**  
    1.0     Defined Terms  
    1.1     Incorporation of Other Documents  
**Article 2 – Responsibility for Direct Assignment Facilities or Customer-Funded**  
**Upgrades**  
    2.0     New Service Customer Financial Responsibilities  
    2.1     Obligation to Provide Security  
    2.2     Failure to Provide Security

- 2.3 Costs
- 2.4 Transmission Owner Responsibilities
- Article 3 – Rights To Transmission Service
  - 3.0 No Transmission Service
- Article 4 – Early Termination
  - 4.0 Termination by New Service Customer
- Article 5 – Rights
  - 5.0 Rights
    - 5.1 Amount of Rights Granted
    - 5.2 Availability of Rights Granted
    - 5.3 Credits
- Article 6 – Miscellaneous
  - 6.0 Notices
  - 6.1 Waiver
  - 6.2 Amendment
  - 6.3 No Partnership
  - 6.4 Counterparts

**ATTACHMENT GG - APPENDIX I –**

**SCOPE AND SCHEDULE OF WORK FOR DIRECT ASSIGNMENT  
FACILITIES OR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY  
TRANSMISSION OWNER**

**ATTACHMENT GG - APPENDIX II - DEFINITIONS**

- 1 Definitions
  - 1.1 Affiliate
  - 1.2 Applicable Laws and Regulations
  - 1.3 Applicable Regional Reliability Council
  - 1.4 Applicable Standards
  - 1.5 Breach
  - 1.6 Breaching Party
  - 1.7 Cancellation Costs
  - 1.8 Commission
  - 1.9 Confidential Information
  - 1.10 Constructing Entity
  - 1.11 Control Area
  - 1.12 Costs
  - 1.13 Default
  - 1.14 Delivering Party
  - 1.15 Emergency Condition
  - 1.16 Environmental Laws
  - 1.17 Facilities Study
  - 1.18 Federal Power Act
  - 1.19 FERC
  - 1.20 Firm Point-To-Point
  - 1.21 Force Majeure
  - 1.22 Good Utility Practice
  - 1.23 Governmental Authority

- 1.24 Hazardous Substances
- 1.25 Incidental Expenses
- 1.26 Local Upgrades
- 1.27 Long-Term Firm Point-To-Point Transmission Service
- 1.28 MAAC
- 1.29 MAAC Control Zone
- 1.30 NERC
- 1.31 Network Upgrades
- 1.32 Office of the Interconnection
- 1.33 Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement
- 1.34 Part I
- 1.35 Part II
- 1.36 Part III
- 1.37 Part IV
- 1.38 Part VI
- 1.39 PJM Interchange Energy Market
- 1.40 PJM Manuals
- 1.41 PJM Region
- 1.42 PJM West Region
- 1.43 Point(s) of Delivery
- 1.44 Point(s) of Receipt
- 1.45 Project Financing
- 1.46 Project Finance Entity
- 1.47 Reasonable Efforts
- 1.48 Receiving Party
- 1.49 Regional Transmission Expansion Plan
- 1.50 Schedule and Scope of Work
- 1.51 Security
- 1.52 Service Agreement
- 1.53 State
- 1.54 Transmission System
- 1.55 VACAR

#### **ATTACHMENT GG - APPENDIX III – GENERAL TERMS AND CONDITIONS**

- 1.0 Effective Date and Term
  - 1.1 Effective Date
  - 1.2 Term
  - 1.3 Survival
- 2.0 Facilitation by Transmission Provider
- 3.0 Construction Obligations
  - 3.1 Direct Assignment Facilities or Customer-Funded Upgrades
  - 3.2 Scope of Applicable Technical Requirements and Standards
- 4.0 Tax Liability
  - 4.1 New Service Customer Payments Taxable
  - 4.2 Income Tax Gross-Up
  - 4.3 Private Letter Ruling

- 4.4 Refund
  - 4.5 Contests
  - 4.6 Taxes Other Than Income Taxes
  - 4.7 Tax Status
- 5.0 Safety
  - 5.1 General
  - 5.2 Environmental Releases
- 6.0 Schedule Of Work
  - 6.1 Standard Option
  - 6.2 Option to Build
  - 6.3 Revisions to Schedule and Scope of Work
  - 6.4 Suspension
- 7.0 Suspension of Work Upon Default
  - 7.1 Notification and Correction of Defects
- 8.0 Transmission Outages
  - 8.1 Outages; Coordination
- 9.0 Security, Billing and Payments
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10.0 Assignment
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11.0 Insurance
  - 11.1 Required Coverages
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.4 No Limitation of Liability
  - 11.5 Self-Insurance
  - 11.6 Notices: Certificates of Insurance
  - 11.7 Subcontractor Insurance
  - 11.8 Reporting Incidents
- 12.0 Indemnity
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing
  - 12.5 Limitation on Damages
  - 12.6 Limitation of Liability in Event of Breach
  - 12.7 Limited Liability in Emergency Conditions
- 13.0 Breach, Cure And Default
  - 13.1 Breach

- 13.2 Notice of Breach
- 13.3 Cure and Default
- 13.4 Right to Compel Performance
- 13.5 Remedies Cumulative
- 14.0 Termination
  - 14.1 Termination
  - 14.2 Cancellation By New Service Customer
  - 14.3 Survival of Rights
  - 14.4 Filing at FERC
- 15.0 Force Majeure
  - 15.1 Notice
  - 15.2 Duration of Force Majeure
  - 15.3 Obligation to Make Payments
- 16.0 Confidentiality
  - 16.1 Term
  - 16.2 Scope
  - 16.3 Release of Confidential Information
  - 16.4 Rights
  - 16.5 No Warranties
  - 16.6 Standard of Care
  - 16.7 Order of Disclosure
  - 16.8 Termination of Upgrade Construction Service Agreement
  - 16.9 Remedies
  - 16.10 Disclosure to FERC or its Staff
  - 16.11 No Party Shall Disclose Confidential Information of Party 16.12  
Information that is Public Domain
  - 16.13 Return or Destruction of Confidential Information
- 17.0 Information Access And Audit Rights
  - 17.1 Information Access
  - 17.2 Reporting of Non-Force Majeure Events
  - 17.3 Audit Rights
  - 17.4 Waiver
  - 17.5 Amendments and Rights under the Federal Power Act
  - 17.6 Regulatory Requirements
- 18.0 Representation and Warranties
  - 18.1 General
- 19.0 Inspection and Testing of Completed Facilities
  - 19.1 Coordination
  - 19.2 Inspection and Testing
  - 19.3 Review of Inspection and Testing by Transmission Owner
  - 19.4 Notification and Correction of Defects
  - 19.5 Notification of Results
- 20.0 Energization of Completed Facilities
- 21.0 Transmission Owner's Acceptance of Facilities Constructed  
by New Service Customer
- 22.0 Transfer of Title to Certain Facilities Constructed By New Service Customer

23.0 Liens

**ATTACHMENT HH – RATES, TERMS, AND CONDITIONS OF SERVICE FOR PJMSETTLEMENT, INC.**

**ATTACHMENT II – MTEP PROJECT COST RECOVERY FOR ATSI ZONE**

**ATTACHMENT JJ – MTEP PROJECT COST RECOVERY FOR DEOK ZONE**

**ATTACHMENT KK - FORM OF DESIGNATED ENTITY AGREEMENT**

**ATTACHMENT LL - FORM OF INTERCONNECTION COORDINATION AGREEMENT**

**ATTACHMENT MM – FORM OF PSEUDO-TIE AGREEMENT – WITH NATIVE BA AS PARTY**

**ATTACHMENT MM-1 – FORM OF SYSTEM MODIFICATION COST REIMBURSEMENT AGREEMENT – PSEUDO-TIE INTO PJM**

**ATTACHMENT NN – FORM OF PSEUDO-TIE AGREEMENT WITHOUT NATIVE BA AS PARTY**

**ATTACHMENT OO – FORM OF DYNAMIC SCHEDULE AGREEMENT INTO THE PJM REGION**

**ATTACHMENT PP – FORM OF FIRM TRANSMISSION FEASIBILITY STUDY AGREEMENT**



### 13.7

#### Classification of Firm Transmission Service:

- (a) The Transmission Customer taking Firm Point-To-Point Transmission Service may (1) change its Receipt and Delivery Points to obtain service on a non-firm basis consistent with the terms of Tariff, Part II, section 22.1 or (2) request a modification of the Points of Receipt or Delivery on a firm basis pursuant to the terms of Tariff, Part II, section 22.2.
- (b) The Transmission Customer may purchase transmission service to make sales of capacity and energy from multiple generating units that are on the Transmission Provider's Transmission System. For such a purchase of transmission service, the resources will be designated as multiple Points of Receipt, unless the multiple generating units are at the same generating plant in which case the units would be treated as a single Point of Receipt.
- (c) The Transmission Provider shall provide firm deliveries of capacity and energy from the Point(s) of Receipt to the Point(s) of Delivery. Each Point of Receipt at which firm transmission capacity is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Receipt. Points of Receipt and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. Each Point of Delivery at which firm transfer capability is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Delivery. Points of Delivery and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. The greater of either (1) the sum of the capacity reservations at the Point(s) of Receipt, or (2) the sum of the capacity reservations at the Point(s) of Delivery shall be the Transmission Customer's Reserved Capacity. The Transmission Customer will be billed for its Reserved Capacity under the terms of [Tariff, Schedule 7](#). The Transmission Customer may not exceed its firm capacity reserved at each Point of Receipt and each Point of Delivery except as otherwise specified in [Tariff, Part II, Section 22](#). In the event the Transmission Customer (including Third Party Sales by a Transmission Owner) exceeds its firm capacity reserved at any Point of Receipt or Point of Delivery or uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved, except as otherwise specified in Tariff, Part II, section 22, the Transmission Customer shall pay a penalty equal to twice the rate set forth in Tariff, Schedule 7 as follows:

The unreserved use penalty for a single hour of unreserved use shall be based on the rate for daily Firm Point-To-Point Transmission Service. If there is more than one assessment for a given duration (e.g., daily) for the Transmission Customer, the penalty shall be based on the next longest duration (e.g., weekly). The unreserved penalty charge for multiple instances of unreserved use (i.e., more than one hour) within a day shall be based on the daily rate Firm Point-To-Point Transmission Service. The unreserved penalty charge for multiple instances of unreserved use isolated to one calendar week shall be based on the charge for weekly Firm Point-To-Point Transmission Service. The unreserved use penalty charge for multiple instances of unreserved use during more than one week during a

calendar month shall be based on the charge for monthly Firm Point-To-Point Transmission Service.

The Transmission Provider shall distribute all unreserved use penalties incurred under this section in a given hour to the Transmission Customers that: (1) were using transmission service in the same hour in which the unreserved use penalty was incurred; and (2) did not incur unreserved use penalties under this section during the hour in which the penalties were incurred. The Transmission Provider shall distribute the unreserved use penalties to each such Transmission Customer pro-rata based on the total Tariff, Schedule 1A charges for all such Transmission Customers for all the hours of the day in which the penalty was incurred.

## 15.2 Determination of Available Transfer Capability:

A description of the Transmission Provider's specific methodology for assessing available transfer capability posted on the Transmission Provider's OASIS (Tariff, section 4) is contained in Tariff, Attachment C. The Transmission Provider will not provide Short-Term Firm Point-To-Point Transmission Service in excess of the transfer capability posted on OASIS pursuant to Tariff, Part II, section 17.9. In the event sufficient transfer capability may not exist to accommodate a request for Long-Term Firm Point-To-Point Transmission Service, and such request does not commence and terminate within the 18 month ATC horizon, the Transmission Provider will respond by performing (in coordination with the affected Transmission Owner or Transmission Owners to the extent necessary) a [Phase I System Impact Study](#) ~~Firm Transmission Feasibility Study~~ as described in Tariff, Part II, section 19. If a request for Long-Term Firm Point-to-Point Transmission Service falls entirely within the ATC horizon, the request will be evaluated based on the posted ATC.

## 17.1

### Application:

A request for Firm Point-To-Point Transmission Service for periods of one year or longer must contain an Application submitted on the OASIS~~a written Application to: PJM Interconnection, L.L.C., 2750 Monroe Blvd., Audubon, PA 19403~~, at least sixty (60) days in advance of the calendar month in which service is to commence. ~~The Transmission Provider will consider requests for such firm service on shorter notice when feasible.~~ Requests for firm service for periods of less than one year shall be subject to the expedited procedures set forth in Tariff, Part II, section 17.8. All Firm Point-To-Point Transmission Service requests should be submitted by entering the information listed below on the Transmission Provider's OASIS. Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line. A Completed Application for service that terminates within the 18-month ATC horizon will receive a timestamp establishing priority in accordance with Tariff, section 13.2. Requests for service for periods of one year or longer that terminate after the 18-month ATC horizon ~~Each of these methods will receive~~ provide a time-stamped record for establishing the Project Identifier~~Queue Position~~ of the Completed Application. For Transmission Service requests that require a Phase I System Impact Study, a Completed Application must be submitted and received by the Transmission Provider by the cycle Application Deadline in order to be assigned a Project Identifier in such cycle.

## 17.2 Completed Application:

If requested by the Transmission Provider, a Completed Application shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The location of the Point(s) of Receipt and Point(s) of Delivery and the identities of the Delivering Parties and the Receiving Parties;
- (iv) The location of the generating facility(ies) supplying the capacity and energy and the location of the load ultimately served by the capacity and energy transmitted. The Transmission Provider will treat this information as confidential except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice or pursuant to Applicable Regional Entity transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations;
- (v) A description of the supply characteristics of the capacity and energy to be delivered;
- (vi) An estimate of the capacity and energy expected to be delivered to the Receiving Party;
- (vii) The Service Commencement Date and the term of the requested Transmission Service;
- (viii) The transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission Provider's Transmission System; customers may combine their requests for service in order to satisfy the minimum transmission capacity requirement;
- (ix) A statement indicating that, if the Eligible Customer submits a Pre-Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that Transmission Provider can provide the requested Transmission Service; and
- (x) Any additional information required by the Transmission Provider's planning process established in Operating Agreement, Schedule 6.

The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

#### **17.4 Notice of Deficient Application:**

If an Application fails to meet the requirements of the Tariff, the Transmission Provider shall notify the entity requesting service within fifteen (15) days of receipt of the reasons for such failure. The Transmission Provider will attempt to remedy minor deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application, along with any deposit, with interest. Upon receipt of a new or revised Application that fully complies with the requirements of Tariff, Part II, the Eligible Customer shall be assigned a new queued time on the OASIS and/or Project Identifier, as applicable, ~~Queue Position~~ consistent with the date of the new or revised Application.

## **17.5 Response to a Completed Application:**

Following receipt of a Completed Application for Firm Point-To-Point Transmission Service, the Transmission Provider shall make a determination of available transfer capability as required in Tariff, Part II, section 15.2. With respect to Short-Term Firm Point-To-Point Transmission Service, the Transmission Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application, whether it will be able to provide service. With respect to Long-Term Firm Point-To-Point Transmission Service, the Transmission Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application either (i) if it will be able to provide service without performing a [Phase I System Impact Study](#)~~Firm Transmission Feasibility Study~~ or (ii) if such a study is needed to evaluate the impact of the Application pursuant to Tariff, Part II, section 19.1; provided that, if, in connection with the request, Transmission Provider must provide notification to an existing customer pursuant to Tariff, Part I, section 2.3, the foregoing deadline shall be extended to forty-five (45) days after the date of receipt of a Completed Application. Responses by the Transmission Provider must be made as soon as practicable to all completed applications and the timing of such responses must be made on a non-discriminatory basis.



## 17.6 Execution of Service Agreement:

Whenever the Transmission Provider determines that a Phase I System Impact Study~~Firm Transmission Feasibility Study~~ is not required and that the service can be provided, it shall notify the Eligible Customer as soon as practicable but no later than thirty (30) days after receipt of the Completed Application. Where a Phase I System Impact Study~~Firm Transmission Feasibility Study~~ is required, the provisions of Tariff, Part II, section 19 will govern the execution of a Service Agreement. Failure of an Eligible Customer to execute and return the Service Agreement or request the filing of an unexecuted service agreement pursuant to Tariff, Part II, section 15.3, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded with interest. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

19     ~~Firm Transmission Feasibility~~ System Impact Study Procedures ~~F~~for Long-Term  
Firm Point-To-Point Transmission Service Requests

## 19.1 Notice of Need for ~~Firm-Transmission-Feasibility~~Phase I System Impact Study:

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a ~~Firm-Transmission-Feasibility~~Phase I System Impact Study is needed. The purpose of the ~~Firm-Transmission-Feasibility~~Phase I System Impact Study shall be to assess whether the Transmission System has sufficient available capability to provide the requested service. If the Transmission Provider determines that a Phase I System Impact~~Firm-Transmission-Feasibility~~ Study is necessary to evaluate the requested service, it shall so inform the Eligible Customer, as soon as practicable. In such cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender an ~~Firm-Transmission-Feasibility-Study~~Application and Studies Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required ~~Firm-Transmission-Feasibility~~Phase I System Impact Study(ies). For a service request to remain a Completed Application, the Eligible Customer shall execute the ~~Firm-Transmission-Feasibility-Study~~Application and Studies Agreement and return it to the Transmission Provider within fifteen (15) days and provide the Study Deposit and Readiness Deposit required pursuant to Tariff, Part VII, Subpart C, section 306(A)(5) or Tariff, Part VIII, Subpart B, section 403(A)(5), as applicable. If the Eligible Customer elects not to execute the ~~Firm-Transmission-Feasibility-Study~~Application and Studies Agreement, its application shall be deemed withdrawn and its deposit, pursuant to Tariff, Part II, section 17.3, shall be returned with interest.

**19.2 ~~Firm Transmission Feasibility Study~~Application and Studies Agreement and ~~Cost Reimbursement~~Study Deposit and Readiness Deposit:**

A request for service for which a Phase I System Impact Study is required is subject to an Application and Studies Agreement along with a Study Deposit and Readiness Deposit(s), as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

- ~~(i) — The Firm Transmission Feasibility Study Agreement will clearly specify the Transmission Provider's estimate (determined in coordination with the affected Transmission Owner(s)) of the actual cost, and time for completion of the Firm Transmission Feasibility Study. The charge shall not exceed the actual cost of the study. In performing the Firm Transmission Feasibility Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.~~
- ~~(ii) — If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single Firm Transmission Feasibility Study is sufficient for the Transmission Provider to accommodate the requests for service, the costs of that study shall be pro-rated among the Eligible Customers.~~
- ~~(iii) — The Transmission Provider shall reimburse the affected Transmission Owner(s) for their study costs, if any, in connection with a Firm Transmission Feasibility Study.~~
- ~~(iv) — For Firm Transmission Feasibility Studies that the Transmission Provider conducts on behalf of a Transmission Owner, the Transmission Owner shall record the cost of the Firm Transmission Feasibility Studies pursuant to Tariff, Part I, section 8.~~

A request for service for which a Phase I System Impact Study is required is subject to the System Impact Study Procedures, as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

~~After receiving a signed Firm Transmission Feasibility Study Agreement and the applicable deposit of \$20,000, the Transmission Provider shall conduct a Firm Transmission Service Feasibility Study to make a preliminary determination of the type and scope of and Direct Assignment Facilities, Local Upgrades, and Network Upgrades that will be necessary to accommodate the Completed Application and provide the Eligible Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Eligible Customer's cost responsibility, estimated consistent with Tariff, Part VI, section 217. The Transmission Service Feasibility Study assesses the practicality and cost of accommodating the requested service. The analysis is limited to load-flow analysis of probable contingencies. The Transmission Provider shall provide a copy of the Transmission Service Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, section 18.17, related work papers to the Eligible Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall make the completed Transmission Service Feasibility Study publicly available. The Transmission Provider shall conduct Transmission Service Feasibility Studies two times each year in conjunction with the Interconnection Feasibility Studies conducted under Tariff, Part IV, section 36.2.~~

~~The Transmission Provider will use the same due diligence in completing the Firm Transmission Feasibility Study for an Eligible Customer as it uses when completing studies for a Transmission Owner. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the Firm Transmission Feasibility Study whether a System Impact Study will be needed to more fully assess and identify the Network Upgrades and/or Local Upgrades that will be needed to accommodate all or part of the Eligible Customer's request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In the event that Transmission Provider determines that a System Impact Study will be needed, the procedures and other terms of Tariff, Part VI shall apply to the Completed Application.~~

### 19.3.1 [Reserved] ~~Meeting with Transmission Provider:~~

~~At the Eligible Customer's request, Transmission Provider, the Eligible Customer and the affected Transmission Owner shall meet at a mutually agreeable time to discuss the results of the Firm Transmission Feasibility Study. Such meeting may occur in person or by telephone or video conference.~~

#### 19.4 [Reserved] Retaining Queue Position:

~~Except when the Transmission Provider determines that a System Impact Study is needed, in order for a request to remain a Completed Application, within thirty (30) days after its receipt of the completed Firm Transmission Feasibility Study, the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement pursuant to Tariff, Part II, section 15.3, or the Completed Application shall be deemed terminated and withdrawn.~~

~~Tariff, Part II, section 19.3, Tariff, Part VI, section 205, and Tariff, Part VI, section 206 require a Transmission Provider to use due diligence to meet study completion deadlines for Firm Transmission Feasibility Studies, System Impact Studies, and Facilities Studies for Eligible Customers.~~

~~(i) — The Transmission Provider is required to file a notice with the Commission in the event that more than twenty (20) percent of non-Affiliates' Firm Transmission Feasibility Studies, System Impact Studies, and Facilities Studies for Eligible Customers completed by the Transmission Provider in any two consecutive calendar quarters are not completed within the completion deadlines, consistent with Tariff, Part II, section 19.3, Tariff, Part VI, section 205, and Tariff, Part VI, section 206. Such notice must be filed within thirty (30) days of the end of the calendar quarter triggering the notice requirement.~~

~~(ii) — For the purposes of calculating the percent of non-Affiliates' Firm Transmission Feasibility Studies, System Impact Studies, and Facilities Studies for Eligible Customers processed outside of the study completion deadlines set forth in Tariff, Part II, section 19.3, Tariff, Part VI, section 205, and Tariff, Part VI, section 206 for such studies for Eligible Customers, the Transmission Provider shall consider all Firm Transmission Feasibility Studies, System Impact Studies, and Facilities Studies for Eligible Customers that it completes for non-Affiliates during the calendar quarter. The percentage should be calculated by dividing the number of those studies which are completed on time by the total number of completed studies. The Transmission Provider may provide an explanation in its notification filing to the Commission if it believes there are extenuating circumstances that prevented it from meeting the study completion deadlines.~~

~~(iii) — The Transmission Provider is subject to an operational penalty if it completes ten (10) percent or more of non-Affiliates' Firm Transmission Feasibility Studies, System Impact Studies, and Facilities Studies for Eligible Customers outside of the study completion deadlines set forth in Tariff, Part II, section 19.3, Tariff, Part VI, section 205, and Tariff, Part VI, section 206 for such studies for Eligible Customers, for each of the two calendar quarters immediately following the quarter that triggered its notification filing to the Commission. The operational penalty will be assessed for each calendar quarter for which an operational penalty applies, starting with the calendar quarter immediately following the quarter that triggered the Transmission Provider's notification filing to the Commission. The operational penalty will continue to be assessed each quarter until the Transmission Provider completes at least ninety (90) percent of all non-Affiliates' Firm Transmission Feasibility Studies, System Impact Studies and Facilities Studies for Eligible Customers within the study completion deadlines, set forth in Tariff, Part II, section 19.3, Tariff, Part VI, section 205, and Tariff, Part VI, section 206 for such studies for Eligible Customers.~~

~~(iv) — For penalties assessed in accordance with subsection (iii) above, the penalty amount for each Firm Transmission Feasibility Study, System Impact Study, or Facilities Study for Eligible Customers shall be equal to \$500 for each day the Transmission Provider takes to complete that study beyond the study completion deadline.~~



## 22.2

### Modification On a Firm Basis:

Any request by a Transmission Customer to modify Receipt and Delivery Points of confirmed service on a firm basis shall be treated as a new request for service in accordance with Tariff, Part II, section 17 hereof and Tariff, Part II, section 19 hereof, as applicable. ~~except that such Transmission Customer shall not be obligated to pay any additional deposit if the capacity reservation does not exceed the amount reserved in the existing Service Agreement. While such new request is pending, the Transmission Customer shall retain its priority for service at the existing firm Receipt and Delivery Points specified in its Service Agreement.~~

### 23.1 Procedures for Assignment or Transfer of Service:

A Transmission Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible Customer (the Assignee). The Transmission Customer that sells, assigns or transfers its rights under its Service Agreement is hereafter referred to as the Reseller. Compensation to Resellers shall be at rates established by agreement between the Reseller and the Assignee.

The Assignee must execute a service agreement with the Transmission Provider and PJMSettlement governing reassignments of transmission service prior to the date on which the reassigned service commences. PJMSettlement shall charge the Reseller, as appropriate, at the rate stated in the Reseller's Service Agreement with the Transmission Provider and PJMSettlement or the associated OASIS schedule and credit the Reseller with the price reflected in the Assignee's Service Agreement with the Transmission Provider and PJMSettlement or the associated OASIS schedule; provided that, such credit shall be reversed in the event of non-payment by the Assignee. ~~The If the Assignee cannot does not~~ request any change ~~to in the Point(s) of Receipt or the Point(s) of Delivery, or a change in~~ any ~~other~~ term or condition set forth in the original Service Agreement, except for a change to commencement of service or reduction of the capacity, to the extent explicitly permitted by this Tariff. ~~The~~<sup>the</sup> Assignee will receive the same services as did the Reseller and the priority of service for the Assignee will be the same as that of the Reseller. The Assignee will be subject to all terms and conditions of this Tariff. ~~If the Assignee requests a change in service, the reservation priority of service will be determined by the Transmission Provider pursuant to Tariff, Part II, section 13.2.~~

## **23.2 Limitations on Assignment or Transfer of Service:**

If the Assignee requests a change in the Point(s) of Receipt or Point(s) of Delivery, or a change in any other specifications set forth in the original Service Agreement, the Transmission Provider will consent to such change subject to the provisions of the Tariff, provided that the change will not impair the operation and reliability of the Transmission Provider's Transmission System or a Transmission Owner's generation, transmission, or distribution systems. The Assignee shall compensate the Transmission Provider for performing any System Impact Study([ies](#)) needed to evaluate the capability of the Transmission System to accommodate the proposed change and any additional costs resulting from such change. The Reseller shall remain liable for the performance of all obligations under the Service Agreement, except as specifically agreed to by the Transmission Provider and the Reseller through an amendment to the Service Agreement.

## **27.2 Redispatch Using Locational Marginal Prices:**

Whenever in the operation of the PJM Region the Transmission Provider identifies transmission constraints, the provisions of [Tariff](#), Attachment K shall apply to all Transmission Customers (including Native Load Customers and a Transmission Owner making a Third-Party Sale); provided, however, that a Transmission Customer receiving Non-Firm Point-To-Point Transmission Service may elect not to pay the costs of redispatch determined pursuant to [Tariff](#), Attachment K when those costs would be imposed consistent with Commission policy and Transmission Service to such Transmission Customer may be interrupted.

## 29.2

### Application Procedures:

An Eligible Customer requesting service under Tariff, Part III must submit an Application to the Transmission Provider as far as possible in advance of the month in which service is to commence. Unless subject to the procedures in Tariff, Part I, section 2, Completed Applications for Network Integration Transmission Service will be assigned a Project Identifier ~~Queue Position~~ according to the date and time the Application is received, with the earliest Application receiving the highest priority. For Transmission Service requests that require a Phase I System Impact Study, a Completed Application must be submitted and received by the Transmission Provider by the cycle Application Deadline in order to be assigned a Project Identifier in such cycle. If requested by Transmission Provider, Applications should be submitted by entering the information listed below (except for applications for Network Integration Transmission Service pursuant to state required retail access programs for which Transmission Customers shall provide the information required under the Service Agreement) on the Transmission Provider's OASIS. ~~Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line.~~ For applications pursuant to state required retail access programs, the information required under the Service Agreement should be submitted on the Transmission Provider's specified electronic information system established for such programs. Each of these methods will provide a time-stamped record for establishing the service priority of the Application. If requested by Transmission Provider, a Completed Application (other than applications for Network Integration Transmission Service pursuant to a state required retail access program, which shall be governed by Tariff, Attachment F-1 and the specifications thereto) shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the party requesting service;
- (ii) A statement that the party requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) A description of the Network Load at each delivery point. This description should separately identify and provide the Eligible Customer's best estimate of the total loads to be served at each transmission voltage level, and the loads to be served from each Transmission Provider substation at the same transmission voltage level. The description should include a ten (10) year forecast of summer and winter load and resource requirements beginning with the first year after the service is scheduled to commence;
- (iv) The amount and location of any interruptible loads included in the Network Load. This shall include the summer and winter capacity requirements for each interruptible load (had such load not been interruptible), that portion of the load subject to interruption, the conditions under which an interruption can be implemented and any limitations on the amount and frequency of interruptions. An Eligible Customer should identify the amount of interruptible customer load (if any) included in the 10 year load forecast provided in response to (iii) above;

(v) A description of Network Resources (current and 10-year projection). For each on-system Network Resource, such description shall include:

- Unit size and amount of capacity from that unit to be designated as Network Resource
- VAR capability (both leading and lagging) of all generators
- Operating restrictions
  - Any periods of restricted operations throughout the year
  - Maintenance schedules
  - Minimum loading level of unit
  - Normal operating level of unit
  - Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations
- Arrangements governing sale and delivery of power to third parties from generating facilities located in the Transmission Provider Control Areas, where only a portion of unit output is designated as a Network Resource
- For each off-system Network Resource, such description shall include:
  - Identification of the Network Resource as an off-system resource
- Amount of power to which the customer has rights
  - Identification of the control area from which the power will originate
  - Delivery point(s) to the Transmission Provider's Transmission System
  - Transmission arrangements on the external transmission system(s)
- Operating restrictions, if any
  - Any periods of restricted operations throughout the year
  - Maintenance schedules

- Minimum loading level of unit
- Normal operating level of unit
- Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations;

(vi) Description of Eligible Customer's transmission system:

- Load flow and stability data, such as real and reactive parts of the load, lines, transformers, reactive devices and load type, including normal and emergency ratings of all transmission equipment in a load flow format compatible with that used by the Transmission Provider
- Operating restrictions needed for reliability
- Operating guides employed by system operators
- Contractual restrictions or committed uses of the Eligible Customer's transmission system, other than the Eligible Customer's Network Loads and Resources
- Location of Network Resources described in subsection (v) above
- 10 year projection of system expansions or upgrades
- Transmission System maps that include any proposed expansions or upgrades
- Thermal ratings of Eligible Customer's Control Area ties with other Control Areas;

(vii) Service Commencement Date and the term of the requested Network Integration Transmission Service. The minimum term for Network Integration Transmission Service is one year except that, for service provided with respect to a state required retail access program, the minimum term is one day;

(viii) A statement signed by an authorized officer from or agent of the Network Customer attesting that all of the network resources listed pursuant to Tariff, Part III, section 29.2(v) satisfy the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Tariff, Part III; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program; and

(ix) Any additional information required of the Transmission Customer as specified in the Transmission Provider's planning process established in Operating Agreement, Schedule 6.

In addition, a party requesting Transmission Service shall provide the information specified in, and otherwise comply with, the "PJM Credit Policy" set forth in Tariff, Attachment Q hereto. Unless the Parties agree to a different time frame, the Transmission Provider must acknowledge the request within ten (10) days of receipt. The acknowledgement must include a date by which a response, including a Service Agreement, will be sent to the Eligible Customer. If an Application fails to meet the requirements of this section, the Transmission Provider shall notify the Eligible Customer requesting service within fifteen (15) days of receipt and specify the reasons for such failure. Wherever possible, the Transmission Provider will attempt to remedy deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application without prejudice to the Eligible Customer filing a new or revised Application that fully complies with the requirements of this section. The Eligible Customer will be assigned a new Project Identifier ~~Queue Position~~ consistent with the date of the new or revised Application. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.



## 29.2A Determination of Available Transfer Capability:

A description of the Transmission Provider's specific methodology for assessing available transfer capability posted on the Transmission Provider's OASIS (Tariff, Part I, section 4) is contained in Tariff, Attachment C. ~~In the event sufficient transfer capability may not exist to accommodate a request for Network Integration Transmission Service, and such request does not commence and terminate within the 18-month ATC horizon, the Transmission Provider will respond by performing (in coordination with the affected Transmission Owner or Transmission Owners to the extent necessary) a Firm Transmission Feasibility Study as described in Tariff, Part III, section 32.~~ If a request for Long-Term Firm Network Integration Transmission Service falls entirely within the ATC horizon, the request will be evaluated based on the posted ATC. Requests that terminate beyond the 18-month ATC horizon require a Phase I System Impact Study and shall be subject to Tariff, Part VII or Tariff, Part VIII, as applicable.

### **29.3 Technical Arrangements to be Completed Prior to Commencement of Service:**

Network Integration Transmission Service shall not commence until the Transmission Provider, the affected Transmission Owners, and the Network Customer, or a third party, have completed installation of all equipment specified under the Network Operating Agreement and, if applicable, the ~~Upgrade~~-Construction Service Agreement, consistent with Good Utility Practice and any additional requirements reasonably and consistently imposed to ensure the reliable operation of the Transmission System. The Transmission Provider and the affected Transmission Owners shall exercise reasonable efforts, in coordination with the Network Customer, to complete such arrangements as soon as practicable taking into consideration the Service Commencement Date.

### **30.2 Designation of New Network Resources:**

The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable (notwithstanding the requirements in this Tariff, Part III, section 30.2, the applicable requirements of Tariff, Attachment DD, the Reliability Assurance Agreement, and the PJM Manuals regarding the designation of Network Resources shall apply). A request for Transmission Service associated with designation of a new Network Resource must be made through the Transmission Provider's OASIS by a request for modification of service pursuant to an Application under Tariff, Part III, section 29. This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Tariff, Part III; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Tariff, Part III, section 29.2. In the event the Network Resource to be designated consists of new generation facilities in the PJM Region, the Network Customer or the owner of the generating facilities also must submit an Interconnection Request pursuant to Tariff, [Part VII or Tariff, Part VIII, as applicable](#). In the event the Network Resource to be designated is Behind The Meter Generation, the designation must be made before the commencement of a Planning Period as that term is defined in the Operating Agreement and will remain in effect for the entire Planning Period. In the event the Network Resource to be designated will use interface capacity and is for a period of less than one year, the designation request must be submitted in accordance with the time requirements set forth in Tariff, Part II, section 17.8 and Tariff, Part II, section 17.9 and will be processed together with, and in the same manner as, requests for Short-Term Firm Point-To-Point Transmission Service.

### 31.7 Establishing and Changing Network Load Energy Settlement Area Definitions:

(a) Prior to the 2015/2016 Planning Period, the Energy Settlement Area for a Network Customer's Network Load in a given electric distribution company's fully metered franchise area(s) or service territory(ies) shall be the aggregate load buses in a Zone, as defined in subsection (c) below, or, with respect to Non-Zone Network Load, to the border of the PJM Region, unless the Network Customer defines a more specific Energy Settlement Area in accordance with the procedures set forth in the PJM Manuals. Commencing with the 2015/2016 Planning Period, the Energy Settlement Area for a Network Customer's Network Load in a given electric distribution company's fully metered franchise area(s) or service territory(ies) shall be the aggregate load buses specifying the Residual Metered Load distribution for that franchise area(s) or service territory(ies), as defined in subsection (c) below, or with respect to Non-Zone Network Load to the border of the PJM Region, unless the Network Customer defines a more specific nodal Energy Settlement Area in accordance with the procedures set forth in the PJM Manuals.

(b) A Network Customer may change the definition of its existing Network Load Energy Settlement Area in accordance with the procedures set forth in the PJM Manuals and the Network Customer's existing rights under the Tariff. Notwithstanding any other relevant provision(s) of this Tariff, advance notice of any such change described in the PJM Manuals must be provided to the Transmission Provider and the effective date of such change shall coincide with the first day of a Planning Period, as defined in the Operating Agreement. If system upgrades are required to ~~affect~~ a Network Load Energy Settlement Area change, all required upgrades shall be completed prior to the requested effective date of the change; if all required system upgrades are not completed prior to the requested effective date, the effective date shall be the first day of the Planning Period that immediately follows completion of all system upgrades. A Network Customer may not change the definition of its existing Network Load Energy Settlement Area to a less specific Energy Settlement Area, except in circumstances where there has been a physical change to the relevant transmission system infrastructure, as set forth in the PJM Manuals, such that settlement according to the previously defined Energy Settlement Area is no longer possible.

(c) The distribution of load buses in an Energy Settlement Area for the determination of a Transmission Loss Charge and Transmission Congestion Charge per Tariff, Part I, section 5.1 and Tariff, Part I, section 5.4 are determined as follows.

- (i) *Zonal aggregate determination.* The default distribution of load buses for a Zone for the Day-ahead Energy Market is the State Estimator distribution of load for that Zone at 8:00 a.m. one week prior to the Operating Day (i.e. if the Operating Day is Monday, the default distribution is from 8:00 a.m. on Monday of the previous week). Should the Office of the Interconnection experience technical limitations that would restrict the ability to obtain the State Estimator distribution of load for a Zone at 8:00 a.m. one week prior to the Operating Day or if the required data is not available, a State Estimator distribution of load from the most recently available day of the week that the Operating Day falls on will be used (i.e., if the Operating Day is Monday, the Office of the Interconnection will utilize

the State Estimator distribution of load from the most recent Monday for which data is available). If the default distribution does not accurately reflect the distribution of load for the Zone for the relevant electric distribution company for the Day-ahead Energy Market, it may specify another more accurate distribution of load buses for the Zone in the Office of the Interconnection's internet-based software application. The distribution of load buses for a Zone for the Real-time Energy Market is the State Estimator distribution of load for that Zone for each hour during the Operating Day.

- (ii) *Residual Metered Load aggregate determination.* The default distribution of load buses for a Residual Metered Load aggregate for the Day-ahead Energy Market is the distribution of the real-time Residual Metered Load at each bus within the Residual Metered Load aggregate at 8:00 a.m. one week prior to the Operating Day. Should the Office of the Interconnection experience technical limitations that would restrict the ability to obtain the bus distribution of the real-time Residual Metered Load aggregate at 8:00 a.m. one week prior to the Operating Day or if the required data is not available, a distribution of the real-time Residual Metered Load aggregate from the most recently available day of the week that the Operating Day falls on will be used (i.e., if the Operating Day is Monday, the Office of the Interconnection will utilize the bus distribution of the real-time Residual Metered Load aggregate from the most recent Monday for which data is available). The distribution of load buses for a Residual Metered Load aggregate for the Real-time Energy Market is the Residual Metered Load at each bus in the Residual Metered Load aggregate for each hour during the Operating Day. Residual Metered Load is determined by reducing the electric distribution company's revenue meter calculated load at each bus in its fully metered franchise area(s) or service territory(ies) as determined in Tariff, Part I, section 5.1.3(e)(i) and Tariff, Part I, section 5.4.3(e)(i) by the nodally priced load of other entities assigned to each load bus in the electric distribution company's fully metered franchise area(s) or service territory(ies) via hourly load contracts as specified in Tariff, Part I, section 5.1.3(e)(ii) and Tariff, Part I, section 5.4.3(e)(ii).
- (iii) *Nodal aggregate determination.* The distribution of load buses for nodal load in the Day-ahead Energy Market and Real-time Energy Market is determined by a fixed aggregate definition that represents the composition of the nodal load at a single identifiable bus or set of identifiable buses, as agreed upon by the Load Serving Entity responsible for the load and the electric distribution company in whose fully metered franchise area(s) or service territory(ies) the load is located, per the nodal pricing settlement rules defined in the PJM Manuals.



### 32.1 Notice of Need for ~~Firm Transmission Feasibility~~ Phase I System Impact Study:

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a ~~Firm Transmission Feasibility~~ Phase I System Impact Study is needed. The purpose of the ~~Firm Transmission Feasibility~~ Phase I System Impact Study shall be to assess whether the Transmission System has sufficient available capability to provide the requested service. If the Transmission Provider determines that a ~~Firm Transmission Feasibility~~ Phase I System Impact Study is necessary to evaluate the requested service, it shall so inform the Eligible Customer, as soon as practicable. In such ~~e~~Cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender an ~~Firm Transmission Study~~ Application and Studies Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required ~~Firm Transmission Feasibility~~ Phase I System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the ~~Firm Transmission Study~~ Application and Studies Agreement and return it to the Transmission Provider within fifteen (15) days and provide the Study Deposit and Readiness Deposit required pursuant to Tariff, Part VII, Subpart C, section 306(A)(5) or Tariff, Part VIII, Subpart B, section 403(A)(5), as applicable. If the Eligible Customer elects not to execute the ~~Firm Transmission Feasibility Study Agreement~~ Application and Studies Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest.

**32.2 ~~Firm Transmission Feasibility Study Agreement and Cost Reimbursement~~Study Deposit and Readiness Deposit:**

A request for service for which a Phase I System Impact Study is required is subject to the Study Deposit and Readiness Deposit(s), as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

~~(i) — The Firm Transmission Feasibility Study Agreement will clearly specify the Transmission Provider's estimate (determined in coordination with the affected Transmission Owner(s)) of the actual cost, and time for completion of the Firm Transmission Feasibility Study. The charge shall not exceed the actual cost of the study. In performing the Firm Transmission Feasibility Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.~~

~~(ii) — If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single Firm Transmission Feasibility Study is sufficient for the Transmission Provider to accommodate the service requests, the costs of that study shall be pro-rated among the Eligible Customers.~~

~~(iii) — The Transmission Provider shall reimburse the affected Transmission Owner(s) for their study costs, if any, in connection with a Firm Transmission Feasibility Study.~~

~~(iv) — For Firm Transmission Feasibility Studies that the Transmission Provider conducts on behalf of a Transmission Owner, the Transmission Owner shall record the cost of the Firm Transmission Feasibility Studies pursuant to Tariff, Part I, section 8.~~



A request for service for which a Phase I System Impact Study is required is subject to the System Impact Study Procedures, as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

~~After receiving a signed Firm Transmission Feasibility Study Agreement and the applicable deposit of \$20,000, the Transmission Provider shall conduct a Firm Transmission Service Feasibility Study to make a preliminary determination of the type and scope of and Direct Assignment Facilities, Local Upgrades, and Network Upgrades that will be necessary to accommodate the Completed Application and provide the Eligible Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Eligible Customer's cost responsibility, estimated consistent with Tariff, Part VI, section 217. The Transmission Service Feasibility Study assesses the practicality and cost of accommodating the requested service. The analysis is limited to load flow analysis of probable contingencies. The Transmission Provider shall provide a copy of the Transmission Service Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, section 18.17, related work papers to the Eligible Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall make the completed Transmission Service Feasibility Study publicly available. The Transmission Provider shall conduct Transmission Service Feasibility Studies two times each year in conjunction with the Interconnection Feasibility Studies conducted under Tariff, Part III, section 36.2.~~

~~The Transmission Provider will use the same due diligence in completing the Firm Transmission Feasibility Study for an Eligible Customer as it uses when completing studies for a Transmission Owner. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the Firm Transmission Feasibility Study whether a System Impact Study will be needed to more fully assess and identify the Network Upgrades and/or Local Upgrades that will be needed to accommodate all or part of the Eligible Customer's request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In the event that Transmission Provider determines that a System Impact Study will be needed, the procedures and other terms of Tariff, Part VI shall apply to the Completed Application.~~

32.3.1           [Reserved] ~~Meeting with Transmission Provider:~~

~~At the Eligible Customer's request, Transmission Provider, the Eligible Customer and the affected Transmission Owner shall meet at a mutually agreeable time to discuss the results of the Firm Transmission Feasibility Study. Such meeting may occur in person or by telephone or video conference.~~

#### 32.4

#### [Reserved] Retaining Queue Position:

~~Except when the Transmission Provider determines that a System Impact Study is needed, in order for a request to remain a Completed Application, within thirty (30) days after its receipt of the completed Firm Transmission Feasibility Study, the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement, or the Application shall be deemed terminated and withdrawn.~~

## 32.5

### [Reserved] ~~Penalties for Failure to Meet Study Deadlines:~~

~~Tariff, Part II, section 19.8 defines penalties that apply for failure to meet the study completion due diligence deadlines for Firm Transmission Feasibility Studies, System Impact Studies, and Facilities Studies for Eligible Customers. These same requirements and penalties apply to service under Tariff, Part III.~~

## IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM

References to section numbers in this Part IV refer to sections of this Part IV, unless otherwise specified.

### Preamble

This Part IV shall apply to apply to: (a) any New Service Request received prior to April 1, 2018; and (b) any New Service Request for which, as of the Transition Date (defined in Tariff, Part VII), the Interconnection Customer has received for execution an Interconnection Service Agreement or wholesale market participation agreement or has directed the Transmission Provider to file an Interconnection Service Agreement or wholesale market participation agreement unexecuted. New Service Requests received on or after April 1, 2018 for which Interconnection Customers have not received for execution or directed to be filed unexecuted an Interconnection Service Agreement or wholesale market participation agreement will be subject to the Generation Interconnection Procedures set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

An Interconnection Customer that proposes to (i) interconnect a generating unit to the Transmission System in the PJM Region, (ii) increase the capacity of a generating unit in the PJM Region, (iii) interconnect Merchant Transmission Facilities with the Transmission System, (iv) increase the capacity of existing Merchant Transmission Facilities interconnected to the Transmission System, or (v) interconnect a generating unit to distribution facilities located in the PJM Region that are used for transmission of power in interstate commerce, and to make wholesale sales using the output of the generating unit shall request interconnection with the Transmission System pursuant to, and shall comply with, the terms, conditions, and procedures set forth in Tariff, Part IV ~~of the Tariff. Tariff, Part IV, Subpart G of Part IV of the Tariff~~ and related portions of the PJM Manuals apply to Interconnection Requests involving new Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources over any consecutive 24-month period. Upgrade Customers that propose Upgrade Requests seeking Incremental Auction Revenue Rights shall also comply with the terms, conditions, and procedures set forth in Tariff, Part VI ~~of the Tariff. Tariff, Part VI of the Tariff~~ contains procedures, terms and conditions governing the Transmission Provider's administration of the New Services Queue, System Impact Studies and Facilities Studies of Interconnection Requests (as well as other New Service Requests), and agreements related to such studies and Interconnection Service. Each Interconnection Customer must pay for any Attachment Facilities, Local Upgrades, and Network Upgrades necessary to accommodate the requested interconnection. Notwithstanding the foregoing, by August 31 of each calendar year, PJM shall solicit requests from Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD. Such additional Capacity Interconnection Rights would be for a one-year period as specified by PJM in the solicitation. Responses to such solicitation must be submitted by such interested Generation Owners by October 31 prior to the upcoming Base Residual Auction. Such requests shall be studied for deliverability similar to any Generation Interconnection Customer seeking to enter the New Services Queue; however, such requests shall not be required to enter the New Services Queue. PJM shall study such requests in a manner so as to prevent infringement on available

system capabilities of any resource which is already in service, or which has an executed Interconnection Service Agreement, Transmission Service Agreement, Upgrade Construction Service Agreement, or has obtained a Queue Position in the New Services Queue.

### **36.1A Behind The Meter Generation:**

The following provisions shall apply with respect to Behind The Meter Generation:

#### **36.1A.1 Generation Interconnection Requests:**

Any Behind The Meter Generation that desires to be designated, in whole or in part, as a Capacity Resource or Energy Resource must submit a Generation Interconnection Request.

#### **36.1A.2 Information Required in Generation Interconnection Requests:**

In addition to the information described in [Tariff, Part IV, Subpart A, Section 36.1](#) ~~of the Tariff~~, a Generation Interconnection Request for Behind The Meter Generation shall include (1) the type and size of the load located (or to be located) at the site of such generation; (2) a description of the electrical connections between the generation facility and the load; and (3) the amount of the facility's generating capacity for which the customer seeks Capacity Interconnection Rights or that will be an Energy Resource. The amount of capacity included in the election pursuant to section (3) of the preceding sentence may be reduced, but shall not be increased, during the interconnection study process in accordance with any rules and procedures stated in the PJM Manuals.

#### **36.1A.3 Small Generation Classification:**

The amount of generating capacity of Behind The Meter Generation that the Generation Interconnection Customer identifies in its Generation Interconnection Request as the capacity that it wishes to be a Capacity Resource or Energy Resource shall determine whether Subpart A or Subpart G of Part IV will apply to such Generation Interconnection Request.

#### **36.1A.4 Transmission Provider Determination:**

Prior to commencing any Interconnection Studies related to a Generation Interconnection Request involving facilities described as Behind The Meter Generation, Transmission Provider shall determine, based on the information included in the Generation Interconnection Request and any other information requested and obtained from the Generation Interconnection Customer, whether the Generating Facility or expansion involved in the Generation Interconnection Request appears to meet the definition of Behind The Meter Generation in the Tariff. In the event that Transmission Provider finds that the subject project does not meet the definition of Behind The Meter Generation, it shall so notify the Generation Interconnection Customer and, for all purposes of Tariff, Part IV and Tariff, Part VI, shall thereafter deem the customer's Generation Interconnection Request to include the full generating capacity of the facility or expansion to which the request relates.

#### **36.1A.5 Treatment As Energy Resource:**

Any portion of the capacity of Behind The Meter Generation that a Generation Interconnection Customer identifies in its Generation Interconnection Request as capacity that it seeks to utilize,

directly or indirectly, in Wholesale Transactions, but for which the customer does not seek Capacity Resource status, shall be deemed to be an Energy Resource.

**36.1A.6          Operation as Capacity Resource:**

To the extent that a Generation Interconnection Customer that owns or operates generation facilities that otherwise would be classified as Behind The Meter Generation elects to operate such facilities as a Capacity Resource, the provisions of the Tariff regarding Behind The Meter Generation shall not apply to such generation facilities for the period such election is in effect.

**36.1A.7          Other Requirements:**

Behind The Meter Generation for which a Generation Interconnection Request is not required under Tariff, Part IV may be subject to other interconnection-related requirements of a Transmission Owner or Electric Distributor with which the generation facility will be interconnected.



## 36.2 Interconnection Feasibility Study:

After receiving an Interconnection Request, a signed Generation Interconnection Feasibility Study Agreement or Transmission Interconnection Feasibility Study Agreement, as applicable, and the applicable deposit contained in Tariff, Part IV, Subpart A, sections 36.1.01 ~~and, Tariff, Part IV, Subpart A, section~~ 36.1.03, ~~and~~ Tariff, Part IV, Subpart G, sections 110.1, ~~Tariff, Part IV, Subpart G, section~~ 111.1, and ~~Tariff, Part IV, Subpart G, section~~ 112.1 from the Interconnection Customer, and, if applicable, subject to the terms of Tariff, Part IV, Subpart A, section 36.1A.5, the Transmission Provider shall conduct an Interconnection Feasibility Study to make a preliminary determination of the type and scope of Attachment Facilities, Local Upgrades, and Network Upgrades that will be necessary to accommodate the Interconnection Request and to provide the Interconnection Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Interconnection Customer's cost responsibility, estimated consistent with Tariff, Part VI, Subpart B, section 217. The Interconnection Feasibility Study assesses the practicality and cost of accommodating interconnection of the generating unit or increased generating capacity with the Transmission System. The analysis is limited to load-flow analysis of probable contingencies and, for Generation Interconnection Requests, short-circuit studies. This study also focuses on determining preliminary estimates of the type, scope, cost and lead time for construction of facilities required to interconnect the project. For a Generation Interconnection Customer, the Interconnection Feasibility Study may provide separate estimates of necessary facilities and upgrades and associated cost responsibility reflecting the Generating Facility being designated as either a Capacity Resource or an Energy Resource. Transmission Provider shall study the Interconnection Request at the level of service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. For purposes of determining necessary interconnection facilities and network upgrades, the Feasibility Study shall consider the level of Interconnection Service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. The study for the primary Point of Interconnection will be conducted as a cluster, within the project's New Services Queue. The study for the secondary Point of Interconnection will be conducted as a sensitivity analysis. The Transmission Provider shall provide a copy of the Interconnection Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, section 18.17, related work papers to the Interconnection Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall list the study and the date of the Interconnection Request to which it pertains on the Transmission Provider's website. To the extent required by Commission regulations, the Transmission Provider shall make the completed Interconnection Feasibility Study publicly available upon request, except that the identity of the Interconnection Customer shall remain confidential. The Transmission Provider shall conduct Interconnection Feasibility Studies two times each year.

The following applies to Interconnection Requests received on or before October 31, 2016:

For Interconnection Requests received during the six-month period ending October 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by

the last day of February. For Interconnection Requests received during the six-month period ending April 30 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by August 31. Following the closure of an interconnection queue on October 31 and April 30, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on December 1 and June 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

The following applies to Interconnection Requests received between November 1, 2016 and March 31, 2017:

For Interconnection Requests received during the five-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queue on March 31, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on May 1. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

The following applies to Interconnection Requests received on or after April 1, 2017:

For Interconnection Requests received during the six-month period ending September 30, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by January 31. For Interconnection Requests received during the six-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queues on September 30 and March 31, respectively, the Transmission Provider will utilize the following months of October and April, respectively, to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on November 1 and May 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

### **36.2.1 Substitute Point:**

If the Interconnection Feasibility Study reveals any result(s) not reasonably expected at the time of the Scoping Meeting, a substitute Point of Interconnection identified by the Interconnection

Customer, Transmission Provider, or the Interconnected Transmission Owner, and acceptable to the others, but which would not be a Material Modification, will be substituted for the Point of Interconnection identified in the Interconnection Feasibility Study Agreement. The substitute Point of Interconnection will be effected without loss of Queue Position and will be utilized in the ensuing System Impact Study.

#### **36.2.2 Meeting with Transmission Provider:**

At the Interconnection Customer's request, Transmission Provider, the Interconnection Customer and the Interconnected Transmission Owner shall meet at a mutually agreeable time to discuss the results of the Interconnection Feasibility Study. Such meeting may occur in person or by telephone or video conference.

#### **36.2.3 [Reserved]**

### **36.2A Modification of Interconnection Request:**

The Interconnection Customer shall submit to the Transmission Provider, in writing, any modification to its project that causes the project's capacity, location, configuration or technology to differ from any corresponding information provided in the Interconnection Request. The Interconnection Customer shall retain its Queue Position if the modification is in accordance with [Tariff, Part IV, Subpart A](#), sections 36.2A.1, 36.2A.3, or 36.2A.6, or, if not in accordance with one of those sections, is determined not to be a Material Modification pursuant to [Tariff, Part IV, Subpart A](#), section 36.2A.4 below. Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the Interconnected Transmission Owner, or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the project's Point of Interconnection, capacity, and/or configuration in accordance with such changes and shall proceed with any re-studies that Transmission Provider finds necessary in accordance with Tariff, Part VI, Subpart A, section 205.5 and/or Tariff, Part VI, Subpart A, section 207.2, as applicable, provided, however, that a change to the Point of Interconnection shall be permitted without loss of Queue Position only if it would not be a Material Modification.

The following language for [these sections](#) 36.2A.1 and 36.2A.3 [below](#) apply to Interconnection Requests which have entered the New Services Queue prior to May 1, 2012:

36.2A.1 Prior to return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce by up to 60 percent the electrical output (MW) (in the case of a Generation Interconnection Request) or by up to 60 percent of the transmission capability (in the case of a Transmission Interconnection Request) of the proposed project. For increases in generating capacity or transmission capability, the Interconnection Customer must submit a new Interconnection Request for the additional capability and shall be assigned a new Queue Position for the additional capability.

36.2A.2 After the System Impact Study Agreement is executed and prior to execution of the Interconnection Service Agreement, an Interconnection Customer may modify its project to reduce the electrical output (MW) (in the case of a Generation Interconnection Request) or the transmission capability (in the case of a Transmission Interconnection Request) of the proposed project by up to the larger of 20 percent of the capability considered in the System Impact Study or 50 MW.

The following language for [these sections](#) 36.2A.1 and 36.2A.3 [below](#) apply to Interconnection Requests which have entered the New Services Queue on or after May 1, 2012:

#### **36.2A.1 Modifications Prior to Executing A System Impact Study Agreement**

36.2A.1.1 Prior to the commencement of the Feasibility Study, an Interconnection Customer may request to reduce by up to 60 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or the capability (in the case of a Transmission Interconnection Request) without losing its current Queue Position. For Interconnection Requests received in months one through five of the New Services Queue the Interconnection Customer must identify this change prior to the close of business on the last day of the sixth month of the New Services Queue. For Interconnection Requests received during the sixth month of the New Services Queue the Interconnection Customer must identify this change no later than close of business on the day following the completion of the scoping meeting.

36.2A.1.2 After the start of the Feasibility Study, but prior to the return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce the size of the project as provided in this section 36.2A.1.2, subject to the limitation described in [Tariff, Part IV, Subpart A](#), section 36.2A.7 below. The Interconnection Customer may reduce its project by up to 15 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than 15 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to 60 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new Interconnection Feasibility Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned. For increases in generating capacity or transmission capability, the Interconnection Customer must submit a new Interconnection Request for the additional capability and shall be assigned a new Queue Position for the additional capability.

### **36.2A.2 Modification of an Interconnection Request for Technological Changes**

36.2A.2.1 For a request to modify a project to include a technological advancement, no later than the return of the executed Facilities Study Agreement (or, if a Facilities Study is not required, prior the return of an executed Interconnection Service Agreement) to the Transmission Provider, an Interconnection Customer may request to modify its Interconnection Request to include a Permissible Technological Advancement without losing its current Queue Position provided Interconnection Customer submits the new machine modeling data associated with such Permissible Technological Advancements no later than the return of the executed Facilities Study Agreement (or, if a Facilities Study is not required, prior to return of an executed Interconnection Service Agreement). The machine modeling data as specified in the PJM Manuals associated with the requested technological change must be submitted via the PJM website.

36.2A.2.2 For a request to modify an Interconnection Request to include a technological advancement that does not qualify as a Permissible Technological Advancement, prior to returning an executed Facilities Study Agreement (or, if a Facilities Study is not required, prior to returning an executed Interconnection Service Agreement) to the Transmission Provider, an Interconnection Customer may request in writing to modify its Interconnection Request to add a technological advancement. Such requests must also include machine modeling data as specified in the PJM Manuals and submitted via the PJM website. If PJM determines the data submitted with such request is incomplete or incorrect, PJM will reject such technological change request and the Interconnection Customer may resubmit its technological change request with the complete and/or accurate data. All technological advancement requests not qualifying as a Permissible Technological Advancement will require a study and be evaluated by the Transmission Provider to determine whether such change would constitute a Material Modification. Such evaluation will include an analysis of the short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response on subsequent-queued Interconnection Requests. If the Transmission Provider determines that the technological advancement is not a Material Modification, the Interconnection Customer may modify its Interconnection Request to include such technological advancement. If the Transmission Provider determines the change is a Material Modification, the Interconnection Customer must withdraw its technological advancement change request to retain its Queue Position or proceed with a new Interconnection Request with such technological change. PJM shall determine whether a technological advancement is a Material Modification within thirty (30) calendar days of receipt of the technological advancement request.

### **36.2A.3 Modifications After the System Impact Study Agreement but Prior to Executing an Interconnection Service Agreement**

After the System Impact Study Agreement is executed and prior to execution of the Interconnection Service Agreement, an Interconnection Customer may modify its project to reduce the size of the project as provided in this section 36.2A.3, subject to the limitation described in [Tariff, Part IV, Subpart A](#), section 36.2A.7 below. The Interconnection Customer may reduce its project by the greater of 10 MW or 5 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service

level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than the greater of 10 MW or 5 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to the greater of 50 MW or 20 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new System Impact Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned.

#### **36.2A.4**

Prior to making any modifications other than those specifically permitted by [Tariff, Part IV, Subpart A](#), sections 36.2A.1, 36.2A.3 and 36.2A.6, the Interconnection Customer may first request that the Transmission Provider evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the Transmission Provider shall evaluate the proposed modifications prior to making them and shall inform the Interconnection Customer in writing of whether the modification(s) would constitute a Material Modification. For purposes of this section 36.2A.4, any change to the Point of Interconnection (other than a change deemed acceptable under [Tariff, Part IV, Subpart A](#), sections 36.1.5, 36.2.1, or 36.2A.1) or increase in generating capacity shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

#### **36.2A.5**

Upon receipt of the Interconnection Customer's request for modification under [Tariff, Part IV, Subpart A](#), section 36.2A.4, the Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but, except as otherwise provided in this Subpart A, the Transmission Provider shall commence such studies no later than thirty (30) calendar days after receiving notice of the Interconnection Customer's request. Any additional studies resulting from such modification shall be done at the Interconnection Customer's expense. Transmission Provider shall not require a separate deposit for any additional studies required as a result of Interconnection Customer's request for modification under [Tariff, Part IV, Subpart A](#), section 36.2A.4 above. Instead, all such study costs shall be invoiced and paid as

work to be conducted under the Feasibility Study, System Impact Study, or Facilities Study, as applicable.

### **36.2A.6**

Extensions of less than three (3) cumulative years in the projected date of Initial Operation of the Customer Facility are not material and shall be handled through construction sequencing.

The proposed Commencement Date can be extended (i) after the scoping meeting, once study timing is fully understood, not to exceed seven (7) years; (ii) due to study delays; or (iii) due to associated Network Upgrade construction timing.

The following language applies to Interconnection Requests which have entered the New Services Queue on or after May 1, 2012.

### **36.2A.7**

An Interconnection Customer may be assigned a new queue position as provided for in [Tariff, Part IV, Subpart A](#), sections 36.2A.1.2, or 36.2A.3 a total of two times for any single Interconnection Request. In the event that Interconnection Customer seeks to reduce the size of its project such that Transmission Provider determines the change is a material modification, and such change would result in the third assignment of a new queue position under [Tariff, Part IV, Subpart A](#), sections 36.2A.1-2, or 36.2A.3, then the Interconnection Request shall be terminated and withdrawn if the Interconnection Customer proceeds with such change.



### 36.3 Upgrade Feasibility Study:

After receiving a signed Upgrade Request, pursuant to Attachment EE of the PJM Tariff, seeking Incremental Auction Revenue Rights and the applicable deposit of \$20,000, the Transmission Provider shall conduct an Upgrade Feasibility Study to make a preliminary determination of the type and scope of any Local Upgrades or Network Upgrades that will be necessary to accommodate the Upgrade Request and provide the Upgrade Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Upgrade Customer's cost responsibility, estimated consistent with [Tariff, Part VI, Subpart B, Ssection 217 of the Tariff](#). The Upgrade Feasibility Study assesses the practicality and cost of accommodating the requested service. The analysis is limited to load-flow analysis of probable contingencies. The Transmission Provider shall provide a copy of the Upgrade Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in [Operating Agreement, Ssection 18.17](#)~~of the Operating Agreement~~, related work papers to the Upgrade Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall make the completed Upgrade Feasibility Study publicly available. The Transmission Provider shall conduct Upgrade Feasibility Studies two times each year in conjunction with the Interconnection Feasibility Studies conducted under [Tariff, Part IV, Subpart A, Ssection 36.2](#).

### 36.4 Surplus Interconnection Study

After receiving a valid Surplus Interconnection Study Agreement seeking Surplus Interconnection Service and the requisite deposit set forth in Tariff, Part IV, Subpart A, section 36.1.1B.1.i from the Surplus Interconnection Customer, the Transmission Provider shall conduct a Surplus Interconnection Study.

- (1) Scope of Surplus Interconnection Study. A Surplus Interconnection Study shall consist of reactive power, short circuit/fault duty, stability analysis and any other appropriate analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. The Transmission Provider shall use Reasonable Efforts to complete the Surplus Interconnection Study within one hundred eighty (180) days of determination of a valid Surplus Interconnection Service Request pursuant to Tariff, Part IV, Subpart A, section 36.1.1B. If the Transmission Provider is unable to complete the Surplus Interconnection Study within such time period, Transmission Provider shall notify the Surplus Interconnection Customer and provide an estimated completion date and an explanation of the reasons why the additional time is required.
- (2) Once the Surplus Interconnection Study is completed and Transmission Provider confirms that (i) no new Network Upgrades are required, (ii) there are no impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, and (iii) there are no material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, the Transmission Provider shall issue the Surplus Interconnection Study to the Surplus Interconnection Customer. If the Surplus Interconnection Customer is an unaffiliated third party, PJM shall issue a Surplus Interconnection Study to the owner of the existing Generating Facility. A revised Interconnection Service Agreement will be prepared and issued to the owner of the existing Generating Facility within sixty (60) days of issuance of the Surplus Interconnection Study including the terms and conditions for Surplus Interconnection Service. Within sixty (60) days of receipt by the owner of the existing Generating Facility of the revised Interconnection Service Agreement, the owner of the existing Generating Facility will execute the revised Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part VI, Subpart A, section 212.4.
- (3) If the Transmission Provider determines from the Surplus Interconnection Study that Network Upgrades may be required or there may be impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, or there may be material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and

response, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.

(4) Deactivation of Existing Generating Facility

- a. Surplus Interconnection Service cannot be offered if the existing Generating Facility from which Surplus Interconnection is provided is deactivated or has submitted a Notice to Deactivate to Transmission Provider consistent with Tariff, Part V, before the surplus generating unit has commenced commercial operation.
- b. Limited Operation. A Generating Facility receiving Surplus Interconnection Service may continue to receive Surplus Interconnection Service for a period not to exceed one (1) year after the existing Generating Facility's Deactivation Date under the following conditions:
  - i. The surplus generating unit must have been studied by the Transmission Provider for the sole operation at the Point of Interconnection; and
  - ii. The owner of the existing Generating Facility must agree in writing that the Surplus Interconnection Customer may continue to operate at either its limited share of the existing Generating Facility's capability under its Interconnection Service Agreement or any level below such capability upon the deactivation of the existing Generating Facility.
- c. If the Surplus Interconnection Customer cannot satisfy the conditions of [Tariff, Part IV, Subpart A](#), section 36.4.4(b) above, the revised Interconnection Service Agreement for the existing Generating Facility shall terminate consistent with the Interconnection Service Agreement terms of termination for a deactivated Generating Facility.

### **37      Additional Procedures:**

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender affected Interconnection Customers a System Impact Study Agreement pursuant to [Tariff](#), Part VI. The procedures and other terms of [Tariff](#), Part VI shall apply to the System Impact Study and subsequent analysis of Interconnection Requests.

### **38 Service on Merchant Transmission Facilities:**

(a) A Transmission Interconnection Customer that will be a Merchant Transmission Provider shall:

(1) at least 90 days prior to the anticipated date of commencement of Interconnection Service under its Interconnection Service Agreement, provide the Transmission Provider with terms and conditions for reservation, interruption and curtailment priorities for firm and non-firm transmission service on the Merchant Transmission Provider's Merchant Transmission Facilities. Such terms and conditions shall be non-discriminatory and shall be consistent with the terms of the Commission's approval of the Merchant Transmission Provider's right to charge negotiated (market-based) rates for service on its Merchant Transmission Facilities. Transmission Provider shall post such terms and conditions applicable to service on the Merchant Transmission Facilities on its OASIS and shall file them with the Commission as a separate service schedule under the Tariff, with a proposed effective date on or before the anticipated date of commencement of Interconnection Service for the affected Transmission Interconnection Customer; and (2) at least 15 days prior to the anticipated date of commencement of Interconnection Service for Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, provide the Transmission Provider with the results of a Commission-approved process for allocation of Transmission Injection Rights and Transmission Withdrawal Rights associated with such Merchant Transmission Provider's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, and with a listing of any Transmission Injection Rights and/or Transmission Withdrawal Rights not allocated in such process. Transmission Provider shall post such information on its OASIS.

(b) Should the Merchant Transmission Provider fail to provide the Transmission Provider with the terms and conditions for service on the Merchant Transmission Provider's Merchant Transmission Facilities required under subsection (a)(1) of this section, firm and non-firm transmission service on such Merchant Transmission Facilities shall be subject to the terms and conditions regarding reservation, interruption and curtailment priorities applicable to Firm or Non-Firm Point-to-Point Transmission Service on the Transmission System.

(c) Except as otherwise provided under this **S**ection 38, transmission service on, and operation of, Merchant Transmission Facilities shall be subject to the terms and conditions (including in particular, but not limited to, those relating to Transmission Provider's authority in the event of an emergency) applicable to Transmission Service under the Tariff and the Operating Agreement.

### **39.1 Transmission Owners That Own Facilities Financed by Local Furnishing Bonds:**

This provision is applicable only to an Interconnected Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code (“local furnishing bonds”). Notwithstanding any other provision of Tariff, Part IV or Tariff, Part VI, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to Tariff, Part IV or Tariff, Part VI if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnected Transmission Owner’s facilities that would be used in providing such Interconnection Service.

### **39.2 Alternative Procedures for Requesting Interconnection Service:**

An Interconnected Transmission Owner that believes the provision of Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnected Transmission Owner's facilities that would be used in providing such Interconnection Service, it shall so notify Transmission Provider within 30 days after the Transmission Owner receives a copy of the Interconnection Customer's Interconnection Request. If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer would jeopardize the tax-exempt status of the Interconnected Transmission Owner's local furnishing bonds, it shall so advise the Interconnection Customer within thirty (30) days after receipt of notice of such jeopardy from the affected Interconnected Transmission Owner. Interconnection Customer thereafter may renew its request for interconnection using the process specified in [Tariff, Part I, Section 5.2\(ii\)](#) ~~of the Tariff~~.

## 41.6 Additional Compliance Requirements

In the event that any of the values calculated in Tariff, Part IV, Subpart A, section 41.1(e), Tariff, Part IV, Subpart A, section 41.2(e) or Tariff, Part IV, Subpart A, [section 41.3\(e\)](#) exceeds 25 percent for two consecutive reporting periods, Transmission Provider will have to comply with the measures below for the next two (2) six-month reporting periods and must continue reporting this information until Transmission Provider reports two (2) consecutive six-month reporting periods without the values calculated in Tariff, Part IV, Subpart A, section 41.1(e), Tariff, Part IV, Subpart A, section 41.2(e) or Tariff, Part IV, Subpart A, [section 41.3\(e\)](#) exceeding 25 percent for two (2) consecutive six-month reporting periods:

- (a) Transmission Provider must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline (i.e., 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the reporting period.
- (b) Transmission Provider shall aggregate the total number of employee hours and third party consultant hours expended towards interconnection studies within its coordinated region that reporting period and post on its website. This information is to be posted within thirty (30) days of the end of the reporting period.



## **Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE**

References to section numbers in this Subpart G refer to sections of this Subpart G, unless otherwise specified.

### **Preamble**

Requests for the interconnection of new Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources may be processed, pursuant to the applicable provisions of Section 36 of the PJM Tariff, and through the expedited procedures set forth in this Subpart G. This Subpart G describes procedures for the following categories of “small resource” additions: permanent Capacity Resource additions of 20 MW or less, permanent Energy Resource additions of 20 MW or less but greater than 2 MW (synchronous) or greater than 5 MW (inverter-based), temporary Energy Resource additions of 20 MW or less but greater than 2 MW (synchronous) or 5 MW (inverter-based), permanent and temporary Energy Resource additions of 2 MW or less (synchronous) or 5 MW or less (inverter-based), and certified small inverter-based facility additions no larger than 10 kW. [Tariff, Part VI](#) ~~of the Tariff~~ contains the procedures, terms and conditions that govern, in general, the Transmission Provider’s administration of the New Services Queue, System Impact Studies and Facilities Studies of Interconnection Requests, and agreements related to such studies and Interconnection Service, except as otherwise provided in this [Tariff, Part IV](#), Subpart G ~~of Part IV of the Tariff~~.

Interconnection Requests submitted pursuant to this Subpart G shall be evaluated using the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider’s electric system. However, if the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider’s electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the Transmission Provider’s agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Transmission Provider’s system. If the Transmission Provider does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider’s electric system without such limitations. Furthermore, nothing in the foregoing shall prevent a Transmission Provider from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

## **109 Pre-application Process**

### **109.1 Eligibility**

A pre-application report request submitted pursuant to this section will only be furnished to prospective Interconnection Customers seeking to interconnect Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources which, when combined, does not exceed 20 MW in aggregated maximum facility output

### **109.2 Informal Request**

The Transmission Provider shall designate an employee or office from which information on the pre-application process and on the Transmission Provider's system can be obtained through informal requests from a prospective Interconnection Customer presenting a proposed project for a specific site. The name, telephone number and e-mail address of such contact employee or office shall be made available on the Transmission Provider's Internet web site. Electric system information provided to the prospective Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to provide an understanding of an interconnection at a particular point on the Transmission Provider's system, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The Transmission Provider shall comply with reasonable requests for such information.

### **109.3 Pre-application Request**

In addition to the information described in section 109.2 [above](#), which may be provided in response to an informal request, a prospective Interconnection Customer may submit a formal written request form, which form shall be made available on the Transmission Provider's Internet web site, requesting a pre-application report on a proposed project at a specific site. The written pre-application report request from shall include the information in sections 109.3.1 through 109.3.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

109.3.1 Project contact information, including name, address, phone number and email address.

109.3.2 Project location (street address with nearby cross streets and town).

109.3.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

109.3.4 Generator type (e.g., solar, wind, combined heat and power, etc.).

109.3.5 Size (alternating current kW).

109.3.6 Single or three phase generator configuration.

109.3.7 Stand-alone generator (no onsite load, not including station service – Yes or No?).

109.3.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.

#### **109.4 Jurisdictional Review**

Within five (5) Business Days following the receipt of a completed formal written request, submitted along with a \$300 deposit paid by the prospective Interconnection Customer, the Transmission Provider will evaluate whether the proposed project contemplates FERC-jurisdictional service and/or will be interconnected with FERC-jurisdictional facilities. If it is determined that the proposed project does not contemplate FERC-jurisdictional service and/or will not be interconnecting with FERC-jurisdictional facilities, the Transmission Provider will so inform the prospective Interconnection Customer and refund the \$300 deposit.

#### **109.5 Pre-application Report**

After the Transmission Provider has determined that a proposed project contemplates FERC-jurisdictional service and/or will be interconnected with FERC-jurisdictional facilities, the prospective Interconnection Customer's \$300 deposit paid in conjunction with the jurisdictional review noted above, will be utilized to satisfy a \$300 non-refundable fee required for the Transmission Provider to process a pre-application report. The Transmission Provider shall provide the pre-application data described in section 109.6 below to the Interconnection Customer within 20 Business Days after the completion of the jurisdictional review set forth above. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Transmission Provider's system.

#### **109.6 Pre-application Report Data**

Using the information provided in the pre-application report request form in [Section 109.3 above](#), the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate after application of the screens and/or study that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 109.7 [below](#), the pre-application report will include the following information:

109.6.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

109.6.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.

109.6.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.

109.6.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).

109.6.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

109.6.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

109.6.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

109.6.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 112A.5.3.1 below and absolute minimum load, when available.

109.6.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

109.6.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

109.6.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

109.6.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

109.6.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

## **109.7 Pre-application Report Limitations**

The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes that data that is available. The provision of information on “available capacity” pursuant to [Tariff, Part IV, Subpart G](#), section 109.6.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions

of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

## 110.2 Feasibility Study

Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the small capacity addition on contingency limits in the vicinity of the Generation Capacity Resource. Linear analysis tools are used to evaluate the impact of a small capacity addition with respect to compliance with the contingency criteria in the Applicable Standards. Generally, small capacity additions will have very limited and isolated impacts on system facilities. If criteria violations are observed, further AC testing is required.

Short circuit calculations are performed for small resource additions to ensure that circuit breaker capabilities are not exceeded.

Once the Feasibility Study is completed, a Feasibility Study report will be prepared and transmitted to the Interconnection Customer along with a System Impact Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in [Tariff, Part VI, Subpart A, Section 204.3A of the Tariff](#). In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

#### 110.4 Facilities Study

As with larger generation projects, facilities design work for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider as described in [Tariff](#), Part VI, [Subpart A](#), [Section 206](#). Transmission Provider will utilize the procedures set forth in [Tariff](#), Part VI, [Subpart A](#), [Section 207](#) for completing the Facilities Study. Within 30 calendar days of receiving the Facilities Study, the Interconnection Customer may provide written comments to Transmission Provider regarding the required upgrades identified in the Facilities Study which the Transmission Provider shall consider and include in the Facilities Study and/or the Interconnection Customer may request a meeting to discuss the results of the Facilities Study as specified in [Tariff](#), Part VI, [Subpart A](#), [Section 207.1](#). Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Facilities Study, subject to confidentiality arrangements as required by the Transmission Provider.

Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement.

Facilities design for small capacity additions will be expedited to the extent possible. In most cases, few or no Network Upgrades will be required for small capacity additions. Attachment Facilities, for some small capacity additions, may, in part, be elements of a “turn key” installation. In such instances, the design of “turn key” attachments will be reviewed by the Interconnected Transmission Owners or their contractors.

## 110.5 Interconnection Service Agreement

As with larger generation projects, an Interconnection Service Agreement must be executed and filed with the FERC, as specified in [Tariff](#), Part VI, [Subpart B](#), [Section 212](#) and [214](#). The Interconnection Service Agreement identifies the obligations, on the part of the Interconnection Customer, to pay for transmission facilities required to facilitate the interconnection and the Capacity Interconnection Rights which are awarded to the Generation Capacity Resource.

In general, the execution of an Interconnection Service Agreement is no different for capacity additions of 20 MW or less than for larger Generation Capacity Resources. However, in instances where an increase of 20 MW or less to an Existing Generation Capacity Resource can be put in service immediately, a modified Interconnection Service Agreement may be executed. If such an increase is expedited through the System Impact Study phase, ahead of larger projects already in the New Services Queue, an Interconnection Service Agreement will be executed granting interim Capacity Interconnection Rights. These interim rights will allow the capacity increase to be implemented and the resource to participate in the capacity market until studies have been completed for earlier queued resources and all related obligations have been defined. At such time, the interim rights awarded the smaller capacity addition will become dependent on the construction of any required transmission facilities and the satisfaction of any financial obligations for those facilities. If, once those obligations are defined, the smaller capacity addition desires to retain the interim Capacity Interconnection Rights; a new Interconnection Service Agreement will be executed.

If a new Generation Capacity Resource of 20 MW or less can be quickly connected to the system, interim Capacity Interconnection Rights can be awarded, as above, through the execution of a modified Interconnection Service Agreement.



### **111 Permanent Energy Resource Additions of 20 MW or Less ~~B~~ut Greater ~~T~~han 2MW (Synchronous) or Greater than 5 MW (Inverter-based)**

This section describes procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are greater than 2 MW (synchronous) or greater than 5 MW (inverter-based) or the increase in capability of 20 MW or less but greater than 2 MW (synchronous) or greater than 5 MW (inverter-based) of an existing generation resource, for which Capacity Interconnection Rights will not be granted. Such resources may participate in the PJM energy markets, but not in the PJM capacity markets. They may, therefore, not be used by load serving entities to meet capacity obligations imposed under the PJM Reliability Assurance Agreement. These procedures apply to generation resources which, when connected to the system, are expected to remain connected to the system for the normal life span of such a generation resource. These procedures do not apply to resources that are specifically being connected to the system temporarily, with the expectation that they will later be removed.

[Tariff, Part IV, Subpart G, S](#)ection 112A describes the procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are less than 2MW (synchronous) or 5MW (inverter based), and includes the eligibility considerations for fast track processing. In the event that such interconnection requests do not qualify for processing in accordance with the provisions of [Tariff, Part IV, Subpart G](#), section 112A, they will be considered under the procedures described in this section 111, if applicable.

## 111.2 Feasibility Study

Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the small Energy Resource addition on contingency limits in the vicinity of the resource. Linear analysis tools are used to evaluate the impact of a small Energy Resource addition with respect to compliance with the contingency criteria in the Applicable Standards. Generally, small resource additions will have very limited and isolated impacts on system facilities. If criteria violations are observed, further AC testing is required.

Short circuit calculations are performed for small resource additions to ensure that circuit breaker capabilities are not exceeded.

Once the Feasibility Study is completed, a Feasibility Study report will be prepared and transmitted to the Interconnection Customer along with a System Impact Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in [Tariff, Part VI, Subpart A, Section 204.3A of the Tariff](#). In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

#### 111.4 Facilities Study

As with larger generation projects, facilities design work for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider as described in [Tariff](#), Part VI, [Subpart A](#), [Section 206](#). Transmission Provider will utilize the procedures set forth in [Tariff](#), Part VI, [Subpart A](#), [Section 207](#) for completing the Facilities Study. Within 30 calendar days of receiving the Facilities Study, the Interconnection Customer may provide written comments to Transmission Provider regarding the required upgrades identified in the Facilities Study which the Transmission Provider shall consider and include in the Facilities Study and/or the Interconnection Customer may request a meeting to discuss the results of the Facilities Study as specified in [Tariff](#), Part VI, [Subpart A](#), [Section 207.1](#). Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Facilities Study, subject to confidentiality arrangements as required by the Transmission Provider.

Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement.

Facilities design for small Energy Resource additions will be expedited to the extent possible. In most cases, few or no Network Upgrades will be required for small Energy Resource additions. Attachment Facilities, for some small Energy Resource additions, may, in part, be elements of a “turn key” installation. In such instances, the design of “turn key” attachments will be reviewed by the Interconnected Transmission Owners or their contractors.

## 111.5 Interconnection Service Agreement

As with larger generation projects, an Interconnection Service Agreement must be executed and filed with the FERC as specified in [Tariff, Part VI, Subpart B, section 212](#) and [Tariff, Part VI, Subpart B, section 214](#). For an Energy Resource, the Interconnection Service Agreement identifies the interconnection and the rights of the Interconnection Customer to participate in the energy market as well as the obligations, on the part of the Interconnection Customer, to pay for transmission facilities required to facilitate the interconnection.

In general, the execution of an Interconnection Service Agreement is no different for Energy Resource additions of 20 MW or less than for larger Energy Resources. However, in instances where an increase of 20 MW or less to an existing resource can be put in service immediately, a modified Interconnection Service Agreement may be executed. If such an increase is expedited through the System Impact Study phase, ahead of larger projects already in the New Services Queue, an Interconnection Service Agreement will be executed granting an interim interconnection. This interim interconnection will allow the Energy Resource increase to be implemented and the resource to participate in the energy market until studies have been completed for earlier queued resources and all related obligations have been defined. At such time, the interim rights awarded the smaller Energy Resource addition will become dependent on the construction of any required transmission facilities and the satisfaction of any financial obligations for those facilities. If, once those obligations are defined, the smaller Energy Resource addition desires to retain its interconnection, a new Interconnection Service Agreement will be executed.

If a new Energy Resource of 20 MW or less can be quickly connected to the system, an interim interconnection can be facilitated, as above, through the execution of a modified Interconnection Service Agreement.

## **112 Temporary Energy Resource Additions of 20 MW or Less ~~B~~ut Greater ~~T~~han 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)**

This section describes procedures related to the submission and processing of requests related to the temporary interconnection of Small Generation Resources greater than 2 MW (synchronous) or 5 MW (inverter-based). These procedures apply to generation resources which can be quickly connected to the system in order to participate in the energy market and are connected with the expectation that they will be removed from the system within six months. Such resources may submit subsequent requests to modify or extend their interconnection status. The inherent assumptions justifying the greater degree of expedition in these procedures for temporary Energy Resources are (1) that such resources will typically only be interconnected to participate in the spot market to assist in meeting peak energy demand, and (2) that such resources will only be connected in situations where minimal or no transmission upgrades are required.

[Tariff, Part IV, Subpart G](#), ~~S~~section 112A describes the procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are less than 2MW (synchronous) or 5MW (inverter based), and includes the eligibility considerations for fast track processing. In the event that such interconnection requests do not qualify for processing in accordance with the provisions of [Tariff, Part IV, Subpart G](#), section 112A, they will be considered under the procedures described in this section 112, if applicable.

### **112.3 Interconnection Service Agreement**

A modified Interconnection Service Agreement will be executed and filed with the FERC as specified in [Tariff, Part VI, Subpart B, S](#)ection 212 and [Tariff, Part VI, Subpart B, section](#) 214, identifying the obligations and rights related to the interconnection of a temporary Energy Resource. Such agreement will identify the interconnection of the resource, cost responsibility for transmission system upgrades, if any, and the date when the temporary interconnection will expire.

## 112A Permanent or Temporary Energy Resources of 2 MW or Less (Synchronous) or 5 MW or Less (Inverter-based).

### Fast Track Eligibility

The screens process is available to an Interconnection Customer proposing to interconnect its Energy Resource with the Transmission Provider's system if the Energy Resource capacity does not exceed the size limits identified in the table below. Energy Resources below these limits are eligible for the screens process. However, eligibility is distinct from the screens process itself, and eligibility does not imply or indicate that an Energy Resource will pass the screens in section 112A.2 below or the Supplemental Review screens in section 112A.5.3 below.

Eligibility is determined based upon the generator type, the size of the generator, voltage of the line and the location of and the type of line at the Point of Interconnection. All Energy Resources connecting to lines greater than 69 kilovolt (kV) are ineligible for this process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for this process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Energy Resources located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for this process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's proposed Energy Resource must meet the codes, standards and certification requirements of [Tariff, Attachments Z and AA](#) ~~of this Tariff~~. Alternatively, the Transmission Provider has to have reviewed the design or tested the proposed Energy Resource and is satisfied that it is safe to operate.

Fast Track Eligibility for Inverter-Based Systems		
Line Voltage	112A Eligibility Regardless of Location	112A Eligibility on a Mainline <sup>1</sup> and ≤ 2.5 Electrical Circuit Miles from Substation <sup>2</sup>
< 5 kV	≤ 500 kW	≤ 500 kW
≥ 5 kV and < 15 kV	≤ 2 MW	≤ 3 MW
≥ 15 kV and < 30 kV	≤ 3 MW	≤ 4 MW
≥ 30 kV and ≤ 69 kV	≤ 4 MW	≤ 5 MW

In the event that such an Energy Resource does not meet such certification requirements, the request for interconnection of the Energy Resource shall be processed under [Tariff, Part IV, Subpart G](#), section 111 or [Tariff, Part IV, Subpart G, section 112](#) ~~above~~, as applicable.

<sup>1</sup> For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

<sup>2</sup> An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.2.

Energy Resources requesting interconnection under this ~~S~~section 112A may be expedited ahead of larger projects already in the New Services Queue. In such instance, the Energy Resource shall be able to participate in the energy market until the studies have been completed for the earlier queued projects and all related obligations have been defined. At such time as these studies are completed and reveal additional obligations required of the Energy Resource interconnected under this ~~S~~section 112A, a revised Interconnection Service Agreement shall be executed.



**112A.2 Screens.** Subject to the Interconnection Customer, Transmission Provider and Interconnected Transmission Owner(s) mutually agreeing to reasonable extension of time beyond 15 business days, which agreement shall not be unreasonably withheld, within 15 business days of the Interconnection Customer submitting an Interconnection Request pursuant to [Tariff, Part IV, Subpart G, Section 112A.1](#) ~~of the Tariff~~, Transmission Provider in consultation with the relevant Interconnected Transmission Owner(s) shall:

1. Provide a screens review/evaluation of the Interconnection Request using the screens set forth below; and
2. Notify the Interconnection Customer of the results of the initial review/evaluation and inform the Interconnection Customer whether supplemental screens evaluations must be performed; and
3. Provide the Interconnection Customer with the analysis and data underlying the Transmission Provider's determinations pursuant to the screens set forth below.

112A.2.1 The proposed interconnection must be on a portion of the Interconnected Transmission Owner's distribution facilities located in the PJM Region and the output of the Customer Facility to be used for wholesale sales in the PJM Region. Distribution facilities shall include facilities that are non-networked, often lower voltage facilities that carry power in one direction, but does not include sub transmission facilities.

112A.2.2 For interconnection of a proposed Energy Resource to a radial distribution circuit, the aggregated generation, including the proposed Energy Resource on the circuit shall not exceed 15% of the line section annual peak load as most recently measured at the substation. A line section is that portion of an Interconnected Transmission Owner's electric system connected to a customer and bounded by automatic sectionalizing devices or the end of the distribution line.

112A.2.3 For interconnection of a proposed Energy Resource to the load side of spot network protectors, the proposed Energy Resource must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5% of a spot network's maximum load or 50 kW.

112A.2.4 The proposed Energy Resource, in aggregation with other generation on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

112A.2.5 The proposed Energy Resource, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the proposed interconnection be accepted for a circuit that already exceeds 87.5% of the short circuit interrupting capability.

112A.2.6 Using the table below, Transmission Provider, in consultation with the Interconnected Transmission Owner, shall determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Interconnected Transmission Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

112A.2.7 If the proposed Energy Resource is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Energy Resource, shall not exceed 20 kW.

112A.2.8 If the proposed Energy Resource is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

112A.2.9 The proposed Energy Resource, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Energy Resource proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the point of interconnection).

112A.2.10 No construction of facilities by the Interconnected Transmission Owner on its own system shall be required to accommodate the Energy Resource.

### 112A.3 Results of Screens

112A.3.1 If the proposed interconnection passes the screens set forth in [Tariff, Part IV, Subpart G](#), section 112A.2-~~of this Tariff~~, the proposed interconnection shall be approved and the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer with an executable Interconnection Service Agreement within five Business Days after the determination. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within five Business Days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with [Tariff, Part IV, Subpart G](#), section 212.4-~~of this Tariff~~.

112A.3.2 If the proposed interconnection of the Energy Resource fails the screens set forth in [Tariff, Part IV, Subpart G](#), section 112A.2-~~of this Tariff~~, but the Transmission Provider, in consultation with the Interconnected Transmission Owner, determines that the Energy Resource may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer an executable Interconnection Service Agreement within five Business Days after such determination. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within five Business Days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with [Tariff, Part IV, Subpart G](#), section 212.4-~~of this Tariff~~.

112A.3.3 If the proposed interconnection of the Energy Resource fails the screens set forth in [Tariff, Part IV, Subpart G](#), section 112A.2-~~of this Tariff~~, but the Transmission Provider does not or cannot determine from the initial review that the Energy Resource may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Transmission Provider shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

## 112A.4 Customer Options Meeting

112A.4.1 If the Transmission Provider determines that the Interconnection Request cannot be approved without: (1) minor modifications at minimal cost; (2) a supplemental study or other additional studies or actions; or (3) incurring at significant cost to address safety, reliability, or power quality problems, the Transmission Provider shall notify the Interconnection Customer of that determination within five Business Days and provide copies of all data and analyses underlying its conclusion. Within ten Business Days of the Transmission Provider's determination, the Transmission Provider shall offer to convene a customer options meeting with the Transmission Provider and the Transmission Owner to review possible Customer Facility modifications or the screens analysis and related results, to determine what further steps are needed to permit the Energy Resource to be connected safely and reliably. At the time of notification of the Transmission Provider's determination, or at the customer options meeting, the Transmission Provider and Transmission Owner, as applicable, shall:

112A.4.1.1 Offer to perform facility modifications or minor modifications to the Transmission System (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Transmission System. If the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's system, the Transmission Provider will provide the Interconnection Customer with an executable Interconnection Service Agreement within ten Business Days of the customer options meeting; or

112A.4.1.2 Offer to perform a supplemental review in accordance with [Tariff, Part IV, Subpart G](#), section 112A.5, and provide a non-binding good faith estimate of the costs of such review; or

112A.4.1.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under [Tariff, Part IV, Subpart G](#), sections 111 or [Tariff, Part IV, Subpart G, section 112](#) ~~of the Tariff~~ (irrespective of the resource size limitations stated therein), as applicable.

## 112A.5 Supplemental Review

112A.5.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing, and submit a deposit for the estimated costs of the supplemental review in the amount of the Transmission Provider's good faith estimate of the costs of such review (recognizing that such amount may be adjusted by the amount of deposits already held by the Transmission Provider in connection with the Interconnection Request) both within 15 Business Days of the offer. If the written agreement and additional deposit (if required) have not been received by the Transmission Provider within that timeframe, the Interconnection Request shall continue to be evaluated under [Tariff, Part IV, Subpart G, section 111](#) or [Tariff, Part IV, Subpart G, section 112](#) ~~of this Subpart G~~ (irrespective of the resource size limitation set forth therein) unless it is withdrawn by the Interconnection Customer.

112A.5.2 The Interconnection Customer may specify the order in which the Transmission Provider will complete the screens in section 112A.5.4 [below](#).

112A.5.3 Within 30 Business Days following receipt of the deposit for a supplemental review, the Transmission Provider shall: (1) perform a supplemental review using the screens set forth below; (2) notify, in writing, the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the Transmission Provider's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the Transmission Provider shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in section 112A.5.3.1 [below](#), within two Business Days of making such a determination to obtain the Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this section 112A.5.3; (2) terminate the supplemental review and continue evaluating the Energy Resource under [Tariff, Part IV, Subpart G, section 111](#) or [Tariff, Part IV, Subpart G, section 112](#) (irrespective of the resource size limitation set forth therein), as applicable; or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

112A.5.3.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed small Energy Resource) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed small Energy Resource. If minimum load data is not available, or cannot be calculated, estimated or determined, the Transmission Provider shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under [this](#) section 112A.5.3.

112A.5.3.1.1 The type of generation used by the proposed Energy Resource will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of ~~this screen~~ [section](#) 112A.5.3.1.

Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e., 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

112A.5.3.1.2 When this screen is being applied to an Energy Resource that services some station service load, only the net injection into the Transmission Provider's electric system will be considered as part of the aggregate generation.

112A.5.3.1.3 Transmission Provider will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

112A.5.3.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

112A.5.3.3 Safety and Reliability Screen: The location of the proposed small Energy Resource and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Transmission Provider shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

112A.5.3.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

112A.5.3.3.2 Whether the loading along the line section is uniform or even.

112A.5.3.3.3 Whether the proposed small Energy Resource is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

112A.5.3.3.4 Whether the proposed small Energy Resource incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

112A.5.3.3.5 Whether operational flexibility is reduced by the proposed small Energy Resource, such that transfer of the line section(s) of the small Energy Resource to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

112A.5.3.3.6 Whether the proposed small Energy Resource employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

112A.5.3.4 If the proposed interconnection passes the supplemental screens in sections 112A.5.3.1, 112A.5.3.2, and 112A.5.3.3 above, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer with an executable Interconnection Service Agreement within the timeframes established in sections 112A.5.3.4.1 and 112A.5.3.4.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under [Tariff, Part IV, Subpart G](#), section 111 or [Tariff, Part IV, Subpart G, section 112](#) (irrespective of the resource size limitation set forth therein) consistent with section 112A.5.3.4.3 below

112A.5.3.4.1 If the proposed interconnection passes the supplemental screens in sections 112A.5.3.1, 112A.5.3.2 and 112A.5.3.3 above and does not require construction of facilities by the Transmission Provider on its own system, the Interconnection Service Agreement shall be provided within ten Business Days after notification of the supplemental review results.

112A.5.3.4.2 If interconnection facilities or minor modifications to the Transmission Provider's system are required for the proposed interconnection to pass the supplemental screens in sections 112A.5.3.1, 112A.5.3.2, and 112A.5.3.3 above, and the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's electric system, the Interconnection Service Agreement, along with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be provided to the Interconnection Customer within 15 Business Days after receiving written notification of the supplemental review results.

112A.5.3.4.3 If the proposed interconnection would require more than interconnection facilities or minor modifications to the Transmission Provider's system to pass the supplemental screens in sections 112A.5.3.1, 112A.5.3.2, and 112A.5.3.3 above, the Transmission Provider shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under [Tariff, Part IV, Subpart G, S](#)sections 111 and 112 (irrespective of the resource size limitation set forth therein) unless the Interconnection Customer withdraws its request.

## **112B Certified Inverter-Based Small Generating Facilities No Larger ~~T~~han 10 kW**

This section describes the procedures related to the submission and processing of requests related to the interconnection of Small Inverter Facilities.



## **112B.2 Verification of Interconnection**

Within 15 Business Days of notification to the Interconnection Customer that its Small Inverter ISA is complete, Transmission Provider shall notify Interconnection Customer whether its Small Inverter Facility can be interconnected safely and reliably. Transmission Provider shall make this determination using the screens set forth in [Tariff, Part IV, Subpart G](#), section 112A-~~of this Tariff~~. In the event that the Transmission Provider determines that the Small Inverter Facility can be safely and reliably interconnected, Transmission Provider shall tender the Small Inverter ISA to the Interconnected Transmission Owner for execution. The Interconnected Transmission Owner shall have five Business Days to execute the Small Inverter ISA and return it to Transmission Provider. Transmission Provider then will provide the Interconnected Parties with the Small Inverter ISA. In the event an Interconnection Party does not execute the Small Inverter ISA, the Interconnection Customer may request the agreement be filed unexecuted with the FERC or alternative dispute resolution in accordance with [Tariff, Part IV, Subpart G](#), section 212.4-~~of this Tariff~~.

### **112B.3 Certificate of Completion and Inspection**

**112B.3.1** Upon receipt of an executed Small Inverter ISA, the Interconnection Customer may commence construction (including operational testing not to exceed two hours) of its Small Inverter Facility. After completion of the Small Inverter Facility, Interconnection Customer shall provide Transmission Provider with a completed [Tariff](#), Attachment CC - Form of Certificate of Completion.

**112B.3.2** Prior to parallel operation, Transmission Provider and/or Interconnected Transmission Owner may inspect the Small Inverter Facility for compliance with standards, which may include a witness test. All inspections by Transmission Provider and/or the Interconnected Transmission Owner shall be at its own expense, within ten Business Days after receipt of the completed Certificate of Completion and shall take place at a time agreeable to the Transmission Provider and/or Interconnected Transmission Owner and the Interconnection Customer. Unless otherwise agreed by the Transmission Provider and/or the Interconnected Transmission Owner and the Interconnection Customer, if the Transmission Provider and/or the Interconnected Transmission Owner do not schedule an inspection of the Small Inverter Facility within ten Business Days after receipt of the completed Certificate of Completion, the right to inspection, including the witness test, is waived. Transmission Provider and/or the Interconnected Transmission Owner shall provide a written statement that the Small Inverter Facility has passed inspection or shall notify the Interconnection Customer of what steps are necessary to pass inspection as soon as practicable after the inspection takes place.

## **112B.4 Interconnection and Operation**

**112B.4.1** The Interconnection Customer may interconnect and operate the Small Inverter Facility after all of the following have occurred:

- (a) Upon completing construction, the Interconnection Customer has caused the Small Inverter Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- (b) The Interconnection Customer provides Transmission Provider with a completed Certificate of Completion, and
- (c) In accordance with [Tariff, Part IV, Subpart G](#), section 112B.3(b) ~~of this Tariff~~, the Transmission Provider and/or Interconnected Transmission Owner has either completed its inspection of the Small Inverter Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes or has waived such inspection.

**112B.4.2** Transmission Provider and/or the Interconnected Transmission Owner shall have the right to disconnect the Small Inverter Facility in the event of improper installation of the Small Inverter Facility, an unsatisfactory witness test, or failure to return a completed Certificate of Completion.

**112B.4.3** Revenue quality metering equipment must be installed at the Small Inverter Facility and tested in accordance with applicable ANSI standards. Prior to parallel operation of the Small Inverter Facility, Transmission Provider and/or Interconnected Transmission Owner may schedule appropriate metering replacement, if necessary.

## **112B.7 Disconnection**

**112B.7.1** The Transmission Provider and/or the Interconnected Transmission Owner may temporarily disconnect a Small Inverter Facility upon the following conditions:

- (a) For scheduled outages upon reasonable notice.
- (b) For unscheduled outages or emergency conditions.
- (c) If the Small Inverter Facility does not operate in the manner consistent with the terms and conditions of [Tariff, Part IV, Subpart G](#), section 112B-~~of this Tariff~~ or applicable PJM Manuals.

**112B.7.2** Transmission Provider shall inform the Interconnection Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

### **112B.8 Indemnification**

The Transmission Provider, Interconnected Transmission Owner, and the Interconnection Customer shall at all times indemnify, defend, and save the other party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other party's action or inactions relating to its obligations under this section 112B ~~of this Tariff~~ on behalf of the indemnifying party, except in cases of gross negligence or intentional wrongdoing by the indemnified party.

## 112B.9 Insurance

An Interconnection Customer interconnecting a Small Inverter Facility shall maintain commercially reasonable amounts of general liability insurance and additionally shall follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state. The amount and type of insurance to be evidenced by an insurance certificate. All other insurance requirements in [Tariff, Attachment O, Appendix 2, section 13](#) ~~of Appendix 2 of Attachment O of this Tariff~~ and [Tariff, Attachment P, Appendix 2, section 11](#) ~~of Appendix 2 of Attachment P of this Tariff~~ are applicable to certified inverter-based small generating facilities no larger than 10 kilowatts.

## **112B.10 Limitation of Liability**

Transmission Provider's, Interconnected Transmission Owner's, and Interconnection Customer's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of its obligations under [Tariff, Part IV, Subpart G](#), section 112B-~~of this Tariff~~ shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under [Tariff, Part IV, Subpart G](#), section 112B.8-~~of this Tariff~~.

## Preamble

This Part VI shall apply to apply to: (a) any New Service Request received prior to April 1, 2018; and (b) any New Service Request for which, as of the Transition Date (defined in Tariff, Part VII), the Interconnection Customer has received for execution an Interconnection Service Agreement or wholesale market participation agreement or has directed the Transmission Provider to file an Interconnection Service Agreement or wholesale market participation agreement unexecuted. New Service Requests received on or after April 1, 2018 for which Interconnection Customers have not received for execution or directed to be filed unexecuted an Interconnection Service Agreement or wholesale market participation agreement will be subject to the Generation Interconnection Procedures set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

Tariff, Part VI ~~of the Tariff~~ sets forth the procedures and other terms governing the Transmission Provider's administration of the New Services Queue; procedures and other terms regarding studies and other processing of New Service Requests; the nature and timing of the agreements required in connection with studies and construction of required facilities; and terms and conditions relating to the rights available to New Service Customers in consideration of their payments for Customer-Funded Upgrades.



## 200     **Applicability:**

Tariff, Part VI ~~of the Tariff~~ applies (a) to an Interconnection Request, upon the Transmission Provider's determination in an Interconnection Feasibility Study that a System Impact Study is needed to evaluate the facilities required to accommodate the requested interconnection; (b) to a Completed Application for new transmission service, upon the Transmission Provider's determination in an Firm Transmission Feasibility Study that a System Impact Study is needed to evaluate the facilities required to provide the requested service; and (c) to Upgrade Requests, upon the Transmission Provider's receipt of a completed request containing all applicable information in the form required by Tariff, Attachment EE ~~to the Tariff~~ in which a customer is seeking to propose a Merchant Network Upgrade or to advance construction of Regional Transmission Expansion Plan project; and (d) to Upgrade Requests seeking Incremental Auction Revenue Rights, upon the Transmission Provider's determination in an Upgrade Feasibility Study that a System Impact Study is needed to evaluate the facilities required to accommodate the Upgrade Request. Notwithstanding the foregoing sentence, however, the provisions of Tariff, Part IV, Subpart G ~~of Part IV~~ shall govern with respect to Generation Interconnection Requests that involve (i) proposed new generation resources having capability of 20 MW or less, or (ii) increases of 20 MW or less to the capability of existing generation resources, except where, and only to the extent, otherwise expressly provided herein.

## **201 Queue Position:**

Each New Service Request shall be assigned a priority, or Queue Position, based on the date and time all required information and requisite deposits are received, i.e., Queue Positions will be assigned on a first-come, first-served basis. The Queue Position of each Interconnection Request and each Completed Application shall be assigned in accordance with the applicable terms of [Tariff, Part II](#), [Tariff, Part III](#), or [Tariff, Part IV](#). The Queue Position of each Upgrade Request shall be the date of Transmission Provider's receipt of all applicable information required by [Tariff, Attachment EE](#) ~~of the Tariff~~. Subject to the applicable terms of the Tariff, all New Service Requests shall be processed as part of a single New Services Queue, except where such projects have been assigned to a subsequent queue pursuant to [Tariff, Part IV, Subpart A, Sections 36.1.01, 36.1.03, 36.2A.1.2, or 36.2A.2](#), [or Tariff, Part IV, Subpart G, sections 110, 111, 112, or 112A](#), in which case such projects will be studied as part of a single New Services Queue with such subsequent queue. With the exception of Interconnection Requests pursuant to [Tariff, Part IV, Section 112](#), the Transmission Provider shall publish the New Services Queue on its website identifying each pending New Service Request and its status as and to the extent consistent with applicable terms of the Tariff. For the purpose of determining the amount of a New Service Customer's cost responsibility for the construction of necessary facilities or upgrades to accommodate its New Service Request, a New Service Request that is deemed terminated and withdrawn under this Part VI or other applicable terms of the Tariff shall concurrently lose its Queue Position and will not be included in any further studies. Nothing in this [Section 201](#), however, precludes an entity from later submitting another New Service Request or resubmitting a withdrawn or terminated New Service Request and receiving a new Queue Position in accordance with the applicable [Tariff, Part IV, Subpart A, Sections 36.1.01, 36.1.03, 36.2A.1.2, or 36.2A.2](#), [or Tariff, Part IV, Subpart G, sections 110, 111, 112, or 112A](#).

### **201.1 Transferability of Queue Position:**

A New Service Customer may transfer its Queue Position to another entity only if, (a) in the case of a transfer by an Interconnection Customer, the other entity acquires the rights to the same Point(s) of Interconnection identified in the Interconnection Request, or, (b) in the case of a transfer by any other New Service Customer, the acquiring entity accepts, as applicable, the same receipt and delivery points or the same source and sink as stated in the transferor's New Service Request.

## 202 Coordination with Affected Systems:

The Transmission Provider will coordinate with Affected System Operators the conduct of any studies required to determine the impact of a New Service Request on any Affected System and, if possible, will include those results in the System Impact Study or the Facilities Study. The Transmission Provider will invite such Affected System Operators to participate in all meetings held with the Interconnection Customer as required by [Tariff, Part VI](#). The Interconnection Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate the Interconnection Request. Transmission Provider shall contact any potential Affected System and shall provide information regarding each relevant New Service Request as required for the Affected System Operator's studies of the effects of such request. A provider of transmission services on a system that may be an Affected System shall cooperate with the Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems related to New Service Requests under the Tariff. To the extent Affected System results are included in the System Impact Study or Facilities Study, an Interconnection Customer shall be provided the opportunity to review such study results consistent with Tariff, Part VI, section 206.2 and Tariff, Part VI, section 212.4(a), as applicable. All New Service Requests will be modeled and studied consistent with the criteria and methodology set forth in PJM Manual 14B, section 2.3 and further supplemented by requirements in PJM Manual 14A, section 4.2. These sections detail the processes and modeling used by the Transmission Provider for all its planning analyses, including Affected System studies.

### **203 System Impact Study Agreement:**

Transmission Provider shall conduct System Impact Studies pursuant to a System Impact Study Agreement with each affected New Service Customer. The form of the System Impact Study Agreement is included in [Tariff](#), Attachment N-1 ~~of the Tariff~~. Pursuant to the System Impact Study Agreement, the New Service Customer shall agree to reimburse the Transmission Provider for the cost of a System Impact Study.

### **203.1 Cost Responsibility:**

The System Impact Study Agreement tendered by the Transmission Provider will clearly specify the Transmission Provider's estimate (determined in coordination with the affected Transmission Owner(s)) of the cost and time required for completion of the study in which the New Service Request is being evaluated and the New Service Customer's cost responsibility for that study. The charges to all affected New Service Customers shall not exceed the actual cost of the System Impact Study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. New Service Customers will not be assessed a charge for such existing studies; however, a New Service Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of such customer's New Service Request. In the event more than one New Service Request is evaluated in a single System Impact Study, the cost of such study shall be allocated among the participating New Service Customers such that (i) each Interconnection Customer pays 100 percent of the study costs associated with evaluating the Attachment Facilities necessary to accommodate its Interconnection Request; (ii) each Eligible Customer pays 100 percent of the study costs associated with evaluating the Direct Assignment Facilities necessary to accommodate its Completed Application for new transmission service; and (iii) each New Service Customer pays the study costs associated with evaluating the Local Upgrades and/or Network Upgrades necessary to accommodate its New Service Request in proportion to its projected cost responsibility (as determined in the Interconnection Feasibility Study or the Firm Transmission Feasibility Study) for such upgrades. In the event that a New Service Customer's responsibility for the actual cost of the System Impact Study under this section is less than the deposit provided with its executed System Impact Study Agreement, the unexpended balance of its deposit shall be refunded, with interest determined at the applicable rate under the Commission's regulations.

#### **203.1.1 Transmission Owners:**

For System Impact Studies that the Transmission Provider conducts on behalf of a Transmission Owner, the Transmission Owner shall record the cost of the System Impact Studies pursuant to [Tariff, Part I, Section 8](#).

## **204.1 Completed Applications:**

After completing a Firm Transmission Feasibility Study regarding a Completed Application for new transmission service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is required to accommodate the requested transmission service. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer as soon as practicable. In such cases, the Transmission Provider shall, upon completion of the Firm Transmission Feasibility Study, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required System Impact Study. For a Completed Application to retain its Queue Position, the Eligible Customer (i) shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, and (ii) shall pay the Transmission Provider a \$50,000 deposit which will be applied to the Eligible Customer's study cost responsibility. If the Eligible Customer elects not to execute the System Impact Study Agreement, its Completed Application shall be deemed terminated and withdrawn, and its deposit provided pursuant to [Tariff, Part II, Section 17.3](#) shall be returned, with interest.

### 204.3 Interconnection Requests:

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender to the affected Interconnection Customer a System Impact Study Agreement. For an Interconnection Request to retain its assigned Queue Position pursuant to [Tariff, Part VI, Preamble, Ssection 201](#), within 30 days of receiving the tendered System Impact Study Agreement, the Interconnection Customer (i) shall execute the System Impact Study Agreement and it must be received by the Transmission Provider, (ii) shall remit to Transmission Provider all past due amounts of the actual Feasibility Study costs exceeding the Feasibility Study deposit fee contained in [Tariff, Part IV, Subpart A, Ssections 36.1.02, and 36.1.03, and Tariff, Part IV, Subpart G, sections 110.1, 111.1, and 112.1](#) ~~of the Tariff~~, if any, (iii) shall pay the Transmission Provider a deposit as provided in [section 204.3A](#) below, (iv) shall identify the Point(s) of Interconnection, and (v) in the case of a Generation Interconnection Customer, shall (A) demonstrate that it has made an initial application for the necessary air emission permits, if any, for its proposed generation, (B) specify whether it desires to interconnect its generation to the Transmission System as a Capacity Resource or an Energy Resource, (C) provide required machine modeling data as specified in the PJM Manuals, (D) in the case of a wind generation facility, provide a detailed electrical design specification and other data (including system layout data) as required by the Transmission Provider for completion of the System Impact Study, and (E) notify the Transmission Provider if it seeks to use Capacity Interconnection Rights in accordance with [Tariff, Part VI, Subpart C, Ssection 230.3.3](#); or, (vi) in the case of a Transmission Interconnection Customer, shall (A) provide Transmission Provider with evidence of an ownership interest in, or right to acquire or control, the site(s) where major equipment (e.g., a new transformer or D.C. converter stations) would be installed, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; (B) demonstrate in a manner acceptable to Transmission Provider that it holds rights to use (or an option to obtain such rights) any existing facilities of the Transmission System that are necessary for construction of the proposed Merchant Transmission Facilities; and (C) provide required modeling data as specified in the PJM Manuals. If an Interconnection Customer fails to comply with any of the applicable listed requirements, its Interconnection Request shall be deemed terminated and withdrawn, however in the event that the information required per (v)-(C), (v) (D), or (vi)-(C) above is provided and deemed to be deficient by the Transmission Provider, Interconnection Customer may provide additional information acceptable to the Transmission Provider within 10 Business Days. Failure of the Interconnection Customer to provide information identified as being deficient within 10 Business Days shall result in the Interconnection Request being terminated and withdrawn. If a terminated and withdrawn Interconnection Request was to be included in a System Impact Study evaluating more than one New Service Request, then the costs of the System Impact Study shall be redetermined and reallocated among the remaining participating New Service Customers as specified in this [Ssection 204](#).

#### 204.3A Deposits for Interconnection Customers

1. Provided that the maximum total deposit amount for a System Impact Study shall be \$300,000 regardless of the size of the proposed Customer Facility, a System Impact Study deposit shall be submitted to Transmission Provider, as follows:

- a. For a proposed Customer Facility that is 20 MW or greater, a deposit of \$500 for each MW requested; or
  - b. For a proposed Customer Facility that is 2 MW or greater, but less than 20 MW, a deposit of \$10,000; or
  - c. For a proposed Customer Facility that is less than 2 MW, a deposit of \$5,000.
2. 10% of each total System Impact Study deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:
  - a. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Interconnection Request and/or associated Queue Position; and/or
  - b. Any restudies required as a result of the rejection, termination and/or withdrawal of such Interconnection Request; and/or
  - c. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior Interconnection Requests by the Interconnection Customer.
3. 90% of each total System Impact Study deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total System Impact Study deposit amount to cover the following:
  - a. The cost of the System Impact Study acceptance review; and
  - b. The dollar amount of the Interconnection Customer's cost responsibility for the System Impact Study; and
  - c. If the System Impact Study Request is deemed to be modified (pursuant to [Tariff, Part IV, Subpart A, Section 36.2A](#) ~~of the Tariff~~), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further below, or during the System Impact Study period, the refundable deposit money shall be



applied to cover all of the costs incurred by the Transmission Provider up to the point of such request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

- i. The costs of any restudies required as a result of the modification, rejection, termination and/or withdrawal of such request; and/or
  - ii. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the System Impact Study Request and/or associated Queue Position; and/or
  - iii. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such customer.
  - iv. If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the customer in accordance with the PJM Manuals.
4. Upon completion of the System Impact Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:
  - a. The cost responsibility of the Interconnection Customer for any other studies conducted for the Interconnection Request; and/or
  - b. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such Interconnection Customer.
5. If any refundable deposit monies remain after the System Impact Study is complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Interconnection Customer.
6. The Interconnection Customer must submit the total required deposit amount with the System Impact Study Request. If the Interconnection Customer fails to submit the total required deposit amount with the System Impact Study Request,

the System Impact Study Request shall be deemed to be terminated and withdrawn.

7. Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request, Upgrade Request or Queue Position be applied in whole or in part to a different New Service Request, Interconnection Request or Queue Position.

### **205.1 Coordination:**

The Transmission Provider shall coordinate, to the extent practical, all System Impact Studies conducted pursuant to this [Section 205](#) for New Service Customers. Such coordination may involve, at the Transmission Provider's sole discretion, combining System Impact Studies for multiple New Service Requests into one study. Transmission Provider shall describe in the PJM Manuals the process by which it will coordinate System Impact Studies and Facilities Studies pertaining to different types of New Service Requests.

## **205.4 Completion of Studies:**

### **205.4.1 Notice to Eligible Customers:**

The Transmission Provider shall notify each Eligible Customer whose Completed Application for new transmission service was included in the System Impact Study upon completion of the System Impact Study whether the Transmission System will be adequate to accommodate all or part of the request for service. In the event that the System Impact Study indicates that no new transmission facilities or upgrades are needed to accommodate the requested service, in order for the Completed Application to retain its Queue Position, within sixty (60) days of completion of the System Impact Study, the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement pursuant to [Tariff, Part II, Ssection 15.3](#) or [Tariff, Part III, Ssection 32.4](#), as applicable, or the Completed Application shall be deemed terminated and withdrawn.

### **205.4.2 Materials for Customers:**

The Transmission Provider shall provide a copy of the System Impact Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in [Operating Agreement, Ssection 18.17](#) ~~of the Operating Agreement~~, related work papers to all New Service Customers that had New Service Requests evaluated in the study and to the affected Transmission Owner(s).

### **205.4.3 Availability of Information:**

Upon completion of the System Impact Study, the Transmission Provider shall post on the Transmission Provider's OASIS (i) the existence of the study, (ii) the New Service Customers that had New Service Requests evaluated in the study, (iii) the location and size in megawatts of each New Service Customer's project or requested rights, as applicable, and (iv) each New Service Customer's Queue Position. The Transmission Provider also shall, to the extent required by the Commission's regulations, make the completed System Impact Study publicly available upon request.

### **205.4.4 Meeting with Transmission Provider:**

At the New Service Customer's request, Transmission Provider, the affected Transmission Owner(s) and the New Service Customer shall meet to discuss the results of the System Impact Study. Such meeting may occur in person or by telephone or video conference.

## **205.5 Re-Study:**

If a re-study of the System Impact Study is required due to a higher queued New Service Request dropping out of the queue, a modification of a higher queued New Service Request subject to [Tariff, Part IV, Subpart A, section](#) 36.2A, or re-designation of the Point of Interconnection of an Interconnection Request pursuant to [Tariff, Part IV, Subpart A, Ssections](#) 36.2.1 or 36.2A, the Transmission Provider shall notify the affected New Service Customer(s) in writing explaining the reason for the re-study. Transmission Provider shall use due diligence to complete such re-study within sixty (60) calendar days from the date of the notice. Any cost of re-study shall be borne by the New Service Customer(s) being restudied.

## **206 Facilities Study Agreement:**

Upon completion of the System Impact Study, the Transmission Provider, if it determines that a Facilities Study is required, shall tender to the affected New Service Customer(s) a Facilities Study Agreement in the form included in [Tariff](#), Attachment N-2 ~~to the Tariff~~. Transmission Provider, in its sole discretion, may determine to evaluate multiple New Service Requests in the same Facilities Study.

## **206.1 Study Agreement:**

Pursuant to the Facilities Study Agreement, the New Service Customer shall agree to reimburse the Transmission Provider for the cost of a Facilities Study. The Transmission Provider shall provide the New Service Customer with an estimate of the time needed to complete the Facilities Study, the cost of the study, and, if more than one New Service Request is being evaluated in the study, the New Service Customer's allocated share of the costs. The Facilities Study Agreement also may contain reasonable milestone dates that an Interconnection Customer's project must meet for the customer's Interconnection Request to retain its assigned Queue Position pursuant to [Tariff, Part VI, Preamble, Section 201](#) while the Transmission Provider is completing the Facilities Study.

## **206.2 Retaining Queue Position:**

For a New Service Request to retain its assigned Queue Position pursuant to [Tariff, Part VI, Preamble, Ssection 201](#), within 30 days of issuing the System Impact Study, the Transmission Provider must be in receipt of (i) all past due amounts of the actual System Impact Study costs exceeding the System Impact Study deposits contained in [Tariff, Part VI, Subpart A, Ssection 204.3A](#), if any, (ii) the executed Facilities Study Agreement and, (iii) the deposit required under this ~~Section~~[section 206](#). If a participating New Service Customer fails to remit past due amounts, execute the Facilities Study Agreement or to pay the deposit required under this ~~Section~~[section 206](#), its New Service Request shall be deemed terminated and withdrawn.



## **206.4 Allocation of Costs:**

In the event more than one New Service Request is being evaluated in a single Facilities Study, the cost of such study shall be allocated among the participating New Service Customers such that (i) each Interconnection Customer pays 100 percent of the study costs associated with evaluating the Attachment Facilities necessary to accommodate its Interconnection Request; (ii) each Eligible Customer pays 100 percent of the study costs associated with evaluating the Direct Assignment Facilities necessary to accommodate its Completed Application for new transmission service; and (iii) each New Service Customer pays the study costs associated with evaluating the Local Upgrades and/or Network Upgrades necessary to accommodate its New Service Request in proportion to its projected cost responsibility (as determined in the System Impact Study) for such upgrades. Each New Service Customer's cost responsibility shall equal its estimated cost responsibility for the work on the Facilities Study scheduled to be completed during each three-month period after such work commences. Transmission Provider's estimates of the required quarterly payments will be stated in the Facilities Study Agreement. If a terminated and withdrawn New Service Request was to be included in a Facilities Study evaluating more than one request, then the costs of the Facilities Study shall be redetermined and reallocated among the remaining participating New Service Customers.

### **206.4.1 Invoices and Payment:**

Except in instances when the total estimated cost of the Facilities Study does not exceed the amount of the deposit required under [Tariff, Part VI, Subpart A, Section 206.3](#), Transmission Provider shall invoice New Service Customer on a quarterly basis for work to be conducted on the Facilities Study during the subsequent three months. The initial invoice shall be delivered prior to the start of work and shall be for the cost of work scheduled to be completed during the first three months after work commences. New Service Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice.

#### **206.4.1.1 Reconciliation of Costs:**

New Service Customer may request in writing, prior to or at the time of execution of the Facilities Study Agreement that the Transmission Provider provide a quarterly cost reconciliation provision in the Facilities Study Agreement. Such quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 12.B of the Facilities Study Agreement shall govern the timing of the final cost reconciliation upon completion of the study.

#### **206.4.1.2 Failure to Pay:**

In the event that a New Service Customer fails to make timely payment of any invoice for work on the Facilities Study, its New Service Request shall be deemed to be terminated and withdrawn as of the date when payment was due.

## **206.5 Estimates of Certain Upgrade-Related Rights:**

### **206.5.1 Incremental Available Transfer Capability Revenue Rights:**

The New Service Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental Available Transfer Capability Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility. The ultimate assignment of Incremental Available Transfer Capability Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility will be made pursuant to the process set forth in [Tariff, Part VI, Subpart C, Section 233](#) ~~of the Tariff~~.

### **206.5.2 Incremental Auction Revenue Rights:**

The New Service Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental Auction Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility on up to three (3) pairs of point-to-point combinations. The ultimate assignment of Incremental Auction Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility will be made pursuant to the allocation process set forth in [Tariff, Part VI, Subpart C, Section 231](#) ~~of the PJM Tariff~~ and may depend upon the point-to-point combination requests and cost responsibilities of other New Service Customers.

### **206.5.3 Transmission Injection Rights and Transmission Withdrawal Rights:**

The assignment of Transmission Injection Rights and Transmission Withdrawal Rights associated with new Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities will be made in accordance with [Tariff, Part VI, Subpart C, Section 232](#) ~~of the Tariff~~ and may depend upon the capabilities of facilities and upgrades necessary to accommodate other New Service Requests.

## **207.2 Re-Study:**

If re-study of the Facilities Study is required due to a higher queued New Service Request dropping out of the queue or a modification of a higher queued New Service Request subject to [Tariff, Part IV, Subpart A, Section 36.2A](#), the Transmission Provider shall notify the New Service Customer in writing explaining the reason for the re-study. Transmission Provider shall use due diligence to complete such re-study within sixty (60) calendar days from the date of the notice. Any cost of re-study shall be borne by the New Service Customer being restudied.

## 208 Expedited Procedures for Part II Requests:

In lieu of the procedures set forth above, an Eligible Customer pursuing a Completed Application under [Tariff](#), Part II ~~of the Tariff~~ shall have the option to expedite the process by requesting the Transmission Provider to tender at one time, together with the results of required studies, an “Expedited Service Agreement” pursuant to which the Eligible Customer would agree to compensate the Transmission Provider or the affected Transmission Owner(s) for all costs incurred pursuant to the terms of the Tariff for purposes of accommodating such customer’s Completed Application. In order to exercise this option, the Eligible Customer shall request in writing an expedited Service Agreement covering all of the above-specified items within thirty (30) days of receiving the results of the System Impact Study identifying needed facility additions or upgrades or costs to be incurred in providing the requested service. While the Transmission Provider agrees to provide the Eligible Customer with its best estimate (determined in coordination with the affected Transmission Owner(s)) of the new facility costs and other charges that may be incurred, such estimate shall not be binding and the Eligible Customer must agree in writing to compensate the Transmission Provider and the affected Transmission Owner(s) for all costs incurred pursuant to the provisions of the Tariff. The Eligible Customer shall execute and return such an Expedited Service Agreement within fifteen (15) days of its receipt or the Eligible Customer’s request for service will cease to be a Completed Application and will be deemed terminated and withdrawn.

## **209.1 Optional Interconnection Study Agreement:**

Within 30 days from the date when the Interconnection Customer receives the results of the System Impact Study, the Interconnection Customer may request, and upon such request, the Transmission Provider shall perform, up to two Optional Interconnection Studies. A request for such a study shall describe the assumptions that the Interconnection Customer wishes the Transmission Provider to study within the scope described in [Tariff, Part VI, Subpart A, Section 209.2](#). Within ten (10) Business Days after receipt of a request for an Optional Interconnection Study, the Transmission Provider shall provide to the Interconnection Customer an Optional Interconnection Study Agreement in the form included in [Tariff, Attachment N-3](#) ~~of this Tariff~~.

### **209.1.1**

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify Interconnection Customer's assumptions regarding any Interconnection Requests with earlier Queue Positions that will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) the Transmission Provider's estimate of the cost of the Optional Interconnection Study. To the extent known by the Transmission Provider, such estimate shall include any costs expected to be incurred by an Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, the Transmission Provider shall not be required as a result of a request for an Optional Interconnection Study to conduct any additional New Service Studies with respect to any other New Service Request.

### **209.1.2**

The Interconnection Customer shall execute and deliver the Optional Interconnection Study Agreement, along with the required technical data, and the greater of a \$10,000 deposit or the estimated study cost to the Transmission Provider within ten (10) Business Days of the Interconnection Customer's receipt of such agreement.

### **209.3 Optional Interconnection Study Procedures:**

The Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified in the Optional Interconnection Study Agreement. If the Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the initial deposit and the actual cost of the study shall be paid to the Transmission Provider or refunded to the Interconnection Customer, as appropriate. Upon request, the Transmission Provider shall provide the Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with [Tariff, Part VI, Subpart B, Section 222](#).

## **210 Responsibilities of the Transmission Provider and Transmission Owners:**

The Transmission Provider shall be responsible for the preparation of all studies of New Service Requests required by the Tariff. The Transmission Provider may contract with consultants, including the affected Transmission Owner(s), to obtain services or expertise with respect to any such study, including but not limited to the need for Attachment Facilities, Direct Assignment Facilities, and Local Upgrades, estimates of costs and construction times required by Interconnection Feasibility Studies, System Impact Studies, and Facilities Studies, and for information regarding distribution facilities. The Transmission Owners shall supply such information and data reasonably required by the Transmission Provider to perform its obligations under this [Tariff](#), Part VI.

## 211 Interim Interconnection Service Agreement:

Under certain circumstances, an Interconnection Customer may wish to initiate construction activities relating to Attachment Facilities, Local Upgrades, or Network Upgrades on an expedited basis prior to completion of the Facilities Study. One example of such a circumstance is to request that orders be placed for equipment or materials that have a long lead time for delivery. To initiate such an advance of procurement and/or construction activities, the Interconnection Customer may request execution of an Interim Interconnection Service Agreement (in the form included in [Tariff, Attachment O-1](#) ~~to the Tariff~~) for the activities being advanced. The Interim Interconnection Service Agreement will bind the Interconnection Customer for all costs incurred for the activities being advanced pursuant to the terms of the Tariff. While the Transmission Provider agrees to provide the Interconnection Customer with the best estimate (determined in coordination with affected Transmission Owner(s)) of the new facility costs and other charges that may be incurred for the work being advanced, such estimate shall not be binding and the Interconnection Customer must agree through execution of the Interim Interconnection Service Agreement to compensate the Transmission Provider and the affected Transmission Owner(s) for all costs incurred due to those activities that were advanced. The Transmission Provider shall not be obligated to offer an Interim Interconnection Service Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in [Tariff, Part IV](#) or other parts of this [Tariff, Part VI](#) ~~of the Tariff~~. The Interim Interconnection Service Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or date of Initial Operation. The Interim Interconnection Service Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security, such as a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to Transmission Provider's estimate of the costs of the procurement and/or construction activities to be advanced pursuant to the Interim Interconnection Service Agreement, consistent with commercial practices as established by the Uniform Commercial Code. Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of the procurement and/or construction activities to be advanced. The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter of credit or other form of security. The Transmission Provider shall provide the affected Transmission Owner with a copy of the Interim Interconnection Service Agreement when this agreement is provided to the Interconnection Customer for execution.



### **211.1 Payment of Costs on Cancellation:**

In the event that, after execution of an Interim Interconnection Service Agreement, the Interconnection Customer determines not to complete its interconnection, it shall immediately so notify Transmission Provider. The Interconnection Customer shall be liable for all Cancellation Costs related to the acquisition, design, construction and/or installation of facilities under the Interim Interconnection Service Agreement. Upon receipt of the Interconnection Customer's notice under this section, Transmission Provider, after consulting with the affected Transmission Owner, may, at the sole cost and expense of the Interconnection Customer, authorize the Transmission Owner to (a) cancel supplier and contractor orders and agreements entered into by the Transmission Owner to acquire and/or design, construct, and install the facilities identified in the Interim Interconnection Service Agreement, provided, however, that the Interconnection Customer shall have the right to choose to take delivery of any equipment ordered by the Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; or (b) remove any facilities built by the Transmission Owner or (c) partially or entirely complete construction or installation of such facilities as necessary to preserve the integrity or reliability of the Transmission System, provided that the Interconnection Customer shall be entitled to receive any rights associated with such facilities and upgrades as determined in accordance with [Tariff, Part VI](#), Subpart C ~~of Part VI~~; or (d) undo any of the changes to the Transmission System that were made pursuant to the Interim Interconnection Service Agreement. To the extent that the Interconnection Customer has fully paid for equipment that is unused upon cancellation or which is removed pursuant to clause (b) above, the Interconnection Customer shall have the right to take back title to such equipment; alternatively, in the event that the Interconnection Customer does not wish to take back title, the Transmission Owner may elect to pay the Interconnection Customer a mutually agreed amount to acquire and own such equipment.

## **212 Interconnection Service Agreement:**

Notwithstanding any other provision of the Tariff, this section 212 shall apply only to Interconnection Customers, excluding those that are proposing Merchant Network Upgrades only for which Tariff, Part VI, Subpart B, section 213 shall apply. Upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to each Interconnection Customer an Interconnection Service Agreement (in the form included in [Tariff](#), Attachment O-~~to the Tariff~~) to be executed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider. The Transmission Provider shall provide the Interconnected Transmission Owner with a copy of the Interconnection Service Agreement when this agreement is provided to the Interconnection Customer for execution. In order to exercise Option to Build, as set forth in Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, section 3.2.3.1, Interconnection Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of its election to exercise the option no later than thirty (30) days from the date the Interconnection Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). Interconnection Customer may not elect Option to Build after such date.

## **212.2 Upgrade-Related Rights:**

The Interconnection Service Agreement shall specify the Upgrade-Related Rights that the Interconnection Customer shall receive pursuant to [Tariff, Part VI](#), Subpart C ~~of Part VI~~, except to the extent the applicable terms of [Tariff, Part VI](#), Subpart C provide otherwise.

### **212.3 Specification of Transmission Owners Responsible for Facilities and Upgrades:**

The Facilities Study shall specify the -Transmission Owner(s) that will be responsible, subject to the terms of the applicable Interconnection Construction Service Agreement(s), for the construction of facilities and upgrades, determined in a manner consistent with [Operating Agreement](#), Schedule 6-~~of the Operating Agreement~~.

## **212.6 Interconnection Construction Service Agreement and Commencement of Construction:**

For all interconnections within the scope of this ~~S~~section 212 for which construction of facilities is required, Transmission Provider shall tender to the Interconnection Customer an Interconnection Construction Service Agreement relating to such facilities within 45 days after receipt of the executed Interconnection Service Agreement. In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Interconnection Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system. The Transmission Provider shall provide the Transmission Owner(s) with a copy of the Interconnection Construction Service Agreement when this agreement is provided to the Interconnection Customer for execution. Within ninety (90) calendar days of receipt thereof, unless otherwise specified in the project specific milestones of the Interconnection Service Agreement, Interconnection Customer either shall have executed the tendered Interconnection Construction Service Agreement and it must be in possession of the Transmission Provider, or, alternatively, shall request dispute resolution under [Tariff, Part I, Ssection 12](#)~~-of the Tariff~~ or, if concerning the Regional Transmission Expansion Plan, consistent with [Operating Agreement, Schedule 5](#)~~-of the Operating Agreement~~, or that the Interconnection Construction Service Agreement be filed unexecuted with the Commission. In the event that the Interconnection Customer has requested dispute resolution or that the Interconnection Service Agreement be filed unexecuted, construction of facilities and upgrades shall be deferred until any disputes are resolved, unless otherwise agreed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider.

### **213.2 Upgrade-Related Rights:**

The Upgrade Construction Service Agreement shall specify the Upgrade-Related Rights to which the New Service Customer is entitled pursuant to [Tariff, Part VI](#), Subpart C ~~of Part VI~~, except to the extent the applicable terms of [Tariff, Part VI](#), Subpart C provide otherwise.

### **213.3 Specification of Transmission Owners Responsible for Facilities and Upgrades:**

The Facilities Study shall specify the -Transmission Owner(s) that will be responsible, subject to the terms of the applicable Upgrade Construction Service Agreement, for the construction of facilities and upgrades, determined in a manner consistent with [Operating Agreement](#), Schedule 6 of the ~~Operating Agreement~~.

#### **213.4 Retaining Priority and Security:**

(a) Retaining Priority: To retain the assigned Queue Position of its New Service Request pursuant to Tariff, Part VI, Preamble, section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the New Service Customer either shall have executed the tendered Upgrade Construction Service Agreement and it must be in possession of the Transmission Provider or, alternatively, request (i) dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5, or (ii) that the Upgrade Construction Service Agreement be filed unexecuted with the Commission.

(b) Security: (1) At the time the New Service Customer executes and returns to the Transmission Provider the Upgrade Construction Service Agreement (or requests dispute resolution or that it be filed unexecuted), the New Service Customer also shall, unless otherwise deferred as set forth in subsection (c) below, provide the Transmission Provider (for the benefit of the affected Transmission Owner(s)) with a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to the sum of the estimated costs determined by the Transmission Provider of (i) the required Direct Assignment Facilities, Non-Direct Connection Local Upgrades and/or Non-Direct Connection Network Upgrades (including required upgrades for which another New Service Customer also has cost responsibility pursuant to Tariff, Part VI, Subpart B, section 217), (ii) the estimated cost of work that the New Service Customer will be responsible for performing on the required Direct Assignment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences in earnest, and (iii) in the event that the New Service Customer exercised the Option to Build pursuant to Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, section 6.2.1 , all Cancellation Costs and the first three months of estimated Transmission Owner's oversight costs associated with the New Service Customer's building Direct Assignment Facilities and/or Direct Connection Network Upgrades, including but not limited to Costs for inspections, testing, and tie-in work, consistent with commercial practices as established by the Uniform Commercial Code. Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment GG, Appendix III, section 6.2.2(a)(12). Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of construction.

The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter of credit or other form of security. After execution of the Upgrade Construction Service Agreement, the amount of Security required may be adjusted from time to time in accordance with Tariff, Attachment GG, Appendix III, section 9.1 of the Upgrade Construction Service Agreement.

(2) Transmission Provider shall invoice New Service Customer for work by the Transmission Owner on a quarterly basis for the costs to be expended in the subsequent three months. Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. New Service Customer may request in the Upgrade Construction Service Agreement that the Transmission



Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Tariff, Attachment GG, Appendix III, section 9.3 of the Upgrade Construction Service Agreement shall govern the timing of the final cost reconciliation upon completion of the work.

(3) Security related to construction of Local Upgrades and/or Network Upgrades may be reduced as construction progresses.

(c) Deferred Security: New Service Customer may request to defer providing security under subsection (b) of this ~~S~~section 213.4 until no later than 120 days after New Service Customer executes the Upgrade Construction Service Agreement. Upon New Service Customer's request to defer security, PJM shall determine if any other queued New Service Customer with a completed System Impact Study would require any Local Upgrade(s) and/or Network Upgrade(s) for which New Service Customer has cost responsibility under the Upgrade Construction Service Agreement. New Service Customer may defer security only for Local Upgrade(s) and/or Network Upgrade(s) for which no other such queued New Service Customer may require, provided New Service Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities on such non-shared Local Upgrade(s) and/or Network Upgrade(s), with \$100,000 of such deposit being non-refundable. If the New Service Customer terminates the Upgrade Construction Service Agreement or is otherwise withdrawn, any unused portion of the non-refundable deposit will be used to fund re-studies due to such termination or withdrawal. Any remaining deposit monies, refundable or non-refundable, will be returned to a New Service Customer upon Stage Two Energization of Completed Facilities.

(d) Withdrawal: If a New Service Customer fails to timely execute the Upgrade Construction Service Agreement (or request dispute resolution or that the agreement be filed unexecuted), or to provide the security prescribed in this Section, its New Service Request shall be deemed terminated and withdrawn. In the event that a terminated and withdrawn New Service Request was included in a Facilities Study that evaluated more than one New Service Request, or in the event that a New Service Customer's participation in and cost responsibility for a Network Upgrade or Local Upgrade is terminated in accordance with the Upgrade Construction Service Agreement, the Transmission Provider shall reevaluate the need for the facilities and upgrades indicated by the Facilities Study, shall redetermine the cost responsibility of each remaining New Service Customer for the necessary facilities and upgrades based on its assigned Queue Position pursuant to Tariff, Part VI, Preamble, section 201, and shall enter into an amended Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable, with each remaining New Service Customer setting forth its revised cost obligation. In such event, if the amount of a New Service Customer's cost responsibility increases, the New Service Customer shall provide additional security pursuant to this section.

## **213.6 Procedures if The Affected Transmission Owners are Unable to Complete New Transmission Facilities for Firm Point-To-Point Transmission Service:**

### **213.6.1 Delays in Construction of New Facilities:**

If any event occurs that will materially affect the time for completion of new facilities or the ability to complete new facilities required to accommodate a Completed Application for new Firm Point-To-Point Transmission Service, the Transmission Provider shall promptly notify the Transmission Customer. In such circumstances, the Transmission Provider shall within thirty (30) days of notifying the Transmission Customer of such delays, convene a technical meeting with the Transmission Customer to evaluate the alternatives available to the Transmission Customer. The Transmission Provider also shall make available to the Transmission Customer studies and work papers related to the delay, including all information that is in the possession of the Transmission Provider that is reasonably needed by the Transmission Customer to evaluate any alternatives.

### **213.6.2 Alternatives to the Original Facility Additions:**

When the review process of ~~S~~section 213.6.1 [above](#) determines that one or more alternatives exist to the originally planned construction project, the Transmission Provider shall present such alternatives for consideration by the Transmission Customer. If, upon review of any alternatives, the Transmission Customer desires to maintain its Completed Application subject to construction of the alternative facilities, it may request the Transmission Provider to submit, as applicable, a revised Service Agreement for Firm Point-To-Point Transmission Service and/or a revised Upgrade Construction Service Agreement. If the alternative approach solely involves Non-Firm Point-To-Point Transmission Service, the Transmission Provider shall promptly tender a Service Agreement for Non-Firm Point-To-Point Transmission Service providing for the service. In the event the Transmission Provider concludes that no reasonable alternative exists and the Transmission Customer disagrees, the Transmission Customer may seek relief under the dispute resolution procedures pursuant to [Tariff, Part I](#), ~~S~~section 12 or it may refer the dispute to the Commission for resolution.

### **213.6.3 Refund Obligation for Unfinished Facility Additions:**

If the Transmission Provider and the Transmission Customer mutually agree that no other reasonable alternatives exist and the requested service cannot be provided out of existing capability under the conditions of [Tariff, Part II](#) ~~of the Tariff~~, the obligation to provide the requested Firm Point-To-Point Transmission Service shall terminate and any deposit made by the Transmission Customer shall be returned with interest pursuant to the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii)..

However, the Transmission Customer shall be responsible for all prudently incurred costs by the Transmission Provider or any Transmission Owner through the time construction was suspended

### **213.6.4 Supply of Data:**

The Transmission Owners shall supply such information and data reasonably required by the Transmission Provider to perform its obligations under this ~~S~~section 213.6.

## 215 Transmission Service Agreements:

Upon completion of the Facilities Study (or, if no Facilities Study was required, the System Impact Study), the Transmission Provider shall tender to each Eligible Customer whose Completed Application for new transmission service was included in the study a Service Agreement (in the form included in [Tariff](#), Attachment A, [Tariff](#), Attachment F, or [Tariff](#), Attachment F-1 ~~of the Tariff~~, as applicable). To retain the assigned Queue Position of its Completed Application pursuant to [Tariff](#), Part VI, Preamble ~~S~~section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), each Eligible Customer must execute and return the tendered Service Agreement to the Transmission Provider or, alternatively, request dispute resolution under [Tariff](#), Part I, ~~S~~section 12 ~~of the Tariff~~, or that the Service Agreement be filed unexecuted with the Commission. Should the Eligible Customer fail to execute and return the Service Agreement or to request dispute resolution or filing unexecuted within the prescribed time, its Completed Application shall be deemed to be terminated and withdrawn. Other terms and procedures for these Service Agreements are set forth in [Tariff](#), Part II and [Tariff](#), Part III.

## 216 Interconnection Requests Designated ~~As~~ Market Solutions:

The provisions of this section shall apply to any Interconnection Request related to a project that Transmission Provider determines, in accordance with [Operating Agreement, Schedule 6, S](#)ection 1.5.7(h) ~~of Schedule 6 of the Operating Agreement~~ could relieve a transmission constraint and which, in the judgment of the Transmission Provider, is economically justified (hereafter, a “market solution”).

## **216.1 Notification ~~A~~and Acceptance ~~O~~f Market Solution Designation:**

Upon determining that an Interconnection Request is a market solution, Transmission Provider shall so notify the affected Interconnection Customer and shall offer the customer formal designation as a “market solution.” With such notification, Transmission Provider also shall tender to the Interconnection Customer a Development Agreement, as described in [section ~~Section~~-216.2](#) below. To accept the designation of its project as a market solution, the Interconnection Customer must execute and return the Development Agreement to Transmission Provider within 15 days after its receipt thereof. The Interconnection Customer may decline the proffered designation as a market solution without prejudice to the Queue Position or processing of its Interconnection Request. An election to decline designation as a market solution may be made by not executing the Development Agreement within the time provided or by otherwise so notifying Transmission Provider. In the event the Interconnection Customer declines designation as a market solution, the remaining provisions of this [section ~~Section~~-216](#) shall not apply to the Interconnection Customer’s Interconnection Request.

## **216.2 Development Agreement:**

### **216.2.1 Disclosure:**

The Development Agreement shall provide that, within 30 days after execution of the agreement, the Interconnection Customer shall disclose fully to Transmission Provider and shall promptly report any material changes in: (a) the Interconnection Customer's affiliate relationships with other Market Participants; (b) the Financial Transmission Rights and Auction Revenue Rights positions of the Interconnection Customer and its Affiliates in any portion of the PJM system that affects or is affected by the transmission constraint for which the Interconnection Customer's project has been designated as a market solution; and (c) the Interconnection Customer's and its affiliates' bilateral transactions and other material contractual relationships (as specified in the Development Agreement) with any Market Participant that is affected by the transmission constraint for which the Interconnection Customer's project is designated as a market solution. Transmission Provider shall treat all information disclosed pursuant to the Development Agreement on a confidential basis in accordance with [Operating Agreement](#), section 18.17 ~~of the Operating Agreement~~.

### **216.2.2 Milestones:**

In addition to the milestones required pursuant to [Tariff, Part VI, Subpart A, Ssections](#) 204.3 and/or [Tariff, Part VI, Subpart A, section](#) 206.1 ~~of the Tariff~~, the Development Agreement may set forth additional milestones for the development of the project designated as a market solution that the Transmission Provider determines to be reasonable and appropriate to ensure diligent pursuit of the project from the time of execution of the Development Agreement until the time for execution of the Interconnection Service Agreement under [Tariff, Part VI, Subpart B, Ssection](#) 212 ~~of the Tariff~~. Transmission Provider may extend any of the additional milestones set forth in the Development Agreement if the Interconnection Customer demonstrates that its inability to meet the milestone(s) is due to delays not caused by the Interconnection Customer that could not be avoided or remedied by the exercise of due diligence. In the event that any milestone set forth in the Development Agreement is not timely met and is not extended by Transmission Provider in accordance with the ~~preceding~~ sentence, Interconnection Customer's project shall lose its designation as a market solution and Transmission Provider shall terminate the Development Agreement. Upon termination of the Development Agreement, Interconnection Customer may retain its priority in the applicable Interconnection Queue in accordance with [Tariff, Part VI, Preamble, Ssection](#) 201 ~~of the Tariff~~, if the Interconnection Customer affirmatively so requests in writing delivered to Transmission Provider within 15 days after termination of the Development Agreement. In the event such a project stays in the Interconnection Queue, the expedited study procedures described in [Ssection](#) 216.3 below will not apply, and any studies of the Interconnection Customer's Interconnection Request that are yet to be completed shall be completed on the schedules otherwise applicable under [Tariff, Part IV](#) or [Tariff, Part VI](#) ~~of the Tariff~~ for other Interconnection Requests in the same Interconnection Queue.

### **216.2.3 Expedited Studies:**

Transmission Provider shall conduct Feasibility Studies, System Impact Studies, and Facilities Studies associated with projects that have accepted designation as market solutions pursuant to this [Tariff, Part VI, Subpart B, S](#)section 216 on an expedited and, where feasible, project-specific basis, notwithstanding the schedule for completion of such studies for the applicable Interconnection Queue under other provisions of [Tariff, Part IV](#) or [Tariff, Part VI](#) ~~of the Tariff~~.

#### **216.2.4 Interconnection Service Agreements For Market Solutions:**

##### **216.2.4.1 Additional Milestones:**

In addition to the milestones specified in or pursuant to [Tariff, Part VI, Subpart B, S](#)section 212.5 ~~of the Tariff~~, the Interconnection Service Agreement executed by an Interconnection Customer with respect to a project for which the customer has accepted designation as a market solution shall include the following additional milestones: (a) within 60 days after execution of the Interconnection Service Agreement, the Interconnection Customer must reasonably demonstrate to Transmission Provider that the Interconnection Customer is likely to be able to obtain sufficient financing for the project; (b) within 180 days after execution of the Interconnection Service Agreement, the Interconnection Customer must demonstrate to Transmission Provider that the Interconnection Customer has arranged sufficient financing to complete the project; and (c) other reasonable milestones that the Transmission Provider determines are necessary to ensure that the Interconnection Customer continues diligently to pursue development of the project.

##### **216.2.4.2 Additional Security:**

###### **216.2.4.2.1 Amount:**

Notwithstanding any other provisions of this Tariff, in the event that no Network Upgrades, Local Upgrades, or Attachment Facilities are required to accommodate the Interconnection Request of a project that has accepted designation as a market solution, at the time of execution of the Interconnection Service Agreement for such project, the Interconnection Customer must provide security in an amount equal to the lesser of 10% of Transmission Provider's reasonable estimate of the fixed cost of the project or \$250,000.

###### **216.2.4.2.2 Forfeiture of Additional Security:**

In the event that Transmission Provider reasonably determines (a) that the Interconnection Customer's failure to meet such milestone(s) reasonably could have been avoided by the exercise of due diligence, and (b) based on the Interconnection Customer's disclosures pursuant to the Development Agreement and other available information, that the Interconnection Customer or one or more of its Affiliates or customers will profit from the transmission constraint for which the Interconnection Customer's project was designated as a market solution, upon termination of the Interconnection Service Agreement, Transmission Provider shall retain the additional security provided by the Interconnection Customer pursuant to [S](#)section 216.2.4.2.1 [above](#). In all other instances of failure to meet such a milestone, the additional security shall be refunded to the Interconnection Customer.



#### **216.2.4.2.3 Disposition of Forfeited Additional Security:**

Transmission Provider shall utilize any funds that it retains pursuant to ~~S~~ection 216.2.4.2.2 above to offset the cost to load affected by the transmission constraint that the project to be built under the relevant terminated Interconnection Service Agreement would have relieved. Such relief shall be applied with regard to congestion caused by the transmission constraint that occurs after termination of the applicable Interconnection Service Agreement. Transmission Provider shall establish in the PJM Manuals procedures for allocating and applying such relief to congestion costs incurred by affected load.

### **217.3 Local and Network Upgrades:**

(a) General: Each New Service Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Local Upgrades and Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Local Upgrades and Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Local Upgrades and Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.

(b) Cost Responsibility for Accelerating Local and Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of a Local Upgrade or Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the New Service Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to [Tariff](#), Schedule 12 ~~of the Tariff~~ as having cost responsibility for such Local Upgrade or Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Local Upgrade or Network Upgrade.

**217.3a** The Transmission Provider shall determine the minimum amount of required Local Upgrades and Network Upgrades required to resolve each reliability criteria violation in each New Services Queue, by studying the impact of the queued projects in their entirety, and not incrementally.

Local Upgrades and Network Upgrades shall be studied in their entirety and according to the following process:

(i) The Transmission Provider shall identify the first New Service Request in the queue contributing to the need for the required Local Upgrades and Network Upgrades within the New Services Queue. The initial New Service Request to cause the need for Local Upgrades or Network Upgrades will always receive a cost allocation. Costs for the minimum amount of Local Upgrades and Network Upgrades shall be further allocated to subsequent projects in the New Services Queue, pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

(ii) In the event a subsequent New Service Request in the queue causes the need for additional Local Upgrades or additional Network Upgrades, only this New Service Request and the New

Service Requests in the queue, which follow such subsequent New Service Request in the queue, shall be allocated the costs for these additional required Local Upgrades or Network Upgrades. The allocation shall be pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

Where a Local Upgrade or Network Upgrade included in the Regional Transmission Expansion Plan is classified as both a reliability-based and market efficiency project, a New Service Request cannot eliminate or defer such upgrade unless the request eliminates or defers both the reliability need and the market efficiency need identified in the Regional Transmission Expansion Plan.

#### **217.4 Additional Upgrades:**

In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a New Service Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the New Service Request, a New Service Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its New Service Request. The New Service Customer shall have the right of first refusal to pay for any or all of the upgrades in addition to the minimum, and to hold all rights associated with the additional upgrades for which it agrees to pay, in accordance with [Tariff, Part VI](#), Subpart C ~~of Part VI~~. The remaining costs shall be borne by the Transmission Owners in accordance with [Operating Agreement](#), Schedule 6 ~~of the Operating Agreement~~ and, subject to FERC approval, may be included in the revenue requirements of the Transmission Owners. If, based upon the date of the submission of a subsequent New Service Request, the Transmission Provider determines that a New Service Customer will make use of additional economic capacity that exists or will exist as a result of facilities and upgrades constructed as a result of an earlier New Service Request, then the Transmission Provider may require the subsequent New Service Customer to pay an appropriate portion of the cost of the facilities and upgrades that produced the additional economic capacity.

## **217.5 Specification of Costs in Agreement:**

The cost responsibility of a New Service Customer shall be specified, (a) in the case of an Interconnection Customer that proposes facilities other than Merchant Network Upgrades, in the Interconnection Service Agreement, and (b) in the case of all other New Service Customers, in the Upgrade Construction Service Agreement. If a New Service Customer does not agree with the Transmission Provider's determination of such cost responsibility, it may request that the matter be submitted to Dispute Resolution under ~~Article~~[Tariff, Part I, section 12](#) ~~of the Tariff~~ or, if concerning the Regional Transmission Expansion Plan, consistent with [Operating Agreement, Schedule 5](#) ~~of the Operating Agreement~~, or request that an unexecuted Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable, be filed with the Commission in accordance with the Tariff.

#### **217.6 Effect of IDR Transfer Agreement:**

A New Service Customer may modify its cost responsibility for Network Upgrades and/or Local Upgrades as determined under this ~~S~~section 217 by submitting an IDR Transfer Agreement in accordance with [Tariff, Part VI, Subpart C, S](#)section 237~~-of the Tariff~~ that transfers to the New Service Customer Incremental Deliverability Rights associated with Merchant Transmission Facilities. As provided in [Tariff, Part VI, Subpart C, S](#)section 237, the New Service Customer's cost responsibility shall be modified only if it elects to terminate, and Transmission Provider confirms termination of, its participation in and cost responsibility for any Network Upgrade or Local Upgrade.

## **217.7 Regional Transmission Expansion Plan:**

### **217.7.1**

Any Attachment Facilities, Direct Assignment Facilities, Local Upgrades, or Network Upgrades constructed to accommodate a New Service Request or an Affected System facility (as defined in ~~S~~section 218 below) shall be included in the Regional Transmission Expansion Plan upon their identification in an executed Interconnection Service Agreement or Upgrade Construction Service Agreement filed with or reported to the Commission pursuant to [Tariff, Part VI, Subpart B](#), ~~S~~section 214.

### **217.7.2**

In the event that termination of a New Service Customer's participation in a previously identified Network Upgrade or Local Upgrade pursuant to [Tariff, Part VI, Subpart C](#), ~~S~~section 237-~~of the Tariff~~ eliminates the need for such upgrade, Transmission Provider shall offer all New Service Customers whose New Service Requests preceded the IDR Transfer Agreement that facilitated such termination an opportunity to pursue and pay for (in whole or in part) such upgrade. Each New Service Customer shall have the right to hold all Upgrade-Related Rights associated with the additional upgrades (or portions thereof) for which it agrees to pay in accordance with [Tariff, Part VI](#), Subpart C-~~of Part VI~~.

### **217.7.3**

Transmission Provider shall remove from the Regional Transmission Expansion Plan any Network Upgrade or Local Upgrade in the event that the need for such upgrade is eliminated due to termination of a New Service Customer's participation in such upgrade and other New Service Customers do not pursue and pay for the upgrade pursuant to ~~S~~section 217.7.2 [above](#).

## **218.2 Generation and Transmission Interconnecting with Affected Systems:**

In the event that interconnection of a new or expanded generation or transmission facility with an Affected System (“Affected System facility”) requires Local Upgrades or Network Upgrades to the Transmission System, such Affected System facility shall be responsible for the costs of such upgrades in accordance with [Tariff, Part VI, Subpart B, S](#)ection 217. Transmission Provider and the developer of the Affected System facility shall enter into an Upgrade Construction Service Agreement for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades. For purposes of applying the Upgrade Construction Service Agreement to the construction of such upgrades, the developer of the Affected System facility shall be deemed to be the New Service Customer.



### **218.3                    Coordination of Third-Party System Additions:**

In circumstances where the need for transmission facilities or upgrades is identified pursuant to this [Tariff](#), Part VI ~~of the Tariff~~, and if such upgrades further require the addition of transmission facilities on one or more Affected Systems, the affected Transmission Owner(s), in coordination with the Transmission Provider, shall have the right to coordinate construction on their own systems with the construction required by the Affected System(s). The Transmission Provider, together with the affected Transmission Owner(s), after consultation with the Transmission Customer and representatives of the Affected System(s), may defer construction of an affected Transmission Owner's new transmission facilities, if the new transmission facilities on an Affected System cannot be completed in a timely manner. The Transmission Provider shall notify the affected New Service Customer in writing of the basis for any decision to defer construction and the specific problems which must be resolved before construction of new facilities will be initiated or resumed. Within sixty (60) days of receiving written notification by the Transmission Provider of the intent to defer construction pursuant to this section, the New Service Customer may challenge the decision in accordance with the dispute resolution procedures pursuant to [Tariff, Part I, Section 12](#) ~~of the Tariff~~ or it may refer the dispute to the Commission for resolution.

## **218.4 Upgrade-Related Rights:**

### **218.4.1 Facilities on Affected System:**

A New Service Customer that pays the costs of any transmission facilities or upgrades on an Affected System as provided in ~~S~~section 218.1 [above](#) shall be entitled to any Upgrade-Related Rights that may be created in the Transmission System due to the construction of such facilities or upgrades on the Affected System, as determined in accordance with [Tariff, Part VI](#), Subpart C ~~of this Part VI~~. The Upgrade-Related Rights (if any) to which the New Service Customer is entitled pursuant to [Tariff, Part VI](#), Subpart C shall be stated in the Upgrade Construction Service Agreement or other agreement executed by such customer as provided in ~~S~~section 218.1 [above](#), except to the extent the applicable terms of [Tariff, Part VI](#), Subpart C provide otherwise.

### **218.4.2 Facilities on Transmission System:**

To the same extent as a New Service Customer under the Tariff, the developer of an Affected System facility that pays the costs of any Local Upgrades or Network Upgrades as provided in ~~S~~section 218.2 [above](#) shall be entitled to any Upgrade-Related Rights associated with those facilities in accordance with [Tariff, Part VI](#), Subpart C ~~of Part VI~~. The Upgrade-Related Rights (if any) to which the developer of an Affected System facility is entitled pursuant to [Tariff, Part VI](#), Subpart C shall be stated in the Upgrade Construction Service Agreement executed by such developer, except to the extent the applicable terms of [Tariff, Part VI](#), Subpart C provide otherwise.

## **219 Inter-queue Allocation of Costs of Transmission Upgrades:**

In the event that Transmission Provider determines that accommodating a New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade or Network Upgrade that was previously determined to be necessary to accommodate, a New Service Request that was part of a previous New Services Queue, such New Service Customer may be responsible, subject to the terms of [Tariff, Part VI, Subpart C](#), [S](#)ections 231.4, 233.5, and 234.5 below and in accordance with criteria prescribed by Transmission Provider in the PJM Manuals, for additional costs up to an amount equal to a proportional share of the costs of such previously-constructed facility or upgrade.

Cost responsibility under this [S](#)ection 219 may be assigned with respect to any facility or upgrade:

- (a) the completed cost of which was \$5,000,000 or more, for a period of time not to exceed five years from the execution date of the Interconnection Service Agreement for the project that initially necessitated the requirement for the Local Upgrade or Network Upgrade.

For purposes of applying this section, Transmission Provider may aggregate the costs of related facilities or upgrades, e.g., multiple replacements of or new circuit breakers at a single substation, that are, or are anticipated to be, constructed contemporaneously. In each Interconnection Service Agreement and Upgrade Construction Service Agreement executed after the date on which this [S](#)ection 219 first becomes effective, Transmission Provider shall identify any of the facilities or upgrades included in the Specifications to such Interconnection Service Agreement or Upgrade Construction Service Agreement the costs of which Transmission Provider will aggregate for purposes of application of this section.

## 220 Advance Construction of Certain Network Upgrades:

An Interconnection Customer that has executed an Interconnection Service Agreement or an Upgrade Construction Service Agreement, as applicable, in order to ensure the availability of, in the case of a Generation Interconnection Customer, all of its Capacity Interconnection Rights, or, in the case of a Transmission Interconnection Customer, all of its Transmission Injection Rights and Transmission Withdrawal Rights, upon Initial Operation of its Customer Facility, may request that the Transmission Provider cause the affected Transmission Owner to advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer; (ii) are necessary to support, (A) in the case of a Generation Interconnection Customer, such Interconnection Customer's full Capacity Interconnection Rights, or (B) in the case of a Transmission Interconnection Customer, are necessary to support such Transmission Interconnection Customer's full Transmission Injection Rights and Transmission Withdrawal Rights; (iii) are the cost responsibility of an entity other than the Interconnection Customer making the request for advance construction; and (iv) would otherwise not be completed on behalf of such other entity in time to support the full Capacity Interconnection Rights or the full Transmission Injection Rights and Transmission Withdrawal Rights, as applicable, of the requesting Interconnection Customer upon Initial Operation of its Customer Facility. Upon such request, Transmission Provider will use Reasonable Efforts to cause the affected Transmission Owner to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay Transmission Provider, on behalf of such Transmission Owner: (a) any associated expediting costs and (b) the cost of such Network Upgrades. The Interconnection Customer shall be entitled to a refund of the cost of the Network Upgrades after the date on which the entity bearing cost responsibility for such upgrades has completed payment of the costs thereof. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. The Transmission Provider shall forward to the Interconnection Customer the amount paid by the entity with cost responsibility for the Network Upgrades as payment in full for the outstanding balance owed to the Interconnection Customer, provided, however, that if the Network Upgrades were built and paid for by a Transmission Owner, such Transmission Owner shall refund to the Interconnection Customer the cost of such upgrades in accordance with the terms of this section. An Interconnection Customer that pays for advance construction of Network Upgrades pursuant to this [Section 220](#) shall be entitled to any Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and/or any Incremental Available Transfer Capability Revenue Rights associated with such facilities for the period from the date of completion of the advanced Network Upgrades to the date on which the cost of such upgrades is refunded to the Interconnection Customer.

## 221.1 Construction Obligation:

The determination of the Transmission Owners' obligations to build the necessary facilities and upgrades to accommodate New Service Requests, or interconnections with Affected Systems in accordance with [Tariff, Part VI, Subpart B, Section 218.2](#), shall be made in the same manner as such responsibilities are determined under [Operating Agreement, Schedule 6](#) ~~of the Operating Agreement~~. Except to the extent otherwise provided in a Construction Service Agreement entered into pursuant to this [Tariff, Part VI](#), the Transmission Owners shall own all Attachment Facilities, Direct Assignment Facilities, Local Upgrades, and Network Upgrades constructed to accommodate New Service Requests.

## 221.2 Alternative Facilities and Upgrades:

Upon completion of the studies of a New Service Request prescribed in the Tariff, ~~the~~ Transmission Provider shall recommend the necessary facilities and upgrades to accommodate the New Service Request and the Transmission Owner's ~~construction obligation to build such~~ facilities and upgrades. The Transmission Owner(s) or the New Service Customer may offer alternatives to the Transmission Provider's recommendation. If, based upon its review of the relative costs and benefits, the ability of the alternative(s) to accommodate the New Service Request, and the alternative's(s') impact on the reliability of the Transmission System, the Transmission Provider does not adopt such alternative(s), the Transmission Owner(s) or the New Service Customer may require that the alternative(s) be submitted to Dispute Resolution in accordance with [Tariff, Part I, S](#)~~ection 12-of the Tariff~~ or, if concerning the Regional Transmission Expansion Plan, consistent with [Operating Agreement](#), Schedule 5~~-of the Operating Agreement~~. The affected New Service Customer may participate in any such Dispute Resolution process.

## **222 Confidentiality:**

Except as otherwise provided in this section, all information provided to Transmission Provider by New Service Customers relating to any study of a New Service Request required under the Tariff shall be deemed Confidential Information under [Tariff, Part VI, Subpart B, Section 223](#). Upon completion of each study, the study will be listed on the Transmission Provider's OASIS and, to the extent required by Commission regulations, will be made publicly available upon request, except that, in the case of Interconnection Feasibility Studies, the identity of the Interconnection Customer shall remain confidential. To the extent that the Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of any of the studies required under the Tariff, the consultants and/or Transmission Owner(s) shall keep all information provided by New Service Customers confidential and shall use such information solely for the purpose of the study for which it was provided and no other purpose.

## **223 Confidential Information:**

For purposes of this ~~S~~ection 223, the term “party” refers to the New Service Customer, the Transmission Provider, or an affected Transmission Owner, as applicable, and the term “parties” refers to all of such entities collectively or to any two or more of them, as the context indicates. Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the party providing the information orally informs the party receiving the information that the information is confidential. If requested by any party, the disclosing party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting party may disclose such writing to an appropriate Governmental Authority. Any party shall be responsible for the costs associated with affording confidential treatment to its information.



### **223.1 Term:**

During the longest of the terms of (as and to the extent applicable) the Interconnection Service Agreement, the Service Agreement, and the Upgrade Construction Service Agreement, and for a period of three (3) years after the expiration or termination thereof, and except as otherwise provided in this ~~S~~Section 223, each party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other party.

## **223.2 Scope:**

Confidential Information shall not include information that the receiving party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving party; (ii) was in the lawful possession of the receiving party on a non-confidential basis before receiving it from the disclosing party; (iii) was supplied to the receiving party without restriction by a third party, who, to the knowledge of the receiving party, after due inquiry, was under no obligation to the disclosing party to keep such information confidential; (iv) was independently developed by the receiving party without reference to Confidential Information of the disclosing party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving party or breach of the requirements of this ~~S~~section 223; or (vi) is required, in accordance with ~~S~~section 223.7 below, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Subpart or any agreement entered into pursuant thereto. Information designated as Confidential Information shall no longer be deemed confidential if the party that designated the information as confidential notifies the other parties that it no longer is confidential.

### **223.3 Release of Confidential Information:**

No party shall disclose Confidential Information to any other person, except to its Affiliates (limited by the Commission's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be, or may be considering, providing financing to or equity participation in the New Service Customer or to potential purchasers or assignees of the New Service Customer, on a need-to-know basis in connection with the Interconnection Service Agreement, Service Agreement, and/or Construction Service Agreement, unless such person has first been advised of the confidentiality provisions of this [Section 223](#) and has agreed to comply with such provisions. Notwithstanding the foregoing, a party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this [Section 223](#).

#### **223.6 Standard of Care:**

Each party shall use at least the same standard of care to protect Confidential Information it receives as the party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each party may use Confidential Information solely to fulfill its obligations to the other parties under this [Tariff](#), Part VI ~~of the Tariff~~ or any agreement entered into pursuant to this [Tariff](#), Part VI.

### **223.7 Order of Disclosure:**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that party shall provide the party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing party may seek an appropriate protective order or waive compliance with the terms of this [Tariff](#), Part VI or any applicable agreement entered into pursuant to this [Tariff](#), Part VI. Notwithstanding the absence of a protective order or agreement, or waiver, the party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the party is legally compelled to disclose. Each party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **223.8 Termination of Agreement(s):**

Upon termination of any agreement entered into pursuant to this [Tariff, Part VI](#), Subpart B-~~of Part VI~~ for any reason, each party shall, within ten (10) calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

### **223.9 Disclosure to FERC or its Staff:**

Notwithstanding anything in this ~~S~~section 223 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the parties that is otherwise required to be maintained in confidence pursuant to this [Tariff](#), Part VI ~~of the Tariff~~ or any agreement entered into pursuant to such [Tariff](#), Part VI, the party receiving such request shall provide the requested information to FERC or its staff, within the time provided for in the request for information.

In providing the information to FERC or its staff, the party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other parties prior to the release of the Confidential Information to the Commission or its staff. A party shall notify the other party(ies) to any agreement entered into pursuant to this [Tariff](#), Part VI when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

### **223.10 Other Disclosures:**

Subject to the exception in [S](#)ection 223.9 [above](#), no party shall disclose Confidential Information of another party to any person not employed or retained by the disclosing party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing party to be required in connection with a dispute between or among the parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this [Tariff](#), Part VI or any agreement entered into pursuant to this [Tariff](#), Part VI, or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another party's Confidential Information under this [S](#)ection 223.10, the disclosing party shall promptly notify the other parties in writing and shall assert confidentiality and cooperate with the other parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.



### 230.1 Purpose:

Capacity Interconnection Rights shall entitle the holder to deliver the output of a Generation Capacity Resource at the bus where the Generation Capacity Resource interconnects to the Transmission System. The Transmission Provider shall plan the enhancement and expansion of the Transmission System in accordance with [Operating Agreement](#), Schedule 6 ~~of the Operating Agreement~~ such that the holder of Capacity Interconnection Rights can integrate its Capacity Resources in a manner comparable to that in which each Transmission Owner integrates its Capacity Resources to serve its Native Load Customers.

## 230.2 Receipt of Capacity Interconnection Rights:

Generation accredited under the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region as a Generation Capacity Resource prior to the original effective date of [Tariff](#), Part IV shall have Capacity Interconnection Rights commensurate with the size in megawatts of the accredited generation. When a Generation Interconnection Customer's generation is accredited as deliverable through the applicable procedures in [Tariff](#), Part VI and [Tariff](#), Part VI ~~of the Tariff~~, the Generation Interconnection Customer also shall receive Capacity Interconnection Rights commensurate with the size in megawatts of the generation as identified in the Interconnection Service Agreement. Any Generation Owner of an Intermittent Resource or Environmentally Limited Resource which has been accredited as deliverable for additional Capacity Interconnection Rights for the winter period (defined as November through April of a Delivery Year) under the ~~Preamble of Tariff, Preamble~~, Part IV ~~of the Tariff~~, shall receive such Capacity Interconnection Rights as further documented in section 2.0 of the Specifications of the Interconnection Service Agreement of such Generation Owner for the year specified. Pursuant to applicable terms of [RAA](#), Schedule 10 ~~of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region~~, a Transmission Interconnection Customer may combine Incremental Deliverability Rights associated with Merchant Transmission Facilities with generation capacity that is not otherwise accredited as a Generation Capacity Resource for the purposes of obtaining accreditation of such generation as a Generation Capacity Resource and associated Capacity Interconnection Rights.

### **230.3 Loss of Capacity Interconnection Rights:**

#### **230.3.1 Operational Standards:**

To retain Capacity Interconnection Rights, the Generation Capacity Resource associated with the rights must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with RAA, Schedule 9 and the PJM Manuals. Generation Capacity Resources that meet these operational standards shall retain their Capacity Interconnection Rights regardless of whether they are available as a Generation Capacity Resource or are making sales outside the PJM Region.

#### **230.3.2 Failure to Meet Operational Standards:**

This section 230.3.2 shall apply only in circumstances other than Deactivation of a Generation Capacity Resource. In the event a Generation Capacity Resource fails to meet the operational standards set forth in Tariff, Part VI, section 230.3.1 for any consecutive three-year period (with the first such period commencing on the date the Interconnection Customer must demonstrate commercial operation of the generating unit(s) as specified in the Interconnection Service Agreement), the holder of the Capacity Interconnection Rights associated with such Generation Capacity Resource will lose its Capacity Interconnection Rights in an amount commensurate with the loss of generating capability. Any period during which the Generation Capacity Resource fails to meet the standards set forth in section 230.3.1 [above](#) as a result of an event that meets the standards of a force majeure event as defined in Tariff, Attachment O, Appendix 2, section 9.4 shall be excluded from such consecutive three-year period, provided that the holder of the Capacity Interconnection Rights exercises due diligence to remedy the event. A Generation Capacity Resource that loses Capacity Interconnection Rights pursuant to this section may continue Interconnection Service, to the extent of such lost rights, as an Energy Resource in accordance with (and for the remaining term of) its Interconnection Service Agreement and/or applicable terms of the Tariff.

#### **230.3.3 Replacement of Generation:**

In the event of the Deactivation of a Generation Capacity Resource (in accordance with Tariff, Part V and any Applicable Standards), or removal of Capacity Resource status (in accordance with Tariff, Attachment DD, section 6.6 or Tariff, Attachment DD, section 6.6A), any Capacity Interconnection Rights associated with such facility shall terminate one year from the Deactivation Date, or one year from the date the Capacity Resource status change takes effect, unless the holder of such rights (including any holder that acquired the rights after Deactivation or removal of Capacity Resource status) has submitted a new Generation Interconnection Request up to one year after the Deactivation Date, or up to one year from the date the Capacity Resource status changes take effect, which contemplates use of the same Capacity Interconnection Rights. The Interconnection Customer must provide written notification to the Transmission Provider that it intends to utilize such Capacity Interconnection Rights on or before the date the Interconnection Customer executes the System Impact Study Agreement associated with the Generation Interconnection Request for which it intends to utilize such Capacity Interconnection Rights. Notwithstanding the previous sentence, Interconnection Customers in

the New Services Queue prior to May 1, 2012 must provide written notice of intent to utilize such Capacity Interconnection Rights when it executes its Facilities Study Agreement or, if it has already executed its Facilities Study Agreement, then by November 1, 2012. Such notification of transfer of Capacity Interconnection Rights shall be posted on Transmission Provider's public website. Such new Generation Interconnection Request may include a request to increase Capacity Interconnection Rights in addition to the replacement of the previously deactivated amount, or amount removed from Capacity Resource status, as a single Generation Interconnection Request. Transmission Provider may perform thermal, short circuit, and/or stability studies, as necessary and in accordance with its manuals, due to any changes in the electrical characteristics of any newly proposed equipment, or where there is a change in Point of Interconnection, which may result in the loss of a portion or all of the Capacity Interconnection Rights as determined by such studies.

Upon execution of an Interconnection Service Agreement reflecting its new Interconnection Request, the holder of the Capacity Interconnection Rights will retain only such rights that are commensurate with the size in megawatts of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights associated with the facility upon Deactivation or removal of Capacity Resource status. Any desired increase in Capacity Interconnection Rights must be requested in the new Generation Interconnection Request and be accredited through the applicable procedures in Tariff, Part IV and Tariff, Part VI. In the event the new Interconnection Request to which this section refers is or is deemed to be terminated and/or withdrawn for any reason at any time, the pertinent Capacity Interconnection Rights shall not terminate until the end of the one year period from the Deactivation Date, or the end of the one year period from the date the Capacity Resource status change takes effect.

#### **230.4 Transfer of Capacity Interconnection Rights:**

Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by the Transmission Provider regarding such transfer and notice to the Transmission Provider of any generation facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in ~~S~~section 230.3 [above](#) regarding loss of Capacity Interconnection Rights.

### **231.1 Right of New Service Customer to Incremental Auction Revenue Rights:**

A New Service Customer that (a) pursuant to [Tariff, Part VI, Subpart B, S](#)~~section~~ 212.1, reimburses the Transmission Provider for the costs of, or (b) pursuant to its Construction Service Agreement undertakes responsibility for, constructing or completing Network Upgrades and/or Local Upgrades required to accommodate its New Service Request shall be entitled to receive the Incremental Auction Revenue Rights associated with such facilities and upgrades as determined in accordance with this ~~S~~[section](#) 231. In addition, an Interconnection Customer that executes an Upgrade Construction Service Agreement for Merchant Network Upgrades shall be entitled to receive the Incremental Auction Revenue Rights as determined in accordance with this ~~S~~[section](#) 231. However, a Transmission Interconnection Customer that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System shall be entitled to Incremental Auction Revenue Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to [Tariff, Part IV, S](#)~~section 36.1.03 of Part IV of the Tariff~~, to receive Incremental Auction Revenue Rights, Incremental Deliverability Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

## **231.2 Procedures for Assigning Incremental Auction Revenue Rights:**

No less than forty-five (45) days prior to the in-service date, as determined by the Office of the Interconnection, of the applicable Customer Facility or of a transmission facility or upgrade related to a New Service Request, the Office of the Interconnection shall notify the New Service Customer(s) which have responsibility to reimburse the costs of, or responsibility for, constructing or completing the facility or upgrade, that initial requests for Incremental Auction Revenue Rights associated with the facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with ~~S~~section 231.3 ~~below of the Tariff~~.

In round two, two-thirds of the Incremental Auction Revenue Rights available for each requested point-to-point combination in that round will be assigned in accordance with ~~S~~section 231.3 ~~below of the Tariff~~. In round three, all available Incremental Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with ~~S~~section 231.3 ~~below of the Tariff~~. In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental Auction Revenue Rights assignment in rounds one and two will result in the Incremental Auction Revenue Rights being available for the next round. The Incremental Auction Revenue Rights assignments made in round three will be final and binding. The final and binding Incremental Auction Revenue Right assignment for a requested point-to-point combination in each round shall in no event be less than one third of 80% and no greater than one-third of 100% of the non-binding estimate of Incremental Auction Revenue Rights for that point-to-point combination that was provided to the New Service Customer under Tariff, Part VI, Subpart A, Ssection 206.5.2. For each round, a request for Incremental Auction Revenue Rights shall specify a single point-to-point combination for which the New Service Customer desires Incremental Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the facility or upgrade.

### **231.3 Determination of Incremental Auction Revenue Rights to be Provided to New Service Customer:**

The Office of the Interconnection shall determine the Incremental Auction Revenue Rights to be provided to New Service Customers associated with a particular transmission facility or upgrade pursuant to ~~S~~section 231.2 above using the tools described in Tariff, Attachment K ~~to the Tariff~~, including an assessment of the simultaneous feasibility of any Incremental Auction Revenue Rights and all other outstanding Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system Auction Revenue Right capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate New Service Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the Auction Revenue Rights capability, including the impact of any new facilities and upgrades. For each point-to-point combination, the Incremental Auction Revenue Right capability shall be the difference between the Auction Revenue Right capability in the base system analysis and the Auction Revenue Right capability in the analysis including the impact of the new facilities and upgrades. When multiple New Service Customers have cost responsibility for the same new transmission facility or upgrade, Incremental Auction Revenue Rights shall be assigned to each New Service Customer in proportion to the New Service Customers' relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or interfaces of the point-to-point combinations selected by the New Service Customers.



## **231.4 Reallocation of Incremental Auction Revenue Rights:**

(1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating a New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate a New Service Request that was part of an earlier New Services Queue, provided that such previously-constructed facility or upgrade meets the criteria stated in [Tariff, Part VI, Subpart B, Ssection 219](#), and

(b) such New Service Customer (hereafter in this section, the "Current Customer") executes, as applicable, an Interconnection Service Agreement or an Upgrade Construction Service Agreement.

Upon determining that this section applies, the Office of the Interconnection shall:

(c) notify each New Service Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Customer") of the portion of the costs of such facility or upgrade for which the Current Customer is determined to be responsible, and

(d) afford each such Preceding Customer, subject to the terms of this [Ssection 231.4](#), an opportunity to obtain, in exchange for a proportional share (as determined in accordance with [Ssection 231.3 above](#)) of the Incremental Auction Revenue Rights associated with such facility or upgrade that the Preceding Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Customer paid or incurred that is proportional to the cost responsibility of the Current Customer for such facility or upgrade.

(2) A Preceding Customer shall have no obligation to exchange Incremental Auction Revenue Rights for cost reimbursement pursuant to this section. In the event, however, that a Preceding Customer chooses not to relinquish Incremental Auction Revenue Rights associated with a previously-constructed facility or upgrade, the Current Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Customer bore cost responsibility.

(3) In the event that a Preceding Customer elects to exchange Incremental Auction Revenue Rights for cost reimbursement pursuant to this section, (a) the Preceding Customer shall relinquish the Incremental Auction Revenue Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental Auction Revenue Rights that the Preceding Customer agreed to exchange; and (c) the Office of the Interconnection shall assign Incremental Auction Revenue Rights associated with the previously-constructed facility or upgrade to the Current Customer in accordance with the following:

(i) in the event that more than one Current Customer is contemporaneously eligible for a reallocation of Incremental Auction Revenue Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of ~~S~~section 231.2 above to reallocate the Incremental Auction Revenue Rights made feasible by retirement of the Incremental Auction Revenue Rights relinquished by the Preceding Customer;

(ii) in all other instances, the Current Customer shall be entitled to assignment of either (A) the Incremental Auction Revenue Rights associated with the pertinent facility or upgrade that the Preceding Customer relinquished pursuant to this section, or (B) any new Incremental Auction Revenue Rights that are made feasible by retirement of the Incremental Auction Revenue Rights relinquished by the Preceding Customer, provided, however,

(iii) that if it is not feasible to assign Incremental Auction Revenue Rights associated with the pertinent facility or upgrade to the Current Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental Auction Revenue Rights that can be feasibly assigned to it, and (B) the Preceding Customer's Incremental Auction Revenue Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Customer's final cost responsibility. In the event of a reduction in the Current Customer's cost responsibility for a previously-constructed facility or upgrade pursuant to this subsection (3)(c)(iii), Transmission Provider shall refund to the Current Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this ~~S~~section-231.4 and the amount of its final cost responsibility for the pertinent facility or upgrade. Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Customer an amount that is proportional to the Current Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental Auction Revenue Rights relinquished by the Preceding Customer.

(4) A Preceding Customer that elects to exchange rights for cost reimbursement pursuant to this section must exchange all Incremental Auction Revenue Rights and all other Upgrade-Related Rights associated with the same Local Upgrade and/or Network Upgrade.

(5) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental Auction Revenue Rights pursuant to this section- and shall complete the reallocation process before the date of, as applicable, commencement of Interconnection Service, Transmission Service or Network Service for the Current Customer, or completion of the Customer-Funded Upgrade that precipitated the reallocation of such rights.

### **231.5 Duration of Incremental Auction Revenue Rights:**

Incremental Auction Revenue Rights received by a New Service Customer pursuant to this section shall be available as of the first day of the first month that the Network Upgrades and/or Local Upgrades required to accommodate its New Service Request that are associated with the Incremental Auction Revenue Rights are included in the transmission system model for the monthly FTR auction and shall continue to be available for thirty (30) years or for the life of the associated facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all Auction Revenue Rights (including Incremental Auction Revenue Rights) in accordance with the ~~Appendix to~~ [Tariff, Attachment K-Appendix](#). At any time during this thirty-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this thirty-year Auction Revenue Right, the New Service Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to [Tariff, Attachment K-Appendix, Section 7.4.2](#) ~~of the Appendix to Attachment K of the Tariff~~) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to [Tariff, Attachment K-Appendix, Section 7.5](#) ~~of the Appendix to Attachment K of the Tariff~~. A New Service Customer may return Incremental Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding Auction Revenue Rights following the return of such Auction Revenue Rights. In the event a New Service Customer returns Incremental Auction Revenue Rights, the New Service Customer shall have no further rights regarding such Incremental Auction Revenue Rights.

### **231.5A Value of Incremental Auction Revenue Rights:**

The value of Incremental Auction Revenue Rights to be provided to a New Service Customer associated with a particular transmission facility or upgrade pursuant to ~~S~~section 231.2 [above](#) that become effective at the beginning of a Planning Period shall be determined in the same manner as annually allocated Auction Revenue Rights based on the nodal prices resulting from the annual Financial Transmission Rights auction. The value of such Incremental Auction Revenue Rights that become effective after the commencement of a Planning Period shall be determined on a monthly basis for each month in the Planning Period beginning with the month the Incremental Auction Revenue Right(s) becomes effective. The value of such Incremental Auction Revenue Right shall be equal to the megawatt amount of the Incremental Auction Revenue Rights multiplied by the LMP differential between the source and sink nodes of the corresponding FTR obligations in each prompt-month FTR auction that occurs from the effective date of the Incremental Auction Revenue Rights through the end of the relevant Planning Period. For each Planning Period thereafter, the value of such Incremental Auction Revenue Rights shall be determined in the same manner as Incremental Auction Revenue Rights that became effective at the beginning of a Planning Period.

### **232.1 Purpose:**

Transmission Injection Rights shall entitle the holder, as provided in this [Section 232](#), to schedule energy transmitted on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities for injection into the Transmission System at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System. Transmission Withdrawal Rights shall entitle the holder, as provided in this [Section 232](#), to schedule for transmission on the associated Merchant Transmission Facilities energy to be withdrawn from the Transmission System at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System.

## **232.2 Right of Interconnection Customer to Transmission Injection Rights and Transmission Withdrawal Rights:**

Provided that such customer elects pursuant to [Tariff, Part IV, Subpart A, Section 36.1.03](#) ~~of the Tariff~~ to receive Transmission Injection Rights and/or Transmission Withdrawal Rights in lieu of Incremental Deliverability Rights, Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights, and subject to the terms of this ~~Section~~ [section](#) 232, a Transmission Interconnection Customer that constructs Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with the Transmission System and with another control area outside the PJM Region shall be entitled to receive Transmission Injection Rights and/or Transmission Withdrawal Rights at each terminal where such customer's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. A Transmission Interconnection Customer that is granted Firm Transmission Withdrawal Rights and/or transmission customers that have a Point of Delivery at the Border of PJM where the Transmission System interconnects with the Merchant D.C. Transmission Facilities may be responsible for a reasonable allocation of transmission upgrade costs added to the Regional Transmission Expansion Plan after such Transmission Interconnection Customer's Queue Position is established, in accordance with [Tariff, Part I, Section 3E](#) and [Tariff, Schedule 12](#) ~~of the Tariff~~. Notwithstanding the foregoing, any Transmission Injection Rights and Transmission Withdrawal Rights awarded to an Interconnection Customer that interconnects Controllable A.C. Merchant Transmission Facilities shall be, throughout the duration of the Interconnection Service Agreement applicable to such interconnection, conditioned on such customer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

### **232.2.1 Total Capability:**

A Transmission Interconnection Customer or other party may hold Transmission Injection Rights and Transmission Withdrawal Rights simultaneously at the same terminal on the Transmission System. However, neither the aggregate Transmission Injection Rights nor the aggregate Transmission Withdrawal Rights held at a terminal may exceed the Nominal Rated Capability of the interconnected Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, as stated in the associated Interconnection Service Agreement.

#### **232.4 Duration of Transmission Injection Rights and Transmission Withdrawal Rights:**

| Subject to the terms of [Section 232.7](#) below, Transmission Injection Rights and/or Transmission Withdrawal Rights received by a Transmission Interconnection Customer shall be effective for the life of the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities.

### **232.6 Transfer of Transmission Injection Rights and Transmission Withdrawal Rights:**

Transmission Injection Rights and/or Transmission Withdrawal Rights may be sold or otherwise transferred subject to compliance with such procedures as Transmission Provider may establish (by publication in the PJM Manuals) regarding such transfer and required notice to the Transmission Provider of use of such rights after the transfer. The transfer of Transmission Injection Rights or of Transmission Withdrawal Rights shall not itself extend the periods set forth in ~~S~~section 232.7 [below](#) regarding loss of such rights.



## **232.7 Loss of Transmission Injection Rights and Transmission Withdrawal Rights:**

### **232.7.1 Operational Standards:**

To retain Transmission Injection Rights and Transmission Withdrawal Rights, the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with applicable criteria stated in the PJM Manuals. Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that meet these operational standards shall retain their Transmission Injection Rights and Transmission Withdrawal Rights regardless of whether they are used to transmit energy within or to points outside the PJM Region.

### **232.7.2 Failure ~~T~~to Meet Operational Standards:**

In the event that any Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities fail to meet the operational standards set forth in ~~S~~section 232.7.1 above ~~of the Tariff~~ for any consecutive three-year period, the holder(s) of the associated Transmission Injection Rights and Transmission Withdrawal Rights will lose such rights in an amount reflecting the loss of first contingency transfer capability. Any period during which the transmission facility fails to meet the standards set forth in ~~S~~section 232.7.1 above as a result of an event that meets the standards of a force majeure event as defined in Tariff, Attachment O, Appendix 2, section 9.4 ~~of Attachment O, Appendix 2 of the Tariff~~ shall be excluded from such consecutive three-year period, provided that the owner of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities exercises due diligence to remedy the event.

### **233.1 Right of Transmission Interconnection Customer to Incremental Available Transfer Capability Revenue Rights:**

An Interconnection Customer that interconnects a Customer Facility with the Transmission System shall be entitled to receive any Incremental Available Transfer Capability Revenue Rights that are associated with the interconnection of such facility as determined in accordance with this section. In addition, a New Service Customer that (a) reimburses the Transmission Provider for the costs of, or (b) pursuant to its Construction Service Agreement undertakes responsibility for, constructing or completing required Customer-Funded Upgrades to accommodate its New Service Request shall be entitled to receive any Incremental Available Transfer Capability Revenue Rights associated with such required facilities and upgrades as determined in accordance with this section.

#### **233.1.1 Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities:**

An Interconnection Customer (a) that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Available Transfer Capability Revenue Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under [Tariff](#), Attachment C ~~to the Tariff~~.

### **233.5 Reallocation of Incremental Available Transfer Capability Revenue Rights:**

(1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating a New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate a New Service Request that was part of an earlier New Services Queue, provided that such previously-constructed facility or upgrade meets the criteria stated in [Tariff, Part VI, Subpart B, Ssection 219](#), and

(b) such New Service Customer (hereafter in this section, the "Current Customer") executes, as applicable, an Interconnection Service Agreement or Upgrade Construction Service Agreement.

Upon determining that this section applies, the Office of the Interconnection:

(c) shall notify each New Service Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Customer") of the portion of the costs of such facility or upgrade for which the Current Customer is determined to be responsible, and (d) shall afford each such Preceding Customer, subject to the terms of this [Ssection 233.5](#), an opportunity to obtain, in exchange for a proportional share (as determined in accordance with [Ssection 233.2 above](#)) of the Incremental Available Transfer Capability Revenue Rights associated with such facility or upgrade that the Preceding Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Customer paid or incurred that is proportional to the cost responsibility of the Current Customer for such facility or upgrade.

(2) A Preceding Customer shall have no obligation to exchange Incremental Available Transfer Capability Revenue Rights for cost reimbursement pursuant to this section, provided, however, that in the event that a Preceding Customer chooses not to relinquish Incremental Available Transfer Capability Revenue Rights associated with a previously-constructed facility or upgrade, the Current Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Customer bore cost responsibility.

(3) In the event that a Preceding Customer elects to exchange Incremental Available Transfer Capability Revenue Rights for cost reimbursement pursuant to this section, (a) the Preceding Customer shall relinquish the Incremental Available Transfer Capability Revenue Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental Available Transfer Capability Revenue Rights that the Preceding Customer agreed to exchange; and (c) the Office of the Interconnection shall assign Incremental Available Transfer

Capability Revenue Rights associated with the previously-constructed facility or upgrade to the Current Customer in accordance with the following:

(i) in the event that more than one Current Customer is contemporaneously eligible for a reallocation of Incremental Available Transfer Capability Revenue Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of ~~S~~section 233.2 above to reallocate the Incremental Available Transfer Capability Revenue Rights made feasible by retirement of the Incremental Available Transfer Capability Revenue Rights relinquished by the Preceding Customer;

(ii) in all other instances, the Current Customer shall be entitled to assignment of either (A) the Incremental Available Transfer Capability Revenue Rights associated with the pertinent facility or upgrade that the Preceding Customer relinquished pursuant to this section, or (B) any new Incremental Available Transfer Capability Revenue Rights that are made feasible by retirement of the Incremental Available Transfer Capability Revenue Rights relinquished by the Preceding Customer, provided, however,

(iii) that if it is not feasible to assign Incremental Available Transfer Capability Revenue Rights associated with the pertinent facility or upgrade to the Current Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental Available Transfer Capability Revenue Rights that can be feasibly assigned to it, and (B) the Preceding Customer's Incremental Available Transfer Capability Revenue Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Customer's final cost responsibility. In the event of a reduction in the Current Customer's cost responsibility for a previously-constructed facility or upgrade pursuant to this subsection (3)(c)(iii), Transmission Provider shall refund to the Current Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this ~~S~~section ~~233.5~~ and the amount of its final cost responsibility for the pertinent facility or upgrade. Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Customer an amount that is proportional to the Current Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental Available Transfer Capability Revenue Rights relinquished by the Preceding Customer.

(4) A Preceding Customer that elects to exchange rights for cost reimbursement pursuant to this section must exchange all Incremental Auction Revenue Rights and all other Upgrade-Related Rights associated with the same Local Upgrade and/or Network Upgrade.

(5) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental Available Transfer Capability Revenue Rights pursuant to this section and shall complete the reallocation process before the date of, as applicable, commencement of Interconnection Service, Transmission Service, or Network Service for the Current Customer, or completion of the Customer-Funded Upgrade that precipitated the reallocation of such rights.

### **233.7 Compensation for Utilization of Incremental Available Transfer Capability Revenue Rights:**

At any time during the effective life, as specified in ~~S~~section 233.4 [above](#), of Incremental Available Transfer Capability Revenue Rights held by an Interconnection Customer that such rights are utilized to accommodate a subsequent Interconnection Request, the Interconnection Customer holding such rights will be compensated to the extent such rights are utilized according to the PJM Manuals.

## **234.1 Right of New Service Customers to Incremental Capacity Transfer Rights:**

A Transmission Interconnection Customer that interconnects Merchant Transmission Facilities with the Transmission System shall be entitled to receive any Incremental Capacity Transfer Rights that are associated with the interconnection of such Merchant Transmission Facilities as determined in accordance with this section. In addition, a New Service Customer that (a) reimburses the Transmission Provider for the costs of, or (b) pursuant to its Construction Service Agreement, undertakes responsibility for, constructing or completing Customer-Funded Upgrades shall be entitled to receive any Incremental Capacity Transfer Rights associated with such required facilities and upgrades as determined in accordance with this section.

### **234.1.1 Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities:**

An Interconnection Customer (a) that interconnects Merchant D.C. transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Capacity Transfer Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under [Tariff](#), Attachment C ~~to the Tariff~~.

### **234.3 Determination of Incremental Capacity Transfer Rights to be Provided to New Service Customer:**

The Office of the Interconnection shall determine the Incremental Capacity Transfer Rights to be provided to New Service Customers in accordance with the applicable terms of [Tariff](#), Attachment DD-~~of the Tariff~~ and pursuant to the procedures specified in the PJM Manuals.

## **234.5 Reallocation of Incremental Capacity Transfer Rights:**

(1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating an New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate an New Service Request that was part of an earlier New Services Queue, provided that such previously-constructed facility or upgrade meets the criteria stated in [Tariff, Part VI, Subpart B, Ssection 219](#), and

(b) such New Service Customer (hereafter in this section, the "Current Customer") executes an Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable.

Upon determining that this section applies, the Office of the Interconnection:

(c) shall notify each New Service Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Customer") of the portion of the costs of such facility or upgrade for which the Current Customer is determined to be responsible, and

(d) shall afford each such Preceding Customer, subject to the terms of this [Ssection 234.5](#), an opportunity to obtain, in exchange for a proportional share (as determined in accordance with [Ssection 234.2 above](#)) of the Incremental Capacity Transfer Rights associated with such facility or upgrade that the Preceding Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Customer paid or incurred that is proportional to the cost responsibility of the Current Customer for such facility or upgrade.

(2) A Preceding Customer shall have no obligation to exchange Incremental Capacity Transfer Rights for cost reimbursement pursuant to this section, provided, however, that in the event that a Preceding Customer chooses not to relinquish Incremental Capacity Transfer Rights associated with a previously-constructed facility or upgrade, the Current Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Customer bore cost responsibility.

(3) In the event that a Preceding Customer elects to exchange Incremental Capacity Transfer Rights for cost reimbursement pursuant to this section, (a) the Preceding Customer shall relinquish the Incremental Capacity Transfer Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental Capacity Transfer Rights that the Preceding Customer agreed to exchange; and (c) the Office of the Interconnection shall assign



Incremental Capacity Transfer Rights associated with the previously-constructed facility or upgrade to the Current Customer in accordance with the following:

(i) in the event that more than one Current Customer is contemporaneously eligible for a reallocation of Incremental Capacity Transfer Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of ~~S~~section 234.2 above to reallocate the Incremental Capacity Transfer Rights made feasible by retirement of the Incremental Capacity Transfer Rights relinquished by the Preceding Customer;

(ii) in all other instances, the Current Customer shall be entitled to assignment of either (A) the Incremental Capacity Transfer Rights associated with the pertinent facility or upgrade that the Preceding Customer relinquished pursuant to this section, or (B) any new Incremental Capacity Transfer Rights that are made feasible by retirement of the Incremental Capacity Transfer Rights relinquished by the Preceding Customer, provided, however,

(iii) that if it is not feasible to assign Incremental Capacity Transfer Rights associated with the pertinent facility or upgrade to the Current Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental Capacity Transfer Rights that can be feasibly assigned to it, and (B) the Preceding Customer's Incremental Capacity Transfer Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Customer's final cost responsibility. In the event of a reduction in the Current Customer's cost responsibility for a previously-constructed facility or upgrade pursuant to this subsection (3)(c)(iii), Transmission Provider shall refund to the Current Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this ~~S~~section ~~234.5~~ and the amount of its final cost responsibility for the pertinent facility or upgrade. Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Customer an amount that is proportional to the Current Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental Capacity Transfer Rights relinquished by the Preceding Customer.

(4) A Preceding Customer that elects to exchange rights for cost reimbursement pursuant to this section must exchange all Incremental Capacity Transfer Rights and all other Upgrade-Related Rights associated with the same Local Upgrade and/or Network Upgrade.

(5) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental Capacity Transfer Rights pursuant to this section and shall complete the reallocation process before the date of, as applicable, commencement of Interconnection Service, Network Service or Transmission Service for the Current Customer, or completion of the Customer-Funded Upgrade that precipitated the reallocation of such rights.

### **235.1 Right of Transmission Interconnection Customer to Incremental Deliverability Rights:**

A Transmission Interconnection Customer shall be entitled to receive the Incremental Deliverability Rights associated with its Merchant Transmission Facilities as determined in accordance with this section, provided, however, that a Transmission Interconnection Customer that proposes to interconnect Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area shall be entitled to Incremental Deliverability Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to [Tariff, Part IV, Subpart A, Section 36.1.03](#) ~~of the Tariff~~, to receive Incremental Deliverability Rights, Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

### **235.3 Determination of Incremental Deliverability Rights to be Provided to Interconnection Customer:**

Transmission Provider shall determine the Incremental Deliverability Rights to be provided to a Transmission Interconnection Customer associated with proposed Merchant Transmission Facilities under ~~S~~section 235.2 [above](#) pursuant to procedures specified in the PJM Manuals.

#### **235.4 Duration of Incremental Deliverability Rights:**

Incremental Deliverability Rights assigned to a Transmission Interconnection Customer shall be effective until the earlier of the date that is one year after the commencement of Interconnection Service for such customer or the date that such Transmission Interconnection Customer's Transmission Interconnection Request is withdrawn and terminated, or deemed to be so, in accordance with [Tariff, Part IV](#) or [Tariff, Part VI](#) ~~of the Tariff~~. Notwithstanding the preceding sentence, however, Incremental Deliverability Rights that are transferred pursuant to an IDR Transfer Agreement under [Tariff, Part VI, Subpart C, S](#)~~ection 237~~ ~~of the Tariff~~, shall be deemed to be Capacity Interconnection Rights of the generator that acquires them under such agreement upon commencement of Interconnection Service related to the generator's generation facility and shall remain effective for the life of such generation facility, or for the life of the Merchant Transmission Facilities associated with the transferred IDRs, whichever is shorter. The deemed conversion of IDRs to Capacity Interconnection Rights under this ~~S~~[S](#)ection 235.4 shall not affect application to such IDRs of the other provisions of [this S](#)~~ection 235~~ ~~of the Tariff~~. A Transmission Interconnection Customer may return Incremental Deliverability Rights that it no longer desires at any time. In the event that a Transmission Interconnection Customer returns Incremental Deliverability Rights, it shall have no further rights regarding such Incremental Deliverability Rights.

### **235.5 Transfer of Incremental Deliverability Rights:**

Incremental Deliverability Rights may be sold or otherwise transferred at any time after they are assigned pursuant to ~~S~~section 235.2 [above](#), subject to execution and submission of an IDR Transfer Agreement in accordance with [Tariff, Part VI, Subpart C](#), ~~S~~section 237 ~~of the Tariff~~. The transfer of Incremental Deliverability Rights shall not itself extend the periods set forth in [Tariff, Part VI, Subpart C](#), ~~S~~section 235.7 regarding loss of Incremental Deliverability Rights.

### **235.7 Loss of Incremental Deliverability Rights:**

Incremental Deliverability Rights shall be extinguished (a) in the event that the Transmission Interconnection Request of the Transmission Interconnection Customer to which the rights were assigned is withdrawn and terminated, or deemed to be so, as provided in [Tariff](#), Part IV or [Tariff](#), Part VI ~~of the Tariff~~, without regard for whether the rights have been transferred pursuant to an IDR Transfer Agreement, or (b) such rights are not transferred pursuant to an IDR Transfer Agreement on or before the date that is one year after the commencement of Interconnection Service related to the Merchant Transmission Facilities with which the rights are associated.

### **236.1 Qualification to Receive Certain Rights:**

In order to obtain the rights associated with Merchant Transmission Facilities (other than Merchant Network Upgrades) provided under this [Tariff, Part VI](#), Subpart C ~~of Part VI of the Tariff~~, prior to the commencement of Interconnection Service associated with such facilities, a Transmission Interconnection Customer that interconnects or adds Merchant Transmission Facilities (other than Merchant Network Upgrades) to the Transmission System must become and remain a signatory to the Consolidated Transmission Owners Agreement.

## 236.2 Upgrades to Merchant Transmission Facilities:

In the event that Transmission Provider determines in accordance with the Regional Transmission Expansion Planning Protocol of [Operating Agreement](#), Schedule 6 ~~of the Operating Agreement~~ that an addition or upgrade to Merchant A.C. Transmission Facilities is necessary, the owner of such Merchant A.C. Transmission Facilities shall undertake such addition or upgrade and shall operate and maintain all facilities so constructed or installed in accordance with Good Utility Practice and with applicable terms of the Operating Agreement and the Consolidated Transmission Owners Agreement, as applicable. Cost responsibility for each such addition or upgrade shall be assigned in accordance with [Operating Agreement](#), Schedule 6 ~~of the Operating Agreement~~. Each Transmission Owner to whom cost responsibility for such an upgrade is assigned shall further be responsible for all costs of operating and maintaining the addition or upgrade in proportion to its respective assigned cost responsibilities.



### **236.3 Limited Duration of Rights in Certain Cases:**

Notwithstanding any other provision of this Subpart C, in the case of any Merchant Transmission Facilities interconnected pursuant to [Tariff, Part VI](#) that solely involves advancing the construction of a transmission enhancement or expansion other than a Merchant Transmission Facility that is included in the Regional Transmission Expansion Plan, any rights available to such facility under this [Tariff, Part VI](#), Subpart C shall be limited in duration to the period from the inception of Interconnection Service for the affected Merchant Transmission Facility until the time when the Regional Transmission Expansion Plan originally provided for the pertinent transmission enhancement or expansion to be completed.

### **237.1 Purpose:**

An Interconnection Customer (hereafter in this ~~S~~section 237 the “Buyer Customer”) may acquire Incremental Deliverability Rights assigned to another Interconnection Customer (hereafter in this ~~S~~section 237, the “Seller Customer”) by entering into an IDR Transfer Agreement with the Seller Customer. Subject to the terms of this ~~S~~section 237, the Buyer Customer may rely upon such Incremental Deliverability Rights to satisfy, in whole or in part, its responsibility for Network Upgrades and/or Local Upgrades otherwise necessary to accommodate the Buyer Customer’s Interconnection Request.

### **237.3 Subsequent Election:**

A Buyer Customer that has submitted a valid IDR Transfer Agreement may elect to terminate its participation in any Network Upgrade or

Local Upgrade for which it has not previously made such an election, at any time prior to its execution of an Interconnection Service Agreement related to the Interconnection Request with respect to which it was assigned responsibility for the affected facility or upgrade. The Buyer Customer must notify Transmission Provider in writing of such an election and its election shall be subject to Transmission Provider's determination and confirmation under ~~S~~section 237.4 below~~of the Tariff.~~

## **237.4 Confirmation by Transmission Provider:**

### **237.4.1**

Transmission Provider shall determine whether and to what extent the Incremental Deliverability Rights transferred under an IDR Transfer Agreement would satisfy the deliverability requirements applicable to the Buyer Customer's Interconnection Request. Transmission Provider shall notify the parties to the IDR Transfer Agreement of its determination within 30 days after receipt of the agreement. If the Transmission Provider determines that the IDRs transferred under the proffered agreement would not satisfy, in whole or in part, the deliverability requirement applicable to the Buyer Customer's Interconnection Request, its notice to the parties shall explain the reasons for its determination and, to the extent of Transmission Provider's negative determination, the parties' IDR Transfer Agreement shall not be queued as an Interconnection Request pursuant to ~~S~~section 237.6 below. Any dispute regarding Transmission Provider's determination may be submitted to dispute resolution under Tariff, Part I, Ssection 12 ~~of the Tariff~~ or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5 ~~of the Operating Agreement~~.

### **237.4.2**

To the extent that an election of the Buyer Customer under ~~S~~section 237.2.2(b) above or ~~S~~section 237.3 above to terminate participation in any Network Upgrade or Local Upgrade is consistent with Transmission Provider's determination, Transmission Provider shall confirm Buyer's termination election and shall recalculate accordingly the Buyer Customer's cost responsibility under Tariff, Part VI, Subpart B, Ssection 217 ~~of the Tariff~~, as applicable. Transmission Provider shall provide its confirmation, along with any recalculation of cost responsibility, under this section in writing to the Buyer Customer within 30 days after receipt of notice of the Buyer Customer's election to terminate participation.

### **237.5 Effect of Election ~~On~~ Interconnection Request:**

In the event that the Buyer Customer, pursuant to a confirmed election under this ~~S~~section 237, terminates its participation in any Network Upgrade or Local Upgrade and the Interconnection Request underlying the Incremental Deliverability Rights acquired by the Buyer Customer under its IDR Transfer Agreement subsequently is terminated and withdrawn, or deemed to be so, under the terms of Tariff, Part IV or Tariff, Part VI ~~of the Tariff~~, then the Buyer Customer's Interconnection Request also shall be deemed to be concurrently terminated and withdrawn.

Tariff, Part VII  
TRANSITION CYCLE  
GENERATION INTERCONNECTION PROCEDURE

Tariff, Part VII, Subpart A  
INTRODUCTION

**Tariff, Part VII, Subpart A, section 300**  
**Definitions**

For purposes of these Generation Interconnection Procedures and any agreement set forth in Tariff, Part IX, in the event of a conflict between the definitions set forth herein and the definitions set forth in Tariff, Part I, the definitions set forth in these Generation Interconnection Procedures shall control.



**Tariff, Part VII, Subpart A, section 300**  
**Definitions A**

**Abnormal Condition:**

“Abnormal Condition” shall mean any condition on the Interconnection Facilities which, determined in accordance with Good Utility Practice, is: (i) outside normal operating parameters such that facilities are operating outside their normal ratings or that reasonable operating limits have been exceeded; and (ii) could reasonably be expected to materially and adversely affect the safe and reliable operation of the Interconnection Facilities; but which, in any case, could reasonably be expected to result in an Emergency Condition. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not, standing alone, constitute an Abnormal Condition.

**Affected System:**

“Affected System” shall mean an electric system other than the Transmission Provider’s Transmission System that may be affected by a proposed interconnection or on which a proposed interconnection or addition of facilities or upgrades may require modifications or upgrades to the Transmission System.

**Affected System Customer**

“Affected System Customer” shall mean the developer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider’s Transmission System,

**Affected System Facility**

“Affected System Facility” shall mean a new, expanded or upgraded generation or transmission facility outside of Transmission Provider’s Transmission System, the effect of which requires Network Upgrades to Transmission Provider’s Transmission System.

**Affected System Operator**

“Affected System Operator” shall mean an entity that operates an Affected System or, if the Affected System is under the operational control of an independent system operator or a regional transmission organization, such independent entity.

**Affected System Study Agreement**

“Affected System Study Agreement” shall mean the agreement set forth in Tariff, Part IX, Subpart N.

**Affiliate:**

“Affiliate” shall mean any two or more entities, one of which Controls the other or that are under common Control. “Control,” as that term is used in this definition, shall mean the possession, directly or indirectly, of the power to direct the management or policies of an entity. Ownership of publicly-traded equity securities of another entity shall not result in Control or affiliation for purposes of the Tariff or Operating Agreement if the securities are held as an investment, the holder owns (in its name or via intermediaries) less than 10 percent of the outstanding securities of the entity, the holder does not have representation on the entity’s board of directors (or equivalent managing entity) or vice versa, and the holder does not in fact exercise influence over day-to-day management decisions. Unless the contrary is demonstrated to the satisfaction of the Members Committee, Control shall be presumed to arise from the ownership of or the power to vote, directly or indirectly, 10 percent or more of the voting securities of such entity.

#### **Ancillary Services:**

“Ancillary Services” shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider’s Transmission System in accordance with Good Utility Practice.

#### **Applicable Laws and Regulations:**

“Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the relevant parties, their respective facilities, and/or the respective services they provide.

#### **Applicable Regional Entity:**

“Applicable Regional Entity” shall mean the Regional Entity for the region in which a Network Customer, Transmission Customer, Project Developer, Eligible Customer, or Transmission Owner operates.

#### **Applicable Standards:**

“Applicable Standards” shall mean the requirements and guidelines of NERC, the Applicable Regional Entity, the Control Area in which the Generating Facility or Merchant Transmission Facility is electrically located and the Transmission Owner FERC Form No. 715 – Annual Transmission Planning and Evaluation Report for each Applicable Regional Entity; the PJM Manuals; and Applicable Technical Requirements and Standards.

#### **Applicable Technical Requirements and Standards:**

“Applicable Technical Requirements and Standards” shall mean those certain technical requirements and standards applicable to interconnections of generation and/or transmission facilities with the facilities of an Transmission Owner or, as the case may be and to the extent applicable, of an Electric Distributor, as published by Transmission Provider in a PJM Manual.

All Applicable Technical Requirements and Standards shall be publicly available through postings on Transmission Provider's internet website.

**Application and Studies Agreement:**

"Application and Studies Agreement" shall mean the application that must be submitted by a Project Developer or Eligible Customer that seeks to initiate a New Service Request, a form of which is set forth in Tariff, Part VII, Subpart A. An Application and Studies Agreement must be submitted electronically through PJM's web site in accordance with PJM's Manuals.

**Application Deadline:**

"Application Deadline" shall mean the Cycle deadline for submitting a Completed New Service Request, as set forth in Tariff, Part VII, Subpart C, section 306(A). If Project Developer's or Eligible Customer's Completed New Service Request is received by Transmission Provider after a particular Cycle deadline, such Completed New Service Request shall automatically be considered as part of the immediate subsequent Cycle.

**Application Phase:**

"Application Phase" shall mean the Cycle period encompassing both the submission and review of New Service Requests as set forth in Tariff, Part VII, Subpart C, subsections 306(A) and 306(B).

**Tariff, Part VII, Subpart A, section 300**  
**Definitions B**

**Behind The Meter Generation:**

“Behind The Meter Generation” shall refer to a generation unit that delivers energy to load without using the Transmission System or any distribution facilities (unless the entity that owns or leases the distribution facilities has consented to such use of the distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection); provided, however, that Behind The Meter Generation does not include (i) at any time, any portion of such generating unit’s capacity that is designated as a Generation Capacity Resource; or (ii) in an hour, any portion of the output of such generating unit that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy Market.

**Breach:**

“Breach” shall mean the failure of a party to perform or observe any material term or condition of the Tariff, Part VII, or any agreement entered into thereunder as described in the relevant provisions of such agreement.

**Breaching Party:**

“Breaching Party” shall mean a party that is in Breach of the Tariff, Part VII and/or an agreement entered into thereunder.

**Business Day:**

“Business Day” shall mean a day ending at 5 pm Eastern prevailing time in which the Federal Reserve System is open for business and is not a scheduled PJM holiday.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions C**

**Cancellation Costs:**

“Cancellation Costs” shall mean costs and liabilities incurred in connection with: (a) cancellation of supplier and contractor written orders and agreements entered into to design, construct and install Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, and/or (b) completion of some or all of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, or specific unfinished portions and/or removal of any or all of such facilities which have been installed, to the extent required for the Transmission Provider and/or Transmission Owner(s) to perform their respective obligations under the Tariff, Part VII. Cancellation costs may include costs for Customer-Funded Upgrades assigned to Project Developer or Eligible Customer, in accordance with the Tariff and as reflected in this GIA, that remain the responsibility of Project Developer or Eligible Customer under the Tariff, even if such New Service Request is terminated or withdrawn.

**Capacity:**

“Capacity” shall mean the installed capacity requirement of the Reliability Assurance Agreement or similar such requirements as may be established.

**Capacity Interconnection Rights:**

“Capacity Interconnection Rights” shall mean the rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection.

**Capacity Resource:**

“Capacity Resource” shall have the meaning provided in the Reliability Assurance Agreement.

**Commencement Date:**

“Commencement Date” shall mean the date on which Interconnection Service commences in accordance with a Generation Interconnection Agreement.

**Common Use Upgrade:**

“Common Use Upgrade” or “CUU” shall mean a Network Upgrade that is needed for the interconnection of Generating Facilities or Merchant Transmission Facilities of more than one Project Developer or Eligible Customer and which is the shared responsibility of each Project Developer or Eligible Customer.

**Completed Application:**

“Completed Application” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

### **Completed New Service Request:**

“Completed New Service Request” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit(s). A Completed New Service Request, if accepted upon review, shall become a valid New Service Request.

### **Confidential Information:**

“Confidential Information” shall mean any confidential, proprietary, or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy, or compilation relating to the present or planned business of a Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party, which is designated as confidential by the party supplying the information, whether conveyed verbally, electronically, in writing, through inspection, or otherwise, and shall include, without limitation, all information relating to the producing party’s technology, research and development, business affairs and pricing, and any information supplied by any Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party to another such party prior to the execution of an Generation Interconnection Agreement or a Construction Service Agreement.

### **Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:**

“Consolidated Transmission Owners Agreement,” “PJM Transmission Owners Agreement” or “Transmission Owners Agreement” shall mean the certain Consolidated Transmission Owners Agreement dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

### **Constructing Entity:**

“Constructing Entity” shall mean either the Transmission Owner, Project Developer, Eligible Customer or Affected System Customer, depending on which entity has the construction responsibility pursuant to the Tariff, Part VII and the applicable GIA or Construction Service Agreement; this term shall also be used to refer to a Project Developer or Eligible Customer with respect to the construction of the Interconnection Facilities.

### **Construction Party:**

“Construction Party” shall mean a party to a Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or a party to a GIA that requires activities pursuant to a GIA.

### **Construction Service Agreement:**

“Construction Service Agreement” shall mean either an Interconnection Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

**Contingent Facilities:**

“Contingent Facilities” shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Control Area:**

“Control Area” shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common automatic generation control scheme is applied in order to:

(1) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);

(2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;

(3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and

(4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Controllable A.C. Merchant Transmission Facilities:**

“Controllable A.C. Merchant Transmission Facilities” shall mean transmission facilities that (1) employ technology which Transmission Provider reviews and verifies will permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were direct current transmission facilities, and (2) that are interconnected with the Transmission System pursuant to the Tariff, Part VII.

**Cost Responsibility Agreement:**

“Cost Responsibility Agreement” shall mean a form of agreement between Transmission Provider and a Project Developer with an existing generating facility, intended to provide the terms and conditions for the Transmission Provider to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner. A form of the Cost Responsibility Agreement is set forth in Tariff, Part IX, Subpart F.

### **Costs:**

As used in the Tariff, Part VII and related agreements and attachments, “Costs” shall mean costs and expenses, as estimated or calculated, as applicable, including, but not limited to, capital expenditures, if applicable, and overhead, return, and the costs of financing and taxes and any Incidental Expenses.

### **Customer-Funded Upgrade:**

“Customer-Funded Upgrade” shall mean any Network Upgrade, Distribution Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on a Project Developer or Eligible Customer pursuant to Tariff, Part VII, Subpart D, section 307(A)(5), or (ii) is voluntarily undertaken by an Upgrade Customer in fulfillment of an Upgrade Request. No Network Upgrade, Distribution Upgrade or Merchant Network Upgrade or other transmission expansion or enhancement shall be a Customer-Funded Upgrade if and to the extent that the costs thereof are included in the rate base of a public utility on which a regulated return is earned.

### **Cycle:**

“Cycle” shall mean that period of time between the start of an Application phase and conclusion of the corresponding Final Agreement Negotiation Phase. The Cycle consists of the Application Phase, Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.



**Tariff, Part VII, Subpart A, section 300**  
**Definitions D**

**Decision Point I:**

“Decision Point I” shall mean the time period that commences on the first Business Day immediately following Phase I of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point II:**

“Decision Point II” shall mean the time period that commences on the first Business Day immediately following Phase II of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point III:**

“Decision Point III” shall mean the time period that commences on the first Business Day immediately following Phase III of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Default:**

As used in the Generation Interconnection Agreement, Construction Service Agreement, and Network Upgrade Cost Responsibility Agreement, “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with the applicable provisions of a Generation Interconnection Agreement, Construction Service Agreement, or Network Upgrade Cost Responsibility Agreement.

**Distribution System:**

“Distribution System” shall mean the Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades:**

“Distribution Upgrades” shall mean the additions, modifications, and upgrades to the Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the delivery service necessary to affect Project Developer’s wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions E**

**Eligible Customer:**

“Eligible Customer” shall mean:

(i) Any electric utility (including any Transmission Owner and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner.

(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff. As used in Tariff, Part VII, Eligible Customer shall mean only those Eligible Customers that have submitted an Application and Study Agreement.

**Emergency Condition:**

“Emergency Condition” shall mean a condition or situation (i) that in the judgment of any Interconnection Party is imminently likely to endanger life or property; or (ii) that in the judgment of the Transmission Owner or Transmission Provider is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Transmission System, the Interconnection Facilities, or the transmission systems or distribution systems to which the Transmission System is directly or indirectly connected; or (iii) that in the judgment of Project Developer is imminently likely (as determined in a non-discriminatory manner) to cause damage to the Generating Facility or to the Project Developer Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions, provided that a Generation Project Developer is not obligated by a Generation Interconnection Agreement to possess black start capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one or more of the enumerated conditions or situations identified in this definition also exists.

**Energy Resource:**

“Energy Resource” shall mean a Generating Facility that is not a Capacity Resource.

**Energy Storage Resource:**

“Energy Storage Resource” shall mean a resource capable of receiving electric energy from the grid and storing it for later injection to the grid that participates in the PJM Energy, Capacity and/or Ancillary Services markets as a Market Participant

**Engineering and Procurement Agreement:**

“Engineering and Procurement Agreement” shall mean an agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request. An Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. A form of the Engineering and Procurement Agreement is set forth in Tariff, Part IX, Subpart D. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions F**

**Facilities Study:**

"Facilities Study" shall be an engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to: (1) determine the required modifications to the Transmission Provider's Transmission System necessary to implement the conclusions of the System Impact Studies; and (2) complete any additional studies or analyses documented in the System Impact Studies or required by PJM Manuals, and determine the required modifications to the Transmission Provider's Transmission System based on the conclusions of such additional studies.

**Federal Power Act:**

"Federal Power Act" shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a, et seq.

**FERC or Commission:**

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

**Final Agreement Negotiation Phase:**

"Final Agreement Negotiation Phase" shall mean the phase set forth in Tariff, Part VII, Subpart D, section 314 to tender, negotiate, and execute any service agreement in Tariff, Part IX.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions G**

**Generating Facility:**

“Generating Facility” shall mean Project Developer’s device for the production and/or storage for later injection of electricity identified in the New Service Request, but shall not include the Project Developer’s Interconnection Facilities. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**Generation Interconnection Agreement (“GIA”):**

“Generation Interconnection Agreement” (“GIA”) shall mean the form of interconnection agreement applicable to a Generation Interconnection Request or Transmission Interconnection Request. A form of the GIA is set forth in Tariff, Part IX, Subpart B.

**Generation Interconnection Procedures (“GIP”):**

“Generation Interconnection Procedures” (“GIP”) shall mean the interconnection procedures set forth in Tariff, Part VII.

**Generation Interconnection Request:**

“Generation Interconnection Request” shall mean a request by a Generation Project Developer pursuant to Tariff, Part VII, Subpart C, section 306(A)(1), to interconnect a generating unit with the Transmission System or to increase the capacity of a generating unit interconnected with the Transmission System in the PJM Region.

**Generation Project Developer:**

“Generation Project Developer” shall mean an entity that submits a Generation Interconnection Request to interconnect a new generation facility or to increase the capacity of an existing generation facility interconnected with the Transmission System in the PJM Region.

**Good Utility Practice:**

“Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act, section 215(a)(4).

**Governmental Authority:**

“Governmental Authority” shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, arbitrating body, or other governmental authority having jurisdiction over any Interconnection Party or Construction Party or regarding any matter relating to a Generation Interconnection Agreement or Construction Service Agreement, as applicable.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions H**

**Hazardous Substances:**

“Hazardous Substance” shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions I**

**Incidental Expenses:**

“Incidental Expenses” shall mean those expenses incidental to the performance of construction pursuant to an Interconnection Construction Service Agreement, including, but not limited to, the expense of temporary construction power, telecommunications charges, Interconnected Transmission Owner expenses associated with, but not limited to, document preparation, design review, installation, monitoring, and construction-related operations and maintenance for the Customer Facility and for the Interconnection Facilities.

**Incremental Auction Revenue Rights:**

“Incremental Auction Revenue Rights” shall mean the additional Auction Revenue Rights, not previously feasible, created by the addition of Incremental Rights-Eligible Required Transmission Enhancements, Merchant Transmission Facilities, or of one or more Customer-Funded Upgrades.

**Incremental Capacity Transfer Rights:**

“Incremental Capacity Transfer Right” shall mean a Capacity Transfer Right allocated to a Generation Project Developer or Transmission Project Developer obligated to fund a transmission facility or upgrade, to the extent such upgrade or facility increases the transmission import capability into a Locational Deliverability Area, or a Capacity Transfer Right allocated to a Responsible Customer in accordance with Tariff, Schedule 12A.

**Incremental Deliverability Rights (IDRs):**

“Incremental Deliverability Rights” (“IDR”) shall mean the rights to the incremental ability, resulting from the addition of Merchant Transmission Facilities, to inject energy and capacity at a point on the Transmission System, such that the injection satisfies the deliverability requirements of a Capacity Resource. Incremental Deliverability Rights may be obtained by a generator or a Generation Project Developer, pursuant to an IDR Transfer Agreement, to satisfy, in part, the deliverability requirements necessary to obtain Capacity Interconnection Rights.

**Initial Operation:**

“Initial Operation” shall mean the commencement of operation of the Generating Facility and Project Developer Interconnection Facilities after satisfaction of the conditions of Tariff, Part IX, Subpart B, Appendix 2, section 1.4.

**Interconnected Entity:**

“Interconnected Entity” shall mean either the Project Developer or the Transmission Owner; Interconnected Entities shall mean both of them.

**Interconnection Construction Service Agreement:**



“Interconnection Construction Service Agreement” shall mean the agreement entered into by an Project Developer, Transmission Owner and the Transmission Provider pursuant to this Tariff, Part VII in the form set forth in Tariff, Part IX, Subpart J or Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades, Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades and/or Transmission Owner Interconnection Facilities and coordination of the construction and interconnection of an associated Generating Facility.

**Interconnection Facilities:**

“Interconnection Facilities” shall mean the Transmission Owner’s Interconnection Facilities and the Project Developer’s Interconnection Facilities. Collectively Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modifications, additions, or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades, or Network Upgrades.

**Interconnection Party:**

“Interconnection Party” shall mean a Transmission Provider, Project Developer, or the Transmission Owner. Interconnection Parties shall mean all of them.

**Interconnection Request:**

“Interconnection Request” shall mean a Generation Interconnection Request, a Transmission Interconnection Request and/or an IDR Transfer Agreement.

**Interconnection Service:**

“Interconnection Service” shall mean the physical and electrical interconnection of the Generating Facility with the Transmission System pursuant to the terms of this Tariff, Part VII and the Generation Interconnection Agreement entered into pursuant thereto by Project Developer, the Transmission Owner and Transmission Provider.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions L**

**List of Approved Contractors:**

“List of Approved Contractors” shall mean a list developed by each Transmission Owner and published in a PJM Manual of (a) contractors that the Transmission Owner considers to be qualified to install or construct new facilities and/or upgrades or modifications to existing facilities on the Transmission Owner’s system, provided that such contractors may include, but need not be limited to, contractors that, in addition to providing construction services, also provide design and/or other construction-related services, and (b) manufacturers or vendors of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) whose products the Transmission Owner considers acceptable for installation and use on its system.

**Load Serving Entity (LSE):**

“Load Serving Entity” or “LSE” shall have the meaning specified in the Reliability Assurance Agreement.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions M**

**Material Modification:**

“Material Modification” shall mean, as determined through a Necessary Study, any modification to a Generation Interconnection Agreement that has a material adverse effect on the cost or timing of Interconnection Studies related to, or any Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades or Transmission Owner Interconnection Facilities needed to accommodate, any Interconnection Request with a later Cycle.

**Maximum Facility Output:**

“Maximum Facility Output” shall mean the maximum (not nominal) net electrical power output in megawatts, specified in the Generation Interconnection Agreement, after supply of any parasitic or host facility loads, that a Generation Project Developer’s Generating Facility is expected to produce, provided that the specified Maximum Facility Output shall not exceed the output of the proposed Generating Facility that Transmission Provider utilized in the System Impact Study.

**Maximum State of Charge:**

“Maximum State of Charge” shall mean the maximum State of Charge that should not be exceeded, measured in units of megawatt-hours.

**Merchant A.C. Transmission Facilities:**

“Merchant A.C. Transmission Facility” shall mean Merchant Transmission Facilities that are alternating current (A.C.) transmission facilities, other than those that are Controllable A.C. Merchant Transmission Facilities.

**Merchant D.C. Transmission Facilities:**

“Merchant D.C. Transmission Facilities” shall mean direct current (D.C.) transmission facilities that are interconnected with the Transmission System pursuant to the Tariff.

**Merchant Network Upgrades:**

“Merchant Network Upgrades” shall mean additions to, or modifications or replacements of, or advancement of additions to, or modifications or replacement of, physical facilities of the Transmission Owner that, on the date of the pertinent Upgrade Customer’s Upgrade Request, are part of the Transmission System or are included in the Regional Transmission Expansion Plan, but that are not already subject to an already existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

### **Merchant Transmission Facilities:**

“Merchant Transmission Facilities” shall mean A.C. or D.C. transmission facilities that are interconnected with or added to the Transmission System pursuant to the Tariff, Part VII and that are so identified in Tariff, Attachment T, provided, however, that Merchant Transmission Facilities shall not include (i) any Project Developer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20, 2003 ; (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Tariff, Attachment T, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.

### **Merchant Transmission Provider:**

“Merchant Transmission Provider” shall mean an Project Developer that (1) owns, controls, or controls the rights to use the transmission capability of, Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area, (2) has elected to receive Transmission Injection Rights and Transmission Withdrawal Rights associated with such facility pursuant to this Tariff, Part VII, Subpart E, section 330, and (3) makes (or will make) the transmission capability of such facilities available for use by third parties under terms and conditions approved by the Commission and stated in the Tariff, consistent with Tariff, Part VII, Subpart E, section 319.

### **Metering Equipment:**

“Metering Equipment” shall mean all metering equipment installed at the metering points designated in the appropriate appendix to a Generation Interconnection Agreement.

### **Minimum State of Charge:**

“Minimum State of Charge” shall mean the minimum State of Charge that should be maintained in units of megawatt-hours.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions N**

**NERC:**

“NERC” shall mean the North American Electric Reliability Corporation or any successor thereto.

**Necessary Study Agreement:**

“Necessary Study Agreement” shall mean the form of agreement for preparation of one or more Necessary Studies, as set forth in Tariff, Part IX, Subpart G.

**Necessary Study:**

“Necessary Study(ies)” shall mean the assessment(s) undertaken by the Transmission Provider to determine whether a planned modification under Appendix 2, section 3.4.1 of the GIA will have a permanent material impact on the Transmission System and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice, and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the planned modifications. A form of the Necessary Study Agreement is set forth in Tariff, Part IX, Subpart G.

**Network Upgrade Cost Responsibility Agreement:**

“Network Upgrade Cost Responsibility Agreement” shall mean the agreement entered into by the Project Developer Parties and the Transmission Provider pursuant to this GIP, and in the form set forth in Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades and coordination of the construction and interconnection of associated Generating Facilities. In regard to Common Use Upgrades, a separate Network Upgrade Cost Responsibility Agreement will be executed for each set of Common Use Upgrades on the system of a specific Transmission Owner that is associated with the interconnection of a Generating Facility.

**Network Upgrades:**

“Network Upgrades” shall mean modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System. Network Upgrades shall include Stand Alone Network Upgrades which are Network Upgrades that are not part of an Affected System; only serve the Generating Facility or Merchant Transmission Facility; and have no impact or potential impact on the Transmission System until the final tie-in is complete. Both Transmission Provider and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in the GIA, Schedule L or in the Interconnection Construction Service Agreement, Schedule D. If the Transmission Provider and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Project Developer a written technical explanation outlining why the

Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**New Service Request:**

“New Service Request” shall mean an Interconnection Request or a Completed Application.

**Nominal Rated Capability:**

“Nominal Rated Capability” shall mean the nominal maximum rated capability in megawatts of a Transmission Project Developer’s Generating Facility or the nominal increase in transmission capability in megawatts of the Transmission System resulting from the interconnection or addition of a Transmission Project Developer’s Generating Facility, as determined in accordance with pertinent Applicable Standards and specified in the Generation Interconnection Agreement.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions O**

**Open Access Same-Time Information System (OASIS) or PJM Open Access Same-Time Information System:**

“Open Access Same-Time Information System,” “PJM Open Access Same-Time Information System” or “OASIS” shall mean the electronic communication and information system and standards of conduct contained in Part 37 and Part 38 of the Commission’s regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS for the collection and dissemination of information about transmission services in the PJM Region, established and operated by the Office of the Interconnection in accordance with FERC standards and requirements.

**Operating Agreement of the PJM Interconnection, L.L.C., Operating Agreement or PJM Operating Agreement:**

“Operating Agreement of the PJM Interconnection, L.L.C.,” “Operating Agreement” or “PJM Operating Agreement” shall mean the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. dated as of April 1, 1997 and as amended and restated as of June 2, 1997, including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time thereafter, among the Members of the PJM Interconnection, L.L.C., on file with the Commission.

**Option to Build:**

“Option to Build” shall mean the option of the Project Developer to build certain Stand Alone Network Upgrades, as set forth in, and subject to the terms of, the Construction Service Agreement.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions P**

**Part I:**

“Part I” shall mean the Tariff Definitions and Common Service Provisions contained in Tariff, Part I, sections 1 through 12A.

**Part II:**

“Part II” shall mean Tariff, Part II, sections 13 through 27A pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part III:**

“Part III” shall mean Tariff, Part III, sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part IV:**

“Part IV” shall mean Tariff, Part IV, sections 36 through 112C pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VI:**

“Part VI” shall mean Tariff, Part VI, sections 200 through 237 pertaining to the queuing, study, and agreements relating to New Service Requests, and the rights associated with Customer-Funded Upgrades in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VII:**

“Part VII” shall mean Tariff, Part VII, sections 300 through 337 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VIII:**

“Part VIII” shall mean Tariff, Part VIII, sections 400 through 435 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the



applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

### **Part IX:**

“Part IX” shall mean Tariff, Part IX, section 500 and Subparts A through L pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

### **Parties:**

“Parties” shall mean the Transmission Provider, as administrator of the Tariff, and the Transmission Customer receiving service under the Tariff. PJMSettlement shall be the Counterparty to Transmission Customers.

### **Permissible Technological Advancement:**

"Permissible Technological Advancement" shall mean a proposed technological change such as an advancement to turbines, inverters, plant supervisory controls or other similar advancements to the technology proposed in the Interconnection Request that is submitted to the Transmission Provider no later than the end of Decision Point II. Provided such change may not: (i) increase the capability of the Generating Facility or Merchant Transmission Facility as specified in the original Interconnection Request; (ii) represent a different fuel type from the original Interconnection Request; or (iii) cause any material adverse impact(s) on the Transmission System with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response. If the proposed technological advancement is a Permissible Technological Advancement, no additional study will be necessary and the proposed technological advancement will not be considered a Material Modification.

### **Phase I**

“Phase I” shall start on the first Business Day immediately after the close of the Application Phase of a Cycle, but no earlier than 30 calendar days following the distribution of the Phase I System Impact Study Base Case Data. During Phase I, Transmission Provider shall conduct the Phase I System Impact Study.

### **Phase I System Impact Study:**

“Phase I System Impact Study” shall mean System Impact Study conducted during the Phase I System Impact Study Phase.

### **Phase II**

“Phase II” shall start on the first Business Day immediately after the close of Decision Point I Phase unless the Decision Point III of the immediately preceding Cycle is still open. In no event,

shall Phase II of a Cycle commence before the conclusion of Decision Point III of the immediately preceding Cycle. During Phase II, Transmission Provider shall conduct the Phase II System Impact Study.

### **Phase II System Impact Study:**

“Phase II System Impact Study” shall mean System Impact Study conducted during the Phase II System Impact Study Phase.

### **Phase III**

“Phase III” shall start on the first Business Day immediately after the close of Decision Point II, unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle. During Phase III, Transmission Provider shall conduct the Phase III System Impact Study.

### **Phase III System Impact Study:**

“Phase III System Impact Study” shall mean System Impact Study conducted during Phase III.

### **PJM:**

“PJM” shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

### **PJM Manuals:**

“PJM Manuals” shall mean the instructions, rules, procedures and guidelines established by the Office of the Interconnection for the operation, planning, and accounting requirements of the PJM Region and the PJM Interchange Energy Market.

### **PJM Region:**

“PJM Region” shall have the meaning specified in the Operating Agreement.

### **PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:**

“PJM Tariff,” “Tariff,” “O.A.T.T.,” “OATT,” or “PJM Open Access Transmission Tariff” shall mean that certain PJM Open Access Transmission Tariff, including any schedules, appendices or exhibits attached thereto, on file with FERC and as amended from time to time thereafter.

### **Point of Change in Ownership:**

“Point of Change in Ownership” shall mean the point, as set forth Schedule B of the Generation Interconnection Agreement, where the Project Developer’s Interconnection Facilities connect to the Transmission Owner’s Interconnection Facilities.

**Point of Interconnection:**

“Point of Interconnection” shall mean the point or points where the Interconnection Facilities connect with the Transmission System.

**Project Developer:**

“Project Developer” shall mean a Generation Project Developer and/or a Transmission Project Developer.

**Project Developer Interconnection Facilities:**

“Project Developer Interconnection Facilities” shall mean all facilities and equipment owned and/or controlled, operated and maintained by Project Developer on Project Developer’s side of the Point of Change of Ownership identified in the Schedule B of the Generation Interconnection Agreement, including any modifications, additions, or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System.

**Project Finance Entity:**

“Project Finance Entity” shall mean: (a) a holder, trustee or agent for holders, of any component of Project Financing; or (b) any purchaser of capacity and/or energy produced by the Generating Facility to which Project Developer has granted a mortgage or other lien as security for some or all of Project Developer’s obligations under the corresponding power purchase agreement.

**Provisional Interconnection Service:**

“Provisional Interconnection Service” shall mean interconnection service provided by Transmission Provider associated with interconnecting the Project Developer’s Generating Facility to Transmission Provider’s Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions Q**

**Qualifying Facility:**

“Qualifying Facility” shall mean means an electric energy generating facility that complies with the qualifying facility definition established by Public Utility Regulatory Policies Act (“PURPA”) and any FERC rules as amended from time to time (18 C.F.R. part 292, section 292.203 et seq.) implementing PURPA and, to the extent required to obtain or maintain Qualifying Facility status, is self-certified as a Qualifying Facility or is certified as a Qualified Facility by the FERC.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions R**

**Readiness Deposit:**

“Readiness Deposit” shall mean the deposit or deposits required by Tariff, Part VII, Subpart A, section 301(A)(3)(b).

**Reasonable Efforts:**

“Reasonable Efforts” shall mean, with respect to any action required to be made, attempted, or taken by an Interconnection Party under the Tariff, Part VII, a Generation Interconnection Agreement, or a Construction Service Agreement, such efforts as are timely and consistent with Good Utility Practice and with efforts that such party would undertake for the protection of its own interests.

**Regional Entity:**

“Regional Entity” shall have the same meaning specified in the Operating Agreement.

**Regional Transmission Expansion Plan:**

“Regional Transmission Expansion Plan” shall mean the plan prepared by the Office of the Interconnection pursuant to Operating Agreement, Schedule 6 for the enhancement and expansion of the Transmission System in order to meet the demands for firm transmission service in the PJM Region.

**Reliability Assurance Agreement or PJM Reliability Assurance Agreement:**

“Reliability Assurance Agreement” or “PJM Reliability Assurance Agreement” shall mean that certain Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, on file with FERC as PJM Interconnection L.L.C. Rate Schedule FERC No. 44, and as amended from time to time thereafter.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions S**

**Schedule of Work:**

“Schedule of Work” shall mean that Schedule of Work set forth in section 8.0 of a GIA, or Schedule of an ICSA, as applicable, setting forth the timing of work to be performed by the Constructing Entity(ies), based upon the System Impact Study(ies) and subject to modification, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Scope of Work:**

“Scope of Work” shall mean that scope of the work set forth in Specification section 3.0 of the GIA to be performed by the Constructing Entity(ies) pursuant to the Interconnection Construction Service Agreement, provided that such Scope of Work may be modified, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Secondary Systems:**

“Secondary Systems” shall mean control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers.

**Security:**

“Security” shall mean the financial guaranty provided by the Project Developer, Eligible Customer or Upgrade Customer pursuant to Tariff, Part VII, Subpart D, sections 309(A)(2)(i), 309(A)(3)(a), 311(a)(2)(d)(i)(a), 311(A)(2)(h), and 313(A)(1)(a), to secure the Project Developer’s, Eligible Customer’s or Upgrade Customer responsibility for Costs under an interconnection-related agreement set forth in Tariff, Part IX.

**Service Agreement:**

“Service Agreement” shall mean the initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

**Site:**

“Site” shall mean all of the real property including, but not limited to, any owned or leased real property, bodies of water and/or submerged land, and easements, or other forms of property rights acceptable to PJM, on which the Generating Facility or Merchant Transmission Facility is situated and/or on which the Project Developer Interconnection Facilities are to be located.

**Site Control:**

“Site Control” shall mean the evidentiary documentation provided by Project Developer in relation to a New Service Request demonstrating the requirements as set forth in the following Tariff, Part VII, Subpart A, section 302, and Tariff, Part VII, Subpart C, section 306, and Subpart D, sections 309 and 313.

**Stand Alone Network Upgrades:**

“Stand Alone Network Upgrades” shall mean Network Upgrades, which are not part of an Affected System, which a Project Developer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Specifications section 3.0 of Appendix L of the GIA. If the Transmission Provider or Transmission Owner and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider or Transmission Owner that disagrees with the Project Developer must provide the Project Developer a written technical explanation outlining why the Transmission Provider or Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**State:**

“State” shall mean the District of Columbia and any State or Commonwealth of the United States.

**State of Charge:**

“State of Charge” shall mean the operating parameter that represents the quantity of physical energy stored (measured in units of megawatt-hours) in an Energy Storage Resource Model Participant in proportion to its maximum State of Charge capability. State of Charge is quantified as defined in the PJM Manuals.

**Station Power:**

“Station Power” shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility; (iii) used in association with restoration or black start service; or (iv) that is Direct Charging Energy.

**Study Deposit:**

“Study Deposit” shall mean the payment in the form of cash required to initiate and fund any study provided for in Tariff, Part VII, Subpart A, section 301(A)(3)(a).

### **Surplus Project Developer:**

“Surplus Project Developer” shall mean either a Project Developer whose Generating Facility is already interconnected to the PJM Transmission System or one of its affiliates, or an unaffiliated entity that submits a Surplus Interconnection Request to utilize Surplus Interconnection Service within the Transmission System in the PJM Region.

### **Surplus Interconnection Service:**

“Surplus Interconnection Service” shall mean any unneeded portion of Interconnection Service established in a Generation Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

### **Switching and Tagging Rules:**

“Switching and Tagging Rules” shall mean the switching and tagging procedures of Transmission Owners and Project Developer as they may be amended from time to time.

### **System Impact Study:**

“System Impact Study” shall mean an assessment(s) by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a New Service Request, (ii) whether any additional costs may be incurred in order to provide such transmission service or to accommodate a New Service Request, and (iii) an estimated date that the New Service Requests can be interconnected with the Transmission System and an estimate of the cost responsibility for the interconnection of the New Service Request; and (iv) with respect to an Upgrade Request, the estimated cost of the requested system upgrades or expansion, or of the cost of the system upgrades or expansion, necessary to provide the requested incremental rights.

### **System Protection Facilities:**

“System Protection Facilities” shall refer to the equipment required to protect (i) the Transmission System, other delivery systems and/or other generating systems connected to the Transmission System from faults or other electrical disturbance occurring at or on the Generating Facility, and (ii) the Generating Facility from faults or other electrical system disturbance occurring on the Transmission System or on other delivery systems and/or other generating systems to which the Transmission System is directly or indirectly connected. System Protection Facilities shall include such protective and regulating devices as are identified in the Applicable Technical Requirements and Standards or that are required by Applicable Laws and Regulations or other Applicable Standards, or as are otherwise necessary to protect personnel and equipment and to minimize deleterious effects to the Transmission System arising from the Generating Facility.



**Tariff, Part VII, Subpart A, section 300**  
**Definitions T**

**Transition Date:**

“Transition Date” shall mean the later of: (i) the effective date of Transmission Provider’s Docket No. ER22-XXXX transition cycle filing seeking FERC acceptance of this Tariff, Part VII or (ii) the date by which all AD2 and prior queue window Interconnection Service Agreements or wholesale market participation agreements have been executed or filed unexecuted.

**Transmission Facilities:**

“Transmission Facilities” shall have the meaning set forth in the Operating Agreement.

**Transmission Injection Rights:**

“Transmission Injection Rights” shall mean Capacity Transmission Injection Rights and Energy Transmission Injection Rights.

**Transmission Interconnection Request:**

“Transmission Interconnection Request” shall mean a request by a Transmission Interconnection Project Developer pursuant to Tariff, Part VII, Subpart C, section 306(A)(4) to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of existing Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

**Transmission Owner:**

“Transmission Owner” shall mean a Member that owns or leases with rights equivalent to ownership Transmission Facilities and is a signatory to the PJM Transmission Owners Agreement. Taking transmission service shall not be sufficient to qualify a Member as a Transmission Owner.

**Transmission Owner Interconnection Facilities:**

“Transmission Owner Interconnection Facilities” shall mean all Interconnection Facilities that are not Project Developer Interconnection Facilities and that, after the transfer under Appendix 2, section 23.3.5 of the GIA to the Transmission Owner of title to any Transmission Owner Interconnection Facilities that the Project Developer constructed, are owned, controlled, operated and maintained by the Transmission Owner on the Transmission Owner’s side of the Point of Change of Ownership identified in appendices to the Generation Interconnection Agreement and if applicable, the Interconnection Construction Service Agreement, including any modifications, additions or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System or interconnected distribution facilities.

### **Transmission Owner Upgrades:**

“Transmission Owner Upgrades” shall mean Distribution Upgrades, Merchant Transmission Upgrades, Network Upgrades and Stand-Alone Network Upgrades.

### **Transmission Project Developer:**

“Transmission Project Developer” shall mean an entity that submits a request to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

### **Transmission Provider:**

The “Transmission Provider” shall be the Office of the Interconnection for all purposes, provided that the Transmission Owners will have the responsibility for the following specified activities:

(a) The Office of the Interconnection shall direct the operation and coordinate the maintenance of the Transmission System, except that the Transmission Owners will continue to direct the operation and maintenance of those transmission facilities that are not listed in the PJM Designated Facilities List contained in the PJM Manual on Transmission Operations;

(b) Each Transmission Owner shall physically operate and maintain all of the facilities that it owns; and

(c) When studies conducted by the Office of the Interconnection indicate that enhancements or modifications to the Transmission System are necessary, the Transmission Owners shall have the responsibility, in accordance with the applicable terms of the Tariff, Operating Agreement and/or the Consolidated Transmission Owners Agreement to construct, own, and finance the needed facilities or enhancements or modifications to facilities.

### **Transmission Service:**

“Transmission Service” shall mean Point-To-Point Transmission Service provided under Tariff, Part II on a firm and non-firm basis.

### **Transmission System:**

“Transmission System” shall mean the facilities controlled or operated by the Transmission Provider within the PJM Region that are used to provide transmission service under Tariff, Part II and Part III.

### **Transmission Withdrawal Rights:**

“Transmission Withdrawal Rights” shall mean Firm Transmission Withdrawal Rights and Non-Firm Transmission Withdrawal Rights.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions U**

**Upgrade Customer:**

“Upgrade Customer” shall mean an entity that submits an Upgrade Request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8, or that submits an Upgrade Request for Merchant Network Upgrades (including accelerating the construction of any transmission enhancement or expansion, other than Merchant Transmission Facilities, that is included in the Regional Transmission Expansion Plan prepared pursuant to Operating Agreement, Schedule 6).

**Upgrade Request:**

“Upgrade Request” shall mean a request submitted in the form prescribed in Tariff, Part IX, Subpart K, for evaluation by the Transmission Provider of the feasibility and estimated costs of (a) a Merchant Network Upgrade or (b) the Customer-Funded Upgrades that would be needed to provide Incremental Auction Revenue Rights specified in a request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions V**

**Valid Upgrade Request:**

“Valid Upgrade Request” shall mean an Upgrade Request that has been determined by Transmission Provider to meet the requirements of Tariff, Part VII, Subpart C, section 306 (application requirements).

**Tariff, Part VII, Subpart A, section 300**  
**Definitions W**

**Wholesale Market Participation Agreement (“WMPA”):**

“Wholesale Market Participation Agreement” (“WMPA”) shall mean the form of agreement intended to allow a Project Developer to effectuate in wholesale sales in the PJM markets. A form of the WMPA is set forth in Tariff, Part IX, Subpart C.

**Wholesale Transaction:**

“Wholesale Transaction” shall mean any transaction involving the transmission or sale for resale of electricity in interstate commerce that utilizes any portion of the Transmission System.

**Tariff, Part VII, Subpart A, section 301**  
**Transition Introduction**

**A. Introduction**

**1. Transition Cycle Overview**

Tariff, Part VII sets forth the procedures and other terms governing the Transmission Provider's administration of the transition to the new Cycle-process, including: procedures and other terms regarding studies and other processing of New Service Requests within the Transition Cycle; the nature and timing of the agreements required within the Transition Cycle in connection with the studies and construction of required facilities; and the terms and conditions relating to the rights available to Project Developers and Eligible Customers in the Transition Cycle. For purposes of this Tariff, Part VII, the term Project Developer shall include an Interconnection Customer as defined in Tariff, Part I. The Transition Cycle shall be comprised of two separate Transition Cycles (Transition Cycle No. 1; and Transition Cycle No. 2), and shall include the processing of backlogged New Service Requests received up to and including the AH1 queue.

2. Tariff, Part VII applies to any project for which the Project Developer, Eligible Customer or Upgrade Customer has submitted a New Service Request between April 1, 2018 and September 30, 2021, and for which, as of the Transition Date, Transmission Provider has not tendered for execution an Interconnection Service Agreement, Wholesale Market Participation Agreement or Upgrade Construction Service Agreement.

a. As of the Transition Date, valid AE1-AG1 projects that have not either executed or received for execution a final Interconnection Service Agreement or Wholesale Market Participation Agreement will have to demonstrate readiness pursuant to Tariff, Part VII, Subpart A, section 301(A)(3)(b), in order to move forward in the interconnection transition process.

i. As set forth in Tariff, Part VII, those projects that have demonstrated readiness and met additional eligibility may be able to advance using the Expedited Process.

b. Priority for projects in the Transition Cycle process is determined by the specific Transition Cycle in which a project's valid New Service Request was assigned.

i. Transition Cycle No. 1 will include re-queued AE1, AE2, AF1, AF2 and AG1 projects.

(a) Transition Cycle No. 1 will include: Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.

- (b) Phase III of Transition Cycle #1 will not start until after all valid projects in the Expedited Process have executed their relevant Generator Interconnection Agreement or Wholesale Market Participation Agreement.
  - ii. Transition Cycle No. 2 will include re-queued AG2 and AH1 projects.
    - (a) Transition Cycle No. 2 will include: the Application Review Phase, Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.
    - (b) The Phase I Base Case data release of Transition Cycle No. 2 will not start until after all Transition Cycle No. 1 Decision Point No. II activities have been completed.
    - (c) Phase II of Transition Cycle No. 2 will not start until after all Transition Cycle No. 1 Decision Point No. III activities have been completed.
    - (d) Phase III of Transition Cycle No. 2 will not start until after all Transition Cycle No. 1 Final Agreement Negotiation Phase activities have been completed.

### 3. Required Study Deposits and Readiness Deposits.

- a. Study Deposits. Pursuant to Tariff, Part VII, Subpart C, section 306(A)(5), each New Service Request must submit with its Application a Study Deposit, the amount of which will be determined based upon the MWs requested in such Application. Ten percent of the Study Deposit is non-refundable. Project Developer and Eligible Customers are responsible for actual study costs, which may exceed the Study Deposit amount.
  - i. If any Study Deposit monies remain after all System Impact Studies are completed and any outstanding monies owed by Project Developer or Eligible Customer in connection with outstanding invoices related to the present or prior New Service Requests have been paid, such remaining deposit monies shall be returned to the Project Developer or Eligible Customer at the conclusion of the required studies for the New Service Request.
- b. Readiness Deposits. Readiness Deposits are funds committed by the Project Developer or Eligible Customer based upon the MW size of the project and, where applicable, the study results.
  - i. Readiness Deposits are due at the following Phases of a Cycle:
    - (a) Readiness Deposit No. 1: Application Submission
    - (b) Readiness Deposit No. 2: Decision Point I; and

(c) Readiness Deposit No. 3: Decision Point II

ii. Readiness Deposits No. 2 and/or No. 3 may equal an amount equal to or greater than zero, but may never be a negative dollar amount.

iii. Readiness Deposit refunds will be handled as follows:

(a) If the project is withdrawn or terminated, the Readiness Deposit refunds for the project will be determined by the study phase at which the project was withdrawn or terminated, and adverse study results tests, as set forth below in Tariff, Part VII, Subpart D, section 311(B)(3)(c).

(b) When all Cycle New Service Requests have either entered into final agreements and the Decision Point III Site Control requirements have been met, or have been withdrawn, remaining Readiness Deposit funds will be dispositioned as follows:

(i) Transmission Provider will incorporate all project withdraws and retool analysis results to provide a final determination on the Network Upgrades that are required for the Cycle.

(ii) Underfunded Network Upgrades will be identified as those where one or more withdrawn New Service Requests that were identified as having a cost allocation in the Phase III analysis results. In the event that there are no underfunded Network Upgrades, all Readiness Deposits will be refunded.

(iii) Readiness Deposits will be applied to underfunded Network Upgrades on a pro-rata share of funds missing from the Phase III cost allocation. In the event that all underfunded Network Upgrades are made whole relative to the withdrawn New Service Requests, remaining Readiness Deposits will be refunded on a pro-rata share.

c. Study Deposits and Readiness Deposits are separate financial obligation, and non-transferrable and cannot be commingled. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific New Service Request be applied in whole or in part to a different New Service Request.

4. If Project Developer is proposing a Generating Facility that will physically connect to non-jurisdictional distribution or sub-transmission facilities for the purpose of engaging in wholesale sales in the PJM markets, such Project Developer must provide additional required information and documentation associated with the



non-jurisdictional arrangements, as set forth in Tariff, Part VII, Subpart D, sections 309 and 312 and Tariff, Part IX, Subpart C.

5. A Project Developer or Eligible Customer cannot combine, swap or exchange all or part of a New Service Request with any other New Service Request within the same or a different Cycle.
6. Prior to entering into a final agreement from Tariff, Part IX, a Project Developer or Eligible Customer may assign its New Service Request to another entity only if the acquiring entity:
  - a. as applicable, accepts and acquires the rights to the same Point of Interconnection and Point of Change of Ownership as identified in the New Service Request for such project;
  - b. and/or as applicable, accepts, as applicable, the same receipt and delivery points or the same source and sink points as stated in the New Service Request for such project.
7. Additional Interconnection-Related Agreements. In connection with interconnection with the Transmission System pursuant to Tariff, Part VIII, Project Developer may be required, or may elect, to enter into one or more of the following interconnection-related agreements:
  - a. Cost Responsibility Agreement. A Project Developer with an existing generating facility that is not a party to an interconnection agreement with Transmission Provider and the relevant Transmission Owner, that desires to enter into a GIA with Transmission Provider and Transmission Owner, shall be required to enter into a Cost Responsibility Agreement in the form set forth in Tariff, Part IX, Subpart F. The Cost Responsibility Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with Transmission Provider and Transmission Owner.
  - b. Engineering and Procurement Agreement. A Project Developer that wishes to advance the implementation of its Interconnection Request during Phase III of a Cycle may enter into an Engineering and Procurement Agreement with Transmission Provider and Transmission Owner, in the form set forth in Tariff, Part IX, Subpart D, to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. An Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

c. Necessary Study Agreement. A Project Developer that has entered into a GIA that plans to undertake modifications pursuant to that GIA to its Generating Facility or Merchant Transmission Facility shall be required to enter into a Necessary Study Agreement with Transmission Provider in the form set forth in Tariff, Part IX, Subpart G. The Necessary Study Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform the Necessary Study(ies) to determine: (a) the type and scope of the permanent material impact, if any, the change will have on the Transmission System; (b) the additions, modifications, or replacements to the Transmission System required to accommodate the change; and (c) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the change.

**Tariff, Part VII, Subpart A, section 302**  
**Site Control**

A. Site Control Evidentiary Requirements

Site Control is evidence provided by the Project Developer to Transmission Provider in relation to Project Developer's New Service Request demonstrating Project Developer's interest in, control over, and right to utilize the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities, and, if applicable, the Transmission Owner's Interconnection Facilities and/or Network Upgrades at the Point of Interconnection. Specific Site Control phase requirements are set forth in the following Tariff, Part VII, Subpart C, section 306, and Subpart D, sections 309 and 312.

1. Site Control consistent with the requirements herein is required for a project to have a valid position within a Cycle.
2. Proof of Site Control can be in the form of one of the following: (1) deed; (2) lease; (3) option to lease or purchase; or (4) as deemed acceptable by the Transmission Provider, any other contractual or legal right to possess, occupy and control the Site.
  - a. Memorandums are not acceptable.
  - b. Documentation solely evidencing an intent to purchase or control the Site is not acceptable.
  - c. Rights of Way are only acceptable for Project Developer Interconnection Facilities up to the Point of Interconnection.
  - d. Notwithstanding the foregoing, for a New Service Request, all or a portion of which requires the use of Sites owned or physically controlled by a state and/or federal governmental entity, and authorization for such use is subject to environmental and other state and/or federal governmental permitting requirements, including 42 U.S.C. § 4331 et seq. and any succeeding statutes, acceptable evidence of Site Control can be in any form the governmental entity issues. For Decision Point I and Decision Point III, Project Developers shall provide evidence that the Project Developer is taking identifiable steps acceptable to the Transmission Provider in furtherance of the issuance of such authorization by the state and/or federal governmental entity, including documentation sufficiently describing and explaining the source of and effects of such regulatory requirements, including a description of any conditions that must be met in order to satisfy the regulatory requirements and the anticipated time by which the Project Developer expects to satisfy the regulatory requirements. For Decision Point I and Decision Point III, Project Developers shall also identify any additional property rights for the

portion of the Site that is not owned or physically controlled by a state and/or federal governmental entity but which cannot be secured until the regulatory requirements have been met and authorization has been provided by the requisite state and/or federal governmental entity.

3. Demonstration of Site Control must include verification, to PJM's satisfaction, that the total feet or acreage ("acreage") of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, as set forth in the PJM Manuals.
  - a. The Project Developer must submit a Geographic Information System (GIS) Site Plan map and data files acceptable to PJM demonstrating the arrangement of the resource-specific proposed facilities for the amount of MW requested.
  - b. Any GIS Site Plan map and data files submitted in accordance with this section must be consistent with all other modeling data submitted in connection with Project Developer's New Service Request.
  - c. In the event of a disagreement between the Transmission Provider and the Project Developer over whether the total acreage of the Site is fully sufficient for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, Transmission Provider will accept a Professional Engineer (PE) stamped site plan drawing (licensed in the state of the facility location) that depicts the proposed generation arrangement and specifies the Maximum Facility Output for that arrangement.
    - i. Failure to verify to Transmission Provider's satisfaction that the total acreage of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility shall result in the New Service Request being deemed terminated and withdrawn.
4. Site Control must be in the name of the Project Developer identified on the corresponding New Service Request. Otherwise, the Project Developer must demonstrate to PJM's satisfaction the relationship between the entity owning or controlling the Site ("landowner" or "owner") with Site Control and the Project Developer identified on the New Service Request.
5. Project Developers are prohibited from submitting evidence of Site Control that utilizes the same Site for multiple New Service Requests unless the total acreage amount of such Site is adequate to support all such New Service Requests.
  - a. To the extent that multiple New Service Requests are submitted by a Project Developer using the same Site Control evidence and the total acreage amount of such Site is not adequate to support all such New Service

Requests, all such New Service Requests shall be deemed terminated and withdrawn.

b. To the extent that a Project Developer submits a New Service Request with Site Control evidence utilizing the Site that is also the subject of Site Control in New Service Requests submitted by other Project Developer's, such Project Developer shall include with its New Service Request evidence, to Transmission Provider's satisfaction, demonstrating that the project referenced in the Project Developer's New Service Request is concurrently feasible with the development of any other projects that will share the Site identified in the Site Control. Such proof of concurrent feasibility shall include:

i. Identification of any other New Service Requests that will share all or a portion of the Site identified in the Site Control; and

ii. Identification of the proposed location and space utilization of all projects that will share the Site, including acreage and boundaries for all projects sharing the Site identified in the Site Control; and

iii. Any related technical information required by the Transmission Provider to enable the Transmission Provider to determine that development of the project referenced in the submitted New Service Request is not inconsistent with development of any of the other New Service Requests that will share all or a portion of the same Site.

6. Multiple projects may share Project Developer Interconnection Facilities. A shared facilities agreement is required if jointly owned common Interconnection Facilities are proposed.

7. Project Developers are prohibited from submitting evidence of Site Control for the Site which is also the subject of an interconnect request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system. To the extent that Project Developers submit evidence of Site Control for the Site which is also the subject of an interconnection request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system, the relevant New Service Request submitted to Transmission Provider shall be deemed terminated and withdrawn.

8. Site Control must demonstrate three key elements: conveyance, term, and exclusivity:

a. Term

Term is the minimum duration required to evidence Site Control. The Term requirements vary, and are established in the following Tariff, Part VII

rules, at various points within a Cycle. The Term cannot be satisfied by an agreement with an initial term shorter than the requisite required term that has extensions, including unilateral extensions, unless those extensions have been exercised and any requisite conditions fulfilled, including any payment obligations, by the Project Developer at the time evidence of Site Control is provided to the Transmission Provider.

b. Exclusivity

With the exception of Tariff, Part VII, Subpart A, section 302(A)(5)(b), exclusivity is evidenced by written acknowledgement from the land owner provided to the Transmission Provider by the Project Developer as part of the Site Control that, for the Term, the Project Developer has exclusive use of the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities, and, if applicable, the Transmission Owner's Interconnection Facilities and/or Network Upgrades, and the landowner cannot make the Site Control identified for the Site available for purchase or lease, to any person or entity other than the Project Developer for any purpose or use that will interfere with the rights granted to Project Developer.

c. Conveyance

The Site Control evidence submitted by the Project Developer must demonstrate that the subject Site is or will be conveyed to the Project Developer, e.g., through a deed or an option to purchase or lease or other form of property rights acceptable to PJM, or that the Project Developer is guaranteed a right to future conveyance at Project Developer's sole discretion, e.g., through a deed or an option to purchase or lease or other forms of property rights acceptable to PJM, consistent with the Site Control Evidentiary Requirements provisions in Tariff, Part VII, Subpart C, section 302(A)(2), above.

9. At each point within a Cycle where a Project Developer is required to provide Site Control, the Project Developer shall also provide Site Control certification in a form set forth in PJM Manual 14G, executed by an officer or authorized representative of Project Developer, verifying that the Site Control requirements are met. At PJM's request, Project Developer shall provide copies of landowner attestations, county recordings, or other similar documentation acceptable to PJM to validate such Site Control certifications.

Tariff, Part VII, Subpart B  
AE1-AG1 TRANSITION CYCLE # 1

**Tariff, Part VII, Subpart B, section 303**  
**Transition Eligibility**

**A. Transition Eligibility**

Within 60 calendar days of the Transition Date, a Project Developer that submitted a valid Interconnection Request to Transmission Provider during the period April 1, 2018 through September 30, 2020 (the AE1 through AG1 New Services Queues) and who has not been tendered an Interconnection Service Agreement or Wholesale Market Participation Agreement under Tariff, Part VI, and whose New Service Request has not been withdrawn, shall:

1. Remit to and have received by Transmission Provider a Readiness Deposit of \$4,000/MW. Such payment shall be by wire transfer or posting of a letter of credit, and shall not be at-risk prior to the end of Decision Point I. Any Readiness Deposit provided, in whatever form, shall include the Project Identifier, conspicuously marked. Such Readiness Deposit shall be at-risk at the end of Decision Point I as set forth in Tariff, Part VII, Subpart D, section 309; and
2. Demonstrate Site Control over the Site for the purpose of constructing a Generating Facility or Merchant Transmission Facility through a deed, lease, or option for 100 percent of the Generation Facility Site including the location of the high-voltage side of the Generating Facility's main power transformer(s) for at least a one-year term beginning from the Transition Date, consistent with the requirements of Tariff, Part VII, Subpart B, section 302.
3. In the event the Project Developer fails to satisfy the requirements of subsections 303(A)(1) and (2) above, its New Service Request shall be deemed terminated and withdrawn. The New Service Request of a Project Developer that satisfies that the requirements of subsections 303(A)(1) and (2) above shall maintain its existing priority.
4. If the Transition Date does not fall on a Business Day, this time period shall conclude on the next Business Day.

No changes or modifications to a New Service Request will be permitted after the effective date of the Transition Cycle Filing, other than as otherwise permitted by this Tariff, Part VII.



**Tariff, Part VII, Subpart B, section 304**  
**AE1-AG1 Expedited Process Eligibility**

**A. Expedited Process Eligibility**

1. Project Developers who have met the requirements of Tariff, Part VII, Subpart B, section 303, shall be subject to an additional restudy to determine shared network upgrades impacts. Projects will be studied on the base case model that was used for their System Impact Study analysis prior to the effective date of the Transition Cycle Filing. A Project is not eligible for the expedited process if it has cost allocation eligibility or is identified as the first to cause, as determined according to Tariff, Part VI, section 217.3, for a Network Upgrade which has a total estimated cost of greater than \$5,000,000. Such cost estimate will be based on Transmission Provider's most recently available data.

All other Projects will be eligible for the expedited procedures set forth in Tariff, Part VII, Subpart B, section 304(B). A New Service Request that does not satisfy the expedited process eligibility criteria shall be reprioritized to Transition Cycle #1. The cost associated with the following factors shall not be considered as part of this analysis: (a) costs associated with Interconnection Facilities required to interconnect the Project Developer's New Service Request; and (b) the costs associated with approved baseline or supplemental projects as determined in accordance with the Regional Transmission Expansion Plan. Affected System impacts will also not be considered as part of this restudy. Transmission Provider shall post the results of this restudy on Transmission Provider's public web site.

2. Valid Upgrade Requests previously submitted in the AE1-AG1 queues will be eligible for the expedited process and are not subject to any additional readiness requirements.

**B. Expedited Process Rules**

Projects that have been determined to be eligible as set forth in Tariff, Part VII, Subpart B, section 304(A), will be allowed to enter the expedited process as follows:

- The cost of Interconnection Facilities is not considered when determining a project's eligibility for the expedited process;
- No additional Readiness Deposits or other readiness requirements will apply to expedited process projects;
- If a project is an uprate (project relies on the Interconnection Facilities of a prior project) whose base project does not qualify for the expedited process, the uprate also will not qualify for the expedited process, regardless of analysis results;
- If stability analysis or a sag study is completed during the expedited process, and it is determined that a project has an estimated Network Upgrade cost greater than \$5,000,000, the project will be removed from the expedited process and shifted to Transition Cycle #1

- If it is determined during the Facilities Study that the cost of a Network Upgrade is now estimated to be greater than \$5,000,000, the project will be removed from the expedited process and shifted to Transition Cycle #1.

Projects that enter the expedited process will have their Facilities Studies completed, and will be tendered an interconnection-related service agreement pursuant to Tariff, Part IX, pursuant to the following cost allocation rules.

Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

1. Cost Responsibility for Necessary Facilities and Upgrades:

- a. General: Each Project Developer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.
- b. Cost Responsibility for Accelerating Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of Network Upgrades that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Project Developer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Tariff, Schedule 12 as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

C. Rules for Transition Cycle #1 Projects

1. The procedures and other terms governing the Transmission Provider's administration of the studies required under the Transition Cycle #1 Phase process, and the nature and timing of such studies, are set forth below.
2. AE1-AG1 Projects that have cost allocation eligibility for a Network Upgrade of greater than \$5,000,000 as set forth in Tariff, Part VII, Subpart B, section 304(A), will be processed in Transition Cycle #1 cycle process.
  - a. Transition Cycle #1 will start after Transmission Provider completes the eligibility review for the Expedited Process and no later than one year from the Transition Date defined in Tariff, Part VII, Subpart A, section 300. Transition Cycle #1 will run simultaneously with the expedited process, however Transition Cycle #1, Phase III will not begin until all expedited process projects have been completed.
  - b. System Impact Studies
    - i. Introduction
      - (a) The Cycle process for Transition Cycle #1 includes three study Phases and three Decision Points:
        - (i) Phase I System Impact Study and Decision Point I; and
        - (ii) Phase II System Impact Study and Decision Point II; and
        - (iii) Phase III System Impact Study and Decision Point III
      - There is no Application Review Phase for Transition Cycle #1.
  - c. Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

Tariff, Part VII, Subpart C  
AG2-AH1 TRANSITION CYCLE #2

**Tariff, Part VII, Subpart C, section 305**  
**Introduction, Overview and Eligibility**

A. Introduction and Overview of AG2-AH1 Transition Cycle #2

1. AG2-AH1 Transition Cycle #2

Tariff, Part VII, Subpart C, section 305 applies to AG2 through AH1 projects in Transition Cycle #2, and sets forth the procedures and other terms governing the Transmission Provider's administration of the AG2 through AH1 Transition Cycle #2 approach; procedures and other terms regarding studies and other processing of New Service Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to New Service Customers.

2. To move forward in Transition Cycle #2, each Project Developer or Eligible Customer with valid projects in AG2 through AH1 must submit the Application and System Study Agreement in the form set forth in Tariff, Attachment IX and submit the required Study Deposit amounts and a Readiness Payment, as set forth below in Tariff, Part VII, Subpart C, section 306, Application Rules. The following restrictions apply to the Application and System Study Agreement to be submitted by the Project Developer or Eligible Customer:

- a. the fuel type may not change from that which was previously submitted for the valid projects in AG2 through AH1; and
- b. Maximum Facility Output and/or Capacity Interconnection Rights values shall not increase but may be reduced up to 100 percent from that which was previously submitted for the valid projects in AG2 through AH1; and
- c. the Project Developer must choose between the primary or secondary Point of Interconnection as previously identified in its New Service Request from that which was previously submitted for the valid projects in AG2 through AH1; and
- d. Eligible Customer transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission System shall not increase but may be reduced up to 100 percent from that which was previously submitted for the valid projects in AG2 through AH1.
  - i. Each valid New Service Request from AG2-AH1 shall be assigned to AG2-AH1 Transition Cycle #2. Phase I of AG2-AH1 Transition Cycle #2 will only start after: (i) all Application Review period activities have been completed for that Cycle; and (ii) the Phase I Base Case data has been made available for a 30 day review during the Application Phase of that Cycle; and (iii) Decision Point II of Transition Cycle #1 has concluded. Phase II of AG2-AH1 Transition

Cycle #2 will only start after all Decision Point III determinations have concluded in Transition Cycle #1. Phase III of AG2-AH1 Transition Cycle #2 will only start after the Final Agreement Negotiation Phase of Transition Cycle #1 has concluded (with all New Service Requests within Transition Cycle #1 either being withdrawn or resulting in a fully executed Tariff, Part IX service agreement).

3. To move forward in Transition Cycle #2, each Upgrade Customer with valid projects in AG2-AH1 must submit revised technical data and/or configuration information, and updates other requirements for its Upgrade Request, and submit the required Study Deposit amounts, as set forth below in Tariff, Part VII, Subpart C, section 306, Application Rules.
  - a. Each valid Upgrade Request from AG2-AH1 shall maintain its existing priority upon successful resubmission under Tariff, Part VII, Subpart C, section 306, Application Rules within 60 days of the Transition Date. Such existing priority shall be subsequent to valid AG1 and prior Upgrade Requests.
  - b. A valid Upgrade Request will be processed in accordance with Tariff, Part VII, Subpart C, section 306.

**Tariff, Part VII, Subpart C, section 306**  
**Application Rules**

**A. Application Submission**

A Project Developer or Eligible Customer (collectively, “Applicant”) that seeks to initiate a New Service Request must submit the following information to the Transmission Provider: (i) a Project Developer Applicant electronically submits through the PJM web site, an Application and Studies Agreement (“Application”), a form of which is provided in Tariff, Part IX, Subpart A, (ii) an Eligible Customer Applicant executes a Transmission Provider tendered Application, a form of which is provided in Tariff, Part IX, Subpart A, following the procedures outlined in Tariff, Parts II and III as applicable.

To be considered in a Cycle, Applicant must submit a completed and signed Application, including the required Study Deposit and Readiness Deposit, to Transmission Provider prior to the Cycle’s Application Deadline. Transmission Provider will post a firm Application Deadline for a Cycle at the beginning of Phase II of the immediately prior Cycle, no less than 180 days in advance of the Application Deadline. Only Completed New Service Requests received from Project Developers by the Application Deadline will be considered for the corresponding Cycle. Only Completed Applications received from Eligible Customers by the Application Deadline will be considered for the corresponding Cycle. Completed New Service Requests and Completed Applications shall be assigned a tentative Project Identifier. Transmission Provider will review and validate New Service Requests and the Project Identifier during the Application Phase, prior to Phase I of the corresponding Cycle. Only valid New Service Requests will proceed past the Application Phase.

**1. Generation Interconnection Request Requirements**

For Transmission Provider to consider an Application for a Generation Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the location of the proposed Point of Interconnection to the Transmission System, including the substation name or the name of the line to be tapped (including the voltage), the estimated distance from the substation endpoints of a line tap, address, and GPS coordinates.
- c. Provide information about the Generating Facility project, including whether it is (1) a proposed new Generating Facility, (2) an increase in capability of an existing Generating Facility, or (3) the replacement of an existing Generating Facility.

- d. Indicate the type of Interconnection Service requested, whether (1) Energy Resource only or (2) Capacity Resource (includes Energy Resource) with Capacity Interconnection Rights.
- e. Specify the project location and provide a detailed site plan.
- f. Submit required evidence of Generating Facility Site Control (including the location of the main step-up transformer), including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- g. Provide information about Qualifying Facility status under the Public Utility Regulatory Policies Act, as applicable.
- h. Submit required information and documentation if the Generating Facility will share Applicant's Interconnection Facilities with another Generating Facility.
- i. For a new Generating Facility, specify requested Maximum Facility Output and Capacity Interconnection Rights.
- j. For a requested increase in generation capability of an existing Generating Facility, specify the existing Maximum Facility Output and Capacity Interconnection Rights, and requested increases.
- k. Provide a detailed description of the equipment configuration and electrical design specifications for the Generating Facility.
- l. Specify the fuel type for the Generating Facility; or, in the case of a multi-fuel Generating Facility, the fuel types.
- m. For a multi-fuel Generating Facility, provide a detailed description of the physical and electrical configuration.
- n. If the Generating Facility will include a storage component, provide detailed information about (1) whether and how the storage device(s) will charge using energy from the Transmission System, (2) the primary frequency response operating range for the storage device(s), (3) the MWh stockpile, and (4) the hour class, as applicable.
- o. Specify the proposed date that the project or uprate associated with the Application will be in service.
- p. Provide other relevant information, including whether Applicant or an affiliate has submitted a previous Application for the Generating Facility; and, if an increase in generation capability, information about existing PJM



Service Agreements and associated Queue Position Nos. or Project Identifier Nos.

2. Behind the Meter Generator Application Requirements

In addition to the above requirements for a Generating Facility, in order for Transmission Provider to consider an Application for behind-the-meter generation Interconnection Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Specify gross output, behind the meter load, requested Maximum Facility Output, and requested Capacity Interconnection Rights.
- b. For a requested increase in generation capability of an existing Behind the Meter Generating Facility, specify existing and requested increase in gross output, behind the meter load, Maximum Facility Output, and Capacity Interconnection Rights.

3. Long Term Firm Transmission Service Application Requirements

For Transmission Provider to consider an Application for Long Term Firm Transmission Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the locations of the Point(s) of Receipt and Point(s) of Delivery.
- c. Specify the requested Service Commencement Date and term of service.
- d. Specify the transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission System.

4. Merchant Transmission Application Requirements

For Transmission Provider to consider an Application for a Transmission Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the location of the proposed facilities, and the name and description of the substation where Applicant proposes to interconnect or add its facilities.

- c. Specify the proposed voltage and nominal capability of new facilities or increase in capability of existing facilities.
- d. Provide a detailed description of the equipment configuration and electrical design specifications for the project.
- e. Specify the proposed date that the project or increase in capability will be in service.
- f. Specify whether the proposed facilities will be either (1) merchant A.C., (2) Merchant D.C. Transmission Facilities, or (3) Controllable A.C. Merchant Transmission Facilities.
- g. If Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities, specify whether Applicant elects to receive (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR) or (2) Incremental Delivery Rights, Incremental Auction Revenue Rights, and/or Incremental Capacity Transfer Rights.
  - i. If Applicant elects to receive TIRs or TWRs, specify (1) total project MWs to be evaluated as Firm (capacity) injection for TIR; (2) total project MWs to be evaluated as Non-firm (energy) injection for TIR; (3) total project MWs to be evaluated as Firm (capacity) withdrawal for TWR; and (4) total project MWs to be evaluated as Non-firm (energy) withdrawal for TWR.
  - ii. If Applicant elects to receive Incremental Delivery Rights, specify the location on the Transmission System where it proposes to receive Incremental Delivery Rights associated with its proposed facilities.
- h. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Applicant contractually binds itself in its interconnection-related service agreement always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the interconnection-related service agreement will provide Applicant with the same types of transmission rights that are available under the Tariff for Merchant D.C. Transmission Facilities. In the Application, Applicant shall represent that, should it execute an interconnection-related service agreement for its project described in the Application, it will agree in the interconnection-related service agreement to operate its facilities continuously in a controllable mode.

- i. Specify the site where Applicant intends to install its major equipment, and provide a detailed site plan.
- j. Submit required evidence of Site Control for the major equipment, including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- k. Provide evidence acceptable to Transmission Provider that Applicant has submitted a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting, as applicable. Applicant shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Applicant fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

5. Additional Requirements Applicable to All Applications

- a. Study Deposit: For Transmission Provider to consider an Application complete, Transmission Provider must receive from the Applicant the required Study Deposit by wire transfer, the amount of which is based on the size of the project as described below. Applicant's wire transfer must specify the Application reference number to which the Study Deposit corresponds, or Transmission Provider will not review or process the Application.
  - i. Ten percent of the Study Deposit is non-refundable. If Applicant withdraws its New Service Request, or the New Service Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:
    - (a) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request;
    - (b) Any restudies required as a result of the rejection, termination, and/or withdrawal of such New Service Request; and/or

- (c) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.
  - ii. 90 percent of the Study Deposit is refundable, and Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:
    - (a) The cost of the Application review;
    - (b) The dollar amount of Applicant's cost responsibility for the System Impact Study; and
    - (c) If the New Service Request is modified, rejected, terminated, and/or withdrawn, refundable deposit money shall be applied to cover all of the costs incurred by Transmission Provider up to the point of the New Service Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:
      - (i) The costs of any restudies required as a result of the modification, rejection, termination, and/or withdrawal of the New Service Request;
      - (ii) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request; and/or
      - (iii) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.
    - (d) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to Applicant in accordance with the PJM Manuals.
  - iii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
    - (a) Applicant is responsible for, and must pay, all actual study costs.

(b) If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

iv. The Study Deposit shall be calculated as follows, based on the number of MW energy (e.g., Maximum Facility Output) or MW capacity (e.g., Capacity Interconnection Rights), whichever is greater:

(a) Up to 20 MW: \$75,000;

(b) Over 20 MW up to 50 MW: \$200,000;

(c) Over 50 MW up to 100 MW: \$250,000;

(d) Over 100 MW up to 250 MW: \$300,000;

(e) Over 250 MW up to 750 MW: \$350,000; and

(f) Over 750 MW: \$400,000.

b. Readiness Deposit: For Transmission Provider to consider an Application complete, Applicant must submit to Transmission Provider the required Readiness Deposit by wire transfer or letter of credit. Applicant's wire transfer or letter of credit must specify the Application reference number to which the Readiness Deposit corresponds, or Transmission Provider will not review or process the Application. Readiness Deposit No. 1 shall be an amount equal to \$4,000 per MW energy (e.g., Maximum Facility Output) or per MW capacity (e.g., Capacity Interconnection Rights), whichever is greater, as specified in the Application.

## B. Application Review Phase

1. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Project Developers for completeness and then establishes the validity of such submitted Applications, beginning with a deficiency review, as follows:

- a. Transmission Provider will exercise Reasonable Efforts to inform Applicant of Application deficiencies within 15 Business Days after the Application Deadline.
  - b. Applicant then has 10 Business Days to respond to Transmission Provider's deficiency determination.
  - c. Transmission Provider then will exercise Reasonable Efforts to review Applicant's response within 15 Business Days, and then will either validate or reject the Application.
2. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Eligible Customers for completeness and then establishes the validity of such submitted Applications.
3. Transmission Provider will only review an Application during the Application Review Phase following the Application Deadline for which the Application was submitted and deemed complete, which will extend for 90 days or the amount of time it takes to complete all Application review activities for the relevant Cycle, whichever is greater.
4. During the Application Review Phase, and at least 30 days prior to initiating Phase I of the Cycle, Transmission Provider will post the Phase I Base Case data for review, subject to CEII protocols.
5. In the case of an Application for a Generating Facility, the Application Review Phase will include a Site Control review for the Generating Facility. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VII, Subpart A, section 302, for at least a one-year term beginning from the Application Deadline, for 100 percent of the Generating Facility Site including the location of the high-voltage side of the Generating Facility's main power transformer(s). In addition, Applicant shall provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings. The Site Control requirement in the Application includes an acreage requirement for the Generating Facility, as set forth in the PJM Manuals.
6. In the case of an Application for Merchant Transmission, the Application Review Phase will include a Site Control review for the Site of the HVDC converter station(s), phase angle regulator (PAR), and/or variable frequency transformer, as applicable. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VII, Subpart A, section 302, for at least a one-year term beginning from the Application Deadline, for 100 percent of the Site. In addition, Applicant shall provide a certification, executed by an officer or authorized representative of

Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings.

C. Scoping Meetings

1. During the Application Review Phase, Transmission Provider may hold a single, or several, scoping meetings for projects in each Transmission Owner zone, which are optional and may be waived by Applicants or Transmission Owner.
2. Scoping meetings may include discussion of potential Affected System needs, whereby Transmission Provider may coordinate with Affected System Operators the conduct of required studies.

D. Other Requirements

1. Applicant must submit any claim for Capacity Interconnection Rights from deactivating generation units with the Application, and it must be received by Transmission Provider prior to the Application Deadline.
2. When an Application results in a valid New Service Request, Transmission Provider shall confirm the assigned Project Identifier to the New Service Request, in accordance with Tariff, Part VII, Subpart E, section 315. Applicant and Transmission Provider shall reference the Project Identifier in all correspondence, submissions, wire transfers, documents, and other materials relating to the New Service Request.

Tariff, Part VII, Subpart D  
PHASES AND DECISION POINTS



**Tariff, Part VII, Subpart D, section 307**  
**Introduction**

**A. Phase I, Phase II and Phase III System Impact Studies**

**1. Introduction**

Tariff, Part VII, Subpart D sets forth the procedures and other terms governing the Transmission Provider's administration of the studies and procedures required under the Cycle process, and the nature and timing of such studies. The Cycle process set forth in Tariff, Part VII includes three study Phases and the three Decision Points:

- a. Phase I: Phase I System Impact Study and Decision Point I
- b. Phase II: Phase II System Impact Study and Decision Point II; and
- c. Phase III: Phase III System Impact Study and Decision Point III.

Procedures and other terms relative to the three study Phases are set forth separately below in Tariff, Part VII, Subpart D, sections 308 through 313.

**2. Overview of System Impact Studies**

- a. The Phase I, Phase II and Phase III System Impact Studies are a regional analysis of the effect of adding to the Transmission System the new facilities and services proposed by valid New Service Requests and an evaluation of their impact on deliverability to the aggregate of PJM Network Load.
  - i. These studies identify the system constraints, identified with specificity by transmission element or flowgate, relating to the New Service Requests included therein and any resulting Interconnection Facilities, Network Upgrades, and/or Contingent Facilities required to accommodate such New Service Requests.
  - ii. These studies provide estimates of cost responsibility and construction lead times for new facilities required to interconnect the project and system upgrades.
  - iii. Transmission Provider, in its sole discretion, can aggregate multiple New Service Requests at the same Point of Interconnection for purposes of Phase I, Phase II and Phase III System Impact Studies.
  - iv. The scope of the studies may include (a) an assessment of sub-area import deliverability, (b) an assessment of sub-area export deliverability, (c) an assessment of project related system stability issues (only occurs in Phase II and Phase III); (d) an assessment of project-related short circuit duty issues (only occurs in Phase II and Phase III), (e) a contingency analysis consistent with NERC's and each Applicable Regional Entity's reliability criteria and the

transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity, (f) an assessment of regional transmission upgrades that most effectively meet identified needs, and (g) an analysis to determine cost allocation responsibility for required facilities and upgrades.

- v. For purposes of determining necessary Interconnection Facilities and Network Upgrades, these studies shall consider the level of service requested in the New Service Request unless otherwise required to study the full electrical capability of the New Service Request due to safety or reliability concerns.
- vi. The studies' results shall include the list and facility loading of all reliability criteria violations specific to the New Service Requests.
- vii. If applicable, the studies for a Transmission Project Developer New Service Request shall also include a preliminary estimate of the Incremental Deliverability Rights associated with the Transmission Project Developer's proposed Merchant Transmission Facilities.

### 3. Contingent Facilities

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Interconnection Facilities and/or Network Upgrades, upon which the New Service Request's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the New Service Request or reassessment of the Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies) and Generator Interconnection Agreement, including why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall also provide, upon request of the Project Developer or Eligible Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

#### a. Minimum Thresholds to Identify Contingent Facilities

##### i. Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least 5 percent distribution factor (DFAX) or contributing at least 5 percent of the facility rating in the applicable model.

##### ii. Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

iii. Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

4. Additional System Impact Study Procedures for Eligible Customers

The following provisions apply to System Impact Studies conducted for Eligible Customers:

- a. The Transmission Provider will notify Eligible Customers of the need to conduct a System Impact Study whenever the Transmission Provider determines that available transmission capability may not be sufficient to provide the requested firm service(s). The purpose of the System Impact Study will be to determine the effect the requested service(s) will have on system operations, identify any system constraints, redispatch options and whether system expansion will be required to provide the requested service(s).
- b. The Commission's comparability standard will be applied in evaluating the impact of all requests. Specifically, the Transmission Provider will use the same due diligence in completing System Impact Studies for Eligible Customers that it uses when completing studies for any Transmission Owner that requests service from the Transmission Provider.
- c. Requests for long-term firm transmission service will be evaluated, to the extent possible, as a part of the on-going planning process for Bulk Transmission Supply in the PJM Region. Appropriate planning studies will be conducted annually to assess the capability of the PJM Region Transmission System to deliver the planned Network Resources to the Forecasted Network Loads of the existing load serving entities and any prior committed Firm Point-to-Point Service transmission customers. The loads and resources of Eligible Customers requesting new or additional service during the normal planning cycle will be incorporated into this aggregate planning process along with the loads and resources of all other Firm Point-to-Point and load serving entities for which prior commitments to provide service have been made. Requests for long-term firm service made at times that will not permit the evaluation of impacts as part of the normal planning process, and requests for short-term firm service, will require that special impact studies be completed.
- d. The Transmission Provider plans and evaluates the PJM Region Transmission System in strict compliance with the following:

- i. North American Electric Reliability Council ("NERC") Reliability Principles and Guides
  - ii. Applicable Standards
  - iii. Transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity.
- e. In evaluating the impact of any request for new or additional service(s), the Transmission Provider will first determine the capability of the system to reliably provide prior committed Network and Point-to-Point service for the term of the requested new or additional service(s), or the normal planning horizon (generally 10 years), whichever is shorter. Requests for new or additional service(s) will then be incorporated into the system representation data and the appropriate system analyses will be completed to evaluate the impacts of the requested services.

## 5. Cost Allocation for Network Upgrades

- a. General: Each Project Developer and Eligible Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.
- b. Cost Responsibility for Accelerating Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of Network Upgrades that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Project Developer or Eligible Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission

Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

- c. The Transmission Provider shall determine the minimum amount of Network Upgrades required to resolve each reliability criteria violation in each Cycle, by studying the impact of the projects the Cycle in their entirety, and not incrementally. Interconnection Facilities and Network Upgrades shall be studied in their entirety and according to the following process:

The Transmission Provider shall identify the New Service Requests in the Cycle contributing to the need for the required Network Upgrades within the Cycle. All New Service Requests that contribute to the need for a Network Upgrade will receive cost allocation for that upgrade pursuant to each New Service Request's contribution to the reliability violation identified on the transmission system in accordance with PJM Manuals.

There will be no inter-Cycle cost allocation for Interconnection Facilities or Network Upgrades identified in the System Impact Study costs identified in a Cycle; all such costs shall be allocated to New Service Requests in that Cycle.

#### 6. Interconnection Facilities

A Project Developer shall be obligated to pay 100 percent of the costs of the Interconnection Facilities necessary to accommodate its Interconnection Request.

#### 7. Facilities Study Procedures:

The Facilities Studies will include good faith estimates of the cost, determined in accordance with Tariff, Part VII, Subpart D, section 307(A)(5), (a) to be charged to each affected New Service Customer for the Interconnection Facilities and Network Upgrades that are necessary to accommodate each New Service Request evaluated in the study; (b) the time required to complete detailed design and construction of the facilities and upgrades; (c) a description of any site-specific environmental issues or requirements that could reasonably be anticipated to affect the cost or time required to complete construction of such facilities and upgrades.

The Facilities Study will document the engineering design work necessary to begin construction of any required transmission facilities, including estimating the costs of the equipment, engineering, procurement and construction work needed to implement the conclusions of the System Impact Study in accordance with Good Utility Practice and, when applicable, identifying the electrical switching configuration of the connection equipment, including without limitation: the transformer, switchgear, meters, and other station equipment; and the nature and

estimated costs of Interconnection Facilities and Network Upgrades necessary to accommodate the New Service Request.

For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Facilities Study shall consider the level of Interconnection Service requested by the Project Developer unless otherwise required to study the full electrical capability of the Generating Facility or Merchant Transmission Facility due to safety or reliability concerns. The Facilities Study will also identify any potential control equipment for requests for Interconnection Service that are lower than the full electrical capability of the Generating Facility or Merchant Transmission Facility.

**Tariff, Part VII, Subpart D, section 308**  
**Phase I**

**A. Phase I Rules**

1. This Tariff, Part VII, Subpart D section 308 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase I of the Cycle process. After the Application Phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase I of a Cycle will commence. During Phase I of a Cycle, the Transmission Provider shall conduct a Phase I System Impact Study.
  - a. The Phase I System Impact Study is conducted on an aggregate basis within a New Services Request's Cycle, and results are provided in a single Cycle format. The Phase I System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers must obtain the results from the website.
  - b. Start and Duration of Phase I
    - i. Phase I shall start on the first Business Day immediately following the end of the Application Review phase, but no earlier than 30 days following the distribution of the Phase I Base Case Data. Transmission Provider shall use Reasonable Efforts to complete Phase I within 120 calendar days from the date such phase commenced. If the 120th day does not fall on a Business Day, Phase I shall be extended to the end of the next Business Day. If Transmission Provider is unable to complete Phase I within 120 calendar days, Transmission Provider shall notify all impacted Project Developers and Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase I.
    - ii. During Phase I, and at least 30 days prior to initiating Decision Point I of the Cycle, Transmission Provider will post an estimated start date for Decision Point I in order for Project developers and Eligible Customers to prepare to meet their Decision Point I requirements.

**Tariff, Part VII, Subpart D, section 309**  
**Decision Point I**

A. Requirements

The Decision Point I shall commence on the first Business Day immediately following the end of Phase I. New Service Requests that are studied in Phase I will enter Decision Point I. Before the close of the Decision Point I, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such New Service Request must meet the requirements set forth below in Tariff, Part VII, Subpart D, section 309(A)(2) (acceleration provisions).

a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point I:

i. The applicable Readiness Deposit No. 2

(a) The Decision Point I Readiness Deposit No. 2 is to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase. The Decision Point I Readiness Deposit No. 2 will be calculated by the Transmission Provider during Phase I, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.

(b) At Decision Point I, the Readiness Deposit No. 2 required shall be an amount equal to:

(i) the greater of (i) 10 percent of the cost allocation for the Network Upgrades as calculated in Phase I or (ii) the Readiness Deposit No. 1 paid by the Project Developer with its New Service Request during the Application Phase; minus

(ii) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase

(c) The Readiness Deposit No. 2 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 2).



- b. Project Developers must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
  - i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional one-year term beginning from last day of the relevant Cycle, Phase I.
    - (a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
    - (b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 50 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
    - (c) If applicable, Interconnection Switchyard Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 50 percent of the acreage required for the identified required Interconnection Switchyard facilities associated with a New Service Request.
- c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant

PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.

- d. Evidence of air and water permits (if applicable)
- e. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
- f. Submission of New Service Request data for Phase II System Impact Study.
- g. If Project Developer or Eligible Customer fails to submit all of the criteria in (a) through (f) above, before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- h. If Project Developer or Eligible Customer submits all elements in (a) through (f) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in (b) through (e) above, as follows:
  - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase II.
  - iv. Transmission Provider's review of the above required elements may run co-extensively with Phase II.

2. Acceleration at Decision Point I. Upon completion of the Phase I System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.

- a. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements before the close of Decision Point I:
  - i. Security

- (a) Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.
  - ii. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
  - iii. Project Developer must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
    - (a) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
    - (b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
    - (c) Interconnection Switchyard, if applicable, Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 100 percent of the acreage required identified required Interconnection Switchyard associated with a New Service Request.
  - iv. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the

Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above.

(a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

(1) Such condition precedent shall not be extended under any circumstances for any reason.

- b. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.
- d. For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- e. If Project Developer or Eligible Customer fails to submit all of the criteria in (a) through (d) above (noting the exception provided for Site Control), before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.

- f. If Project Developer or Eligible Customer subject to Acceleration at Decision Point I submits all elements in (a) through (d) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in (a) through (d) above, as follows:
    - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
    - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
    - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.
- 3. For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point I to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:
  - a. Security. Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.
  - b. Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request
  - c. Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
    - i. Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
    - (a) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall

continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

(a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.

iii. Interconnection Switchyard, if applicable, Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

(a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.

iv. PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase I through a date that extends three years beyond the full execution date of the relevant state level interconnection agreement with the applicable entity

v. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above.

(a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in

accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

(i) Such condition precedent shall not be extended under any circumstances for any reason.

- d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle
- e. Evidence of a fully executed state level Interconnection Agreement with the applicable entity
- f. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- g. If Project Developer fails to submit all of the criteria in (a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's New Service Request shall be deemed terminated and withdrawn.
- h. When Project Developer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in (a) through (f) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in (a) through (f) above, as follows:
  - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer of deficiencies within 10 Business Days after the close of Decision Point I.



- ii. Project Developer then has five Business Days to respond to Transmission Provider's deficiency determination.
- iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.

4. New Service Request Withdraw or Termination at Decision Point I

- a. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point I. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point I, the Transmission Provider must receive before the close of the Decision Point I Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
- b. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point I requirements, as set forth in this Tariff, Part VII, Subpart D, section 309.
- c. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - i. For Readiness Deposits:
    - (a) At the conclusion of Transmission Provider's deficiency review for Decision Point I or upon voluntary withdrawal of a New Service Request, refund to the Project Developer or Eligible Customer 50 percent of Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase, and 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during this Decision Point I. Notwithstanding the preceding, Project Developers or Eligible Customers in Transition Cycle # 1 will be refunded 100 percent of Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request provided pursuant to Tariff, Part VII, Subpart C, section 306(A)(5)(b), and 100 percent of the Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during this Decision Point I; and
    - (b) At the conclusion of the Cycle, Project Developers or Eligible Customers will be refunded up to 50 percent of



Readiness Deposit No. 1 pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).

- ii. At the conclusion of Transmission Provider's deficiency review for Decision Point I, Project Developers or Eligible Customers will be refunded up to 90 percent of their Study Deposit submitted with their New Service Request during the Application Phase, less any actual costs.

B. New Service Request Modification Requests at Decision Point I

1. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.
2. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 100 percent of the requested amount
3. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.
4. Point of Interconnection.
  - a. The Point of Interconnection must be finalized before the close of the Decision Point I Phase.
    - i. Project Developer may only move the location of the Point of Interconnection 1) along the same segment of transmission line, as defined by the two electrical nodes located on the transmission line as modeled in the Phase I Base Case Data, or 2) move the location of the Point of Interconnection to a different breaker position within the same substation, subject to Transmission Owner review and approval. Project Developer may not modify its Point of Interconnection to/from a transmission line from/to a direct connection into a substation.
      - (a) Project Developer must notify Transmission Provider in writing of any changes to its Point of Interconnection prior to the close of Decision Point I. No modifications to the Point of Interconnection will be accepted for any reason after the close of Decision Point I.
5. Generating Facility or Merchant Transmission Facility Site Changes

Project Developer may specify a change to the project Site only if:

- a. the Project Developer satisfied the requirements for Site Control for both the initial Site proposed in the New Service Request Application and the newly proposed Site; and
- b. the initial Site and the proposed Site are adjacent parcels.
- c. Such Site Control is subject to the verification procedures set forth in Tariff, Subpart D, section 309(A)(2)(c) (Decision Point I Site Control verification).

6. Equipment Changes

- a. During Decision Point I, Project Developer may modify its Interconnection Request for updated equipment data. Project Developer shall submit machine modeling data as specified in the PJM Manuals before the close of Decision Point I.

**Tariff, Part VII, Subpart D, section 310**  
**Phase II**

**A. Phase II Rules**

- 1. This Tariff, Part VII, Subpart D, section 310 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase II of the Cycle process. After the Decision Point I phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase II of a Cycle will commence. During Phase II of a Cycle, the Transmission Provider shall conduct the Phase II System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VII, Subpart D, section 309, Decision Point I phase, will be included in the Phase II System Impact Study.**
  - a. The Phase II System Impact Study analysis will retool load flow results based on decisions made during Decision Point I, and perform short circuit and stability analyses as required.**
  - b. The Phase II System Impact Study will identify Affected Systems, if applicable.**
    - i. If an Affected System Study Agreement is required, the Transmission Provider shall notify the Project Developer or Eligible Customer prior to the end of Phase II by posting on the Transmission Provider's website of the need for Project Developer or Eligible Customer to enter into an Affected System Study Agreement.**
  - c. The Phase II System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.**
  - d. Facilities Study. During the Phase II System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VII, Subpart D, section 307.**
  - e. Start and Duration of Phase II**
    - i. Phase II shall start on the first Business Day immediately following the end of the Decision Point I unless the Decision Point III of the immediately preceding Cycle is still open. In no event shall Phase II of a Cycle commence before the conclusion of the Decision Point III Phase of the immediately preceding Cycle.**
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase II within 180 days from the date such Phase II commenced. If the 180<sup>th</sup> day does not fall on a Business Day, Phase II shall be extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase II within 180 days, the Transmission Provider shall notify all impacted Project Developers simultaneously by posting on Transmission Provider's website a**

revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase II.

**Tariff, Part VII, Subpart D, section 311**  
**Decision Point II**

**A. Requirements**

Decision Point II shall commence on the first Business Day immediately following the end of Phase II. New Service Requests that are studied in Phase II will enter Decision Point II. Before the close of Decision Point II, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such new Service Request must meet the requirements set forth below in Tariff, Part VII, Subpart D, section 311(A)(2)(d).

a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:

b. The applicable Readiness Deposit No. 3

i. The Decision Point II Readiness Deposit No. 3 to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase, and the Readiness Deposit No. 2 that was submitted at Decision Point I. The Decision Point II Readiness Deposit No. 3 will be calculated by the Transmission Provider during Phase II, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.

ii. The Decision Point II Readiness Deposit No. 3 required amount shall be an amount equal to the greater of:

(a) (i) 20 percent of the cost allocation for the Network Upgrades as calculated in Phase II or (ii) the Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase plus the Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I; minus

(b) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase, plus the Readiness Deposit No. 2 amount paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I.

- iii. The Readiness Deposit No. 3 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 3).
  - c. Notification in writing that Project Developer or Eligible Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its New Service Request
  - d. Evidence of Site Control. There are no Site Control evidentiary requirements at Decision Point II.
  - e. Evidence of air and water permits (if applicable)
  - f. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
  - g. Submission of New Service Request Data for Phase II System Impact Study data.
  - h. Evidence that Project Developer or Eligible Customer entered into a fully executed Affected System Study Agreement, if applicable to its New Service Request by the later of Decision Point II or 60 days after notification from Transmission Provider that an Affected System Study Agreement is required.
  - i. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.
  - j. If Project Developer or Eligible Customer fails to submit all of the criteria in (b) through (i) above, before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- 2. If Project Developer or Eligible Customer submits all elements in (b) through (i) above, then, at the close of the Decision Point II, Transmission Provider will begin the deficiency review of the elements set forth in (b) through (i) above, as follows:

- a. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point II.
- b. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
- c. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase III.
  - i. Transmission Provider's review of the above required elements may run co-extensively with Phase III.
- d. Acceleration at Decision Point II. Upon completion of the Phase II System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.
  - i. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:
    - (a) Security
      - (i) Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.
    - (b) Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
    - (c) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
      - (i) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase II.
        - (1) Such Site Control evidence shall be identical to the Generating Facility or Merchant

Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

(ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.

(1) Such Site Control evidence shall cover 100 percent of the linear distance for identified required Interconnection Facilities associated with a New Service Request.

(iii) If applicable, Interconnection Switchyard Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.

(1) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.

e. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(d)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(d)(i), (ii) and (iii) above.

i. If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(d)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled,



and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

- (a) Such condition precedent shall not be extended under any circumstances for any reason.
- (b) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- (c) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.
- (d) For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- (e) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VII, Subpart D, section 311(A)(2)(e)(i)(a) through (d) above (noting the exception provided for Site Control), before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (f) If Project Developer or Eligible Customer submits all elements in Tariff, Part VII, Subpart D, section 311(A)(2)(e)(i)(a) through (d) above, then, at the close of the Decision Point II, Transmission Provider will begin the

deficiency review of the elements set forth in Tariff, Part VII, Subpart D, section 311(A)(2)(e)(i)(a) through (d) above, as follows:

- (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.
- (g) For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point II to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:
- (h) Security. Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.
  - (i) Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request
  - (j) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
    - (i) Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase II that

extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

- (1) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
- (ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase II that extends through the full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (1) Such Site Control evidence shall cover 100 percent of linear distance for the identified required Interconnection Facilities associated with a New Service Request.
- (iii) Interconnection Switchyard, if applicable, Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase II that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (1) Such Site Control evidence shall cover 100 percent of acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- (iv) PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase II through a date that extends three years beyond the full execution date of the

relevant state level interconnection agreement with the applicable entity

(v) If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(j)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(j)(i), (ii) and (iii) above.

(1) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(j)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

(1.a) Such condition precedent shall not be extended under any circumstances for any reason.

(k) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent

Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle

- (l) Evidence of a fully executed state level Interconnection Agreement with the applicable entity
- (m) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- (n) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VII, Subpart D, section 311(A)(2)(a) through (m) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (o) When Project Developer or Eligible Customer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in Tariff, Part VII, Subpart D, section 311(A)(2)(a) through (m) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VII, Subpart D, section 311(A)(2)(a) through (m) above, as follows:
  - (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible

Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.

B. New Service Request Withdraw or Termination at Decision Point II

1. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point II. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point II, the Transmission Provider must receive before the close of the Decision Point II Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
2. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point II requirements, as set forth in this Tariff, Part VII, Subpart D, section 311.
3. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - a. For Readiness Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to Project Developer or Eligible Customer 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during Decision Point I;
    - ii. At the conclusion of the Cycle, refund to Project Developer or Eligible Customer up to 100 percent of Readiness Deposit No. 1 pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).
  - b. For Study Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
  - c. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VII, Subpart D, section 311(B)(3)(a) and (b)(i), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer at the Application Phase and at the Decision Point I

Phase if the Project Developer's Network Upgrade cost from Phase I to Phase II:

- i. increases overall by 25 percent or more; and
- ii. increases by more than \$10,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

4. New Service Request Modification Requests at Decision Point II

- a. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.
- b. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 10 percent of the values studied in Phase II.
- c. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.
- d. Point of Interconnection. The Point of Interconnection may not be changed or modified in any way for any reason at this point in the Cycle process.
- e. Generating Facility or Merchant Transmission Facility Site Changes. Project Developer may specify a change to the project Site only if the Project Developer satisfied the requirements for Site Control for both (i) the initial Site proposed in the New Service Request Application and the newly proposed Site; and (ii) the initial Site and the proposed Site are adjacent parcels. Such Site Control is subject to the verification procedures set forth in Tariff, Part VII, Subpart D, section 313.
- f. Equipment Changes

During Decision Point II, Project Developer is limited to modifying its New Service Request to Permissible Technological Advancement changes only. Project Developer shall submit machine modeling data as specified in the PJM Manuals associated with the Permissible Technological Advancement before the close of Decision Point II.

**Tariff, Part VII, Subpart D, section 312**  
**Phase III**

A. Phase III Rules

1. This Tariff, Part VII, Subpart D, section 312 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase III of the Cycle process. After Decision Point II of a Cycle is completed and a group of valid New Service Requests is established therein, Phase III of a Cycle will commence. During Phase III of a Cycle, the Transmission Provider shall conduct a Phase III System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VII, Subpart D, section 311, Decision Point II, will be included in the Phase III System Impact Study.
  - a. The Phase III System Impact Study analysis will retool load flow, short circuit, and stability results based on decisions made in Decision Point II.
  - b. The Phase III System Impact Study will include a final Affected System study, if applicable.
  - c. Phase III System Impact Study results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.
  - d. Facilities Study. During the Phase III System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VII, Subpart D, section 307 (System Impact Study intro).
  - e. Start and Duration of Phase III
    - i. Phase III shall start on the first Business Day immediately following the end of Decision Point II unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle.
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase III within 180 days from the date such Phase III commenced. If the 180th day does not fall on a Business Day, Phase III shall be extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase III within 180 days, the Transmission Provider shall notify all impacted Project Developers or Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase III.
  - f. Draft Agreement



Prior to the Final Agreement Negotiation Phase, Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX, as applicable to the Project Developer's or Eligible Customer's New Service Request, along with any applicable draft schedules, to the parties to such interconnection related agreement.

**Tariff, Part VII, Subpart D, section 313**  
**Decision Point III**

A. Decision Point III shall commence on the first Business Day immediately following the end of Phase II, and shall run concurrently with the Final Agreement Negotiation Phase. New Service Requests that are studied in Phase II will enter Decision Point III. Before the close of Decision Point III, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point III for a New Service Request to remain in the Cycle and proceed through the Final Agreement Negotiation Phase as set forth below:

a. Security

i. Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results.

b. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request

c. Project Developers must present evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:

i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional one-year term beginning from last day of the relevant Cycle, Phase III.

(a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence for an additional one-year term beginning from the last day of the relevant Cycle, Phase III.

(a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.

iii. Interconnection Switchyard, if applicable, Site Control evidence for an additional one-year term beginning from the last day of the relevant Cycle, Phase III.

(a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.

iv. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 313(A)(1)(c)(i), (ii) and (iii) above, then Project Developer or Eligible Customer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer or Eligible Customer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 313(A)(1)(c)(i), (ii) and (iii) above.

(a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 313(A)(1)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

(i) Such condition precedent shall not be extended under any circumstances for any reason.

d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

- e. Project Developer or Eligible Customer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment. If Project Developer or Eligible Customer does not satisfy these requirements, these requirements can be addressed through a milestone in the applicable interconnection-related service agreement entered into pursuant to Tariff, Part IX.
- f. For state-level, non-jurisdictional interconnection projects, evidence of a fully executed Interconnection Agreement with the applicable entity.
- g. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VII, Subpart D, section 313(A)(1)(a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.

B. If Project Developer or Eligible Customer submits all elements in Tariff, Part VII, Subpart D, section 313(A)(1)(a) through (f) above, then, at the close of the Decision Point III, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VII, Subpart D, section 313(A)(1)(a) through (f) above, as follows:

- 1. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point III.
- 2. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
- 3. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to the Final Agreement Negotiation Phase.

Transmission Provider's review of the above required elements may run co-extensively with the Final Agreement Negotiation Phase.

- 4. If the New Service Request is deemed terminated and withdrawn by the Transmission Provider, then Transmission Provider shall:
  - a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;
  - b. Readiness Deposits will be treated pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).
  - c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up

to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.

5. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point III. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point III, the Transmission Provider must receive before the close of Decision Point III written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request. Following receipt of such written notification from the Project Developer or Eligible Customer, the Transmission Provider shall:

a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;

b. Readiness Deposits will be treated pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).

c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.

d. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VII, Subpart D, sections 313(B)(4)(b) and (c) and 313(B)(5)(b), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer if the Project Developer's or Eligible Customer's Network Upgrade cost from Phase II to Phase III:

i. increases overall by 35 percent or more; and

ii. increased by more than \$25,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

C. New Service Request Modification Requests at Decision Point III

New Service Requests may not be changed or modified in any way for any reason during Decision Point III. A New Service Request must be withdrawn and resubmitted in a subsequent Cycle to the extent a Project Developer or Eligible Customer wants to make any changes to such New Service Request at this point in the Cycle process.

**Tariff, Part VII, Subpart D, section 314**  
**Final Agreement Negotiation Phase**

- A. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the end of Phase III, and shall run concurrently with Decision Point III. New Service Requests that enter Decision Point III will also enter the Final Agreement Negotiation Phase. The purpose of the Final Agreement Phase is to negotiate, execute and enter into a final interconnection related service agreement found in Tariff, Part IX, as applicable to a New Service Request or Upgrade Request; adjust the Security obligation based on New Service Requests or Upgrade Request withdrawn during Decision Point III and/or during the Final Agreement Negotiation Phase; and conduct any remaining analyses or updated analyses based on New Service Requests or Upgrade Request withdrawn during Decision Point III. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
1. If a New Service Request or Upgrade Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the New Service Request or Upgrade Request from the Cycle, and adjust the Security obligations of other New Service Requests based on the withdrawal.
- B. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:
1. Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX, as applicable to the Project Developer's or Eligible Customer's New Service Request, along with any applicable draft schedules, to the parties to such interconnection related agreement prior to the start of the Final Agreement Negotiation Phase.
- a. Subject to any withdrawn New Service Requests during Decision Point III that require Transmission Provider to update study results, the draft interconnection related agreement shall be prepared using the study results available from Phase III or the most-recently completed studies conducted during the Final Agreement Negotiation Phase.
- i. If a different New Service Request is withdrawn during Decision Point III after a draft agreement has been tendered to Project Developer or Eligible Customer, and that withdrawn New Service Request impacts the Project Developer's or Eligible Customer tendered draft, Transmission Provider shall use Reasonable Efforts to update and reissue the tendered draft within 15 Business Days.
2. Negotiation
- Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60th day is not a Business Day, negotiations shall conclude on the next Business

Day. Upon receipt of the draft agreements, Project Developer or Eligible Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

3. Impasse

If the Project Developer or Eligible Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC, or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

4. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final interconnection related agreement, along with any applicable schedules, to the parties in electronic form.

a. Not later than 15 Business Days after receipt of the final interconnection related agreement, Project Developer or Eligible Customer shall either:

i. execute the final interconnection related service agreement in electronic form and return it to Transmission Provider electronically;

ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

iii. request in writing that Transmission Provider file with FERC the final interconnection related service agreement in unexecuted form

(a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.

iv. and provide any required adjustments to Security.

b. If Project Developer or Eligible Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:

- i. execute the final interconnection related agreement in electronic form and return it to Transmission Provider electronically;
  - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
  - iii. request in writing that Transmission Provider file with FERC the final interconnection related serviced agreement in unexecuted form.
    - (a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.
- 5. Parties may not proceed under such interconnection related service agreement until:
  - (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.



Tariff, Part VII, Subpart E  
MISCELLANEOUS

**Tariff, Part VII, Subpart E, section 315**  
**Assignment of Project Identifier**

- A. When an Application from a Project Developer or an Eligible Customer results in a valid New Service Request, in accordance with Tariff, Part VII, Subpart C, section 306 Transmission Provider shall confirm the assigned Project Identifier to such request. For Project Developers and Eligible Customers, the Project Identifier will indicate the applicable Cycle, and will denote a number that represents the project within the Cycle. The Project Identifier is strictly for identification purposes, and does not indicate priority within a Cycle.
  
- B. When an Application from a Upgrade Customer results in a valid Upgrade Request, in accordance with Tariff, Part VII, Subpart C, section 306, Transmission Provider shall confirm the assigned Request Number to such request. The Request Number will indicate the serial position and priority.

**Tariff, Part VII, Subpart E, section 316**  
**Service Below Generating Capability**

The Transmission Provider shall consider requests for Interconnection Service below the full electrical generating capability of the Generating Facility. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of determining Interconnection Facilities, Network Upgrades, and associated costs, but may be subject to other studies at the full electrical generating capability of the Generating Facility to ensure the safety and reliability of the system, with the study costs borne by the Project Developer. If after additional studies are complete, Transmission Provider determines that additional Network Upgrades are necessary, then Transmission Provider must: (i) specify which additional Network Upgrade costs are based on which studies; and (ii) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrades costs required for safety and reliability also will be borne by the Project Developer. Project Developers may be subject to additional control technologies as well as testing and validation of these technologies as set forth in the GIA. The necessary control technologies and protection systems shall be established in Tariff, Part IX, Subpart B, Schedule K (Requirements for Interconnection Service Below Full Electrical Generating Capability) of the executed, or requested to be filed unexecuted the GIA.

**Tariff, Part VII, Subpart E, section 317**  
**Behind The Meter Generation**

The following provisions shall apply with respect to Behind The Meter Generation:

A. New Service Requests

A Project Developer that desires to designate any Behind The Meter Generation, in whole or in part, as a Capacity Resource or Energy Resource must submit a New Service Request Application, a form of which is located in Tariff, Part IX, Subpart A.

B. Information Required in New Service Requests

The Project Developer must provide the information set forth in Tariff, Part VII, Subpart C, section 306.

C. Transmission Provider Determination

During the Application Review Phase of a Cycle, Transmission Provider shall determine, based on the information included in the New Service Request Application, whether the proposed project meets the definition in Tariff, Part VII, Subpart A, section 300 for Behind The Meter Generation. In the event that Transmission Provider finds that the subject project does not meet the definition of Behind The Meter Generation, it shall so notify the Project Developer during the deficiency review process pursuant to Tariff, Part VII, Subpart (Application Review rules).

D. Treatment as Energy Resource

Any portion of the capacity of Behind The Meter Generation that a Project Developer identifies in its Application as capacity that it seeks to utilize, directly or indirectly, in Wholesale Transactions, but for which the customer does not seek Capacity Resource status, shall be deemed to be an Energy Resource.

E. Operation as Capacity Resource

To the extent that a Project Developer that owns or operates generation facilities that otherwise would be classified as Behind The Meter Generation elects to operate such facilities as a Capacity Resource, the provisions of the Tariff regarding Behind The Meter Generation shall not apply to such generation facilities for the period such election is in effect.

F. Other Requirements

Behind The Meter Generation for which a New Service Request is not required under Tariff, Part VII may be subject to other interconnection-related requirements of a

Transmission Owner or Electric Distributor with which the generation facility will be interconnected.

**Tariff, Part VII, Subpart E, section 318**  
**Base Case Data**

Transmission Provider shall maintain base case power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on a password-protected website, subject to the confidentiality provisions of Tariff, Part VII, Subpart E, section 327. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent Cycle. Transmission Provider may require Project Developers or Eligible Customers and password-protected website users to sign any required confidentiality agreement(s) before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

**Tariff, Part VII, Subpart E, section 319**  
**Service on Merchant Transmission Facilities**

A. A Transmission Project Developer that will be a Merchant Transmission Provider shall:

1. At least 90 days prior to the anticipated date of commencement of Interconnection Service under its Generator Interconnection Agreement, provide the Transmission Provider with terms and conditions for reservation, interruption and curtailment priorities for firm and non-firm transmission service on the Merchant Transmission Provider's Merchant Transmission Facilities. Such terms and conditions shall be non-discriminatory and shall be consistent with the terms of the Commission's approval of the Merchant Transmission Provider's right to charge negotiated (market-based) rates for service on its Merchant Transmission Facilities. Transmission Provider shall post such terms and conditions applicable to service on the Merchant Transmission Facilities on its OASIS and shall file them with the Commission as a separate service schedule under the Tariff, with a proposed effective date on or before the anticipated date of commencement of Interconnection Service for the affected Transmission Project Developer; and (2) at least 15 days prior to the anticipated date of commencement of Interconnection Service for Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, provide the Transmission Provider with the results of a Commission-approved process for allocation of Transmission Injection Rights and Transmission Withdrawal Rights associated with such Merchant Transmission Provider's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, and with a listing of any Transmission Injection Rights and/or Transmission Withdrawal Rights not allocated in such process. Transmission Provider shall post such information on its OASIS.
2. Should the Merchant Transmission Provider fail to provide the Transmission Provider with the terms and conditions for service on the Merchant Transmission Provider's Merchant Transmission Facilities required under Tariff, Part VII, Subpart E, section 319(A)(1), firm and non-firm transmission service on such Merchant Transmission Facilities shall be subject to the terms and conditions regarding reservation, interruption and curtailment priorities applicable to Firm or Non-Firm Point-to-Point Transmission Service on the Transmission System.
3. Except as otherwise provided under this Tariff, Part VII, Subpart E, section 319, transmission service on, and operation of, Merchant Transmission Facilities shall be subject to the terms and conditions (including in particular, but not limited to, those relating to Transmission Provider's authority in the event of an emergency) applicable to Transmission Service under the Tariff and the Operating Agreement.

**Tariff, Part VII, Subpart E, section 320**  
**Local Furnishing Bonds**

**A. Transmission Owners That Own Facilities Financed by Local Furnishing Bonds**

This provision is applicable only to a Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of Part IV or Part VI, Transmission Provider shall not be required to provide Interconnection Service to Project Developer pursuant to Part IV or Part VI if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner's facilities that would be used in providing such Interconnection Service.

**B. Alternative Procedures for Requesting Interconnection Service**

A Transmission Owner that believes the provision of Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner's facilities that would be used in providing such Interconnection Service, it shall so notify Transmission Provider within 30 days after the Transmission Owner receives a copy of the Project Developer's Interconnection Request. If Transmission Provider determines that the provision of Interconnection Service requested by Project Developer would jeopardize the tax-exempt status of the Transmission Owner's local furnishing bonds, it shall so advise the Project Developer within 30 days after receipt of notice of such jeopardy from the affected Transmission Owner. Project Developer thereafter may renew its request for interconnection using the process specified in Tariff, Part I, section 5.2(ii).



**Tariff, Part VII, Subpart E, section 321**  
**Internal Dispute Resolution Procedures**

Any dispute between a Transmission Customer or New Service Customer, an affected Transmission Owner, or the Transmission Provider involving transmission or interconnection service under the Tariff (excluding applications for rate changes or other changes to the Tariff which shall be presented directly to the Commission for resolution) shall be referred to a designated senior representative of each of the parties to the dispute for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within 30 days (or such other period as the parties to the dispute may agree upon) by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

A. To the extent these Internal Dispute Resolution Procedures are invoked with regard to an unpaid invoice, any additional related subsequent unpaid invoices shall be considered to be a part of the initial internal dispute invoked under this section in order to avoid multiple internal dispute claims involving the same matter.

1. If the additional related subsequent unpaid invoices arise after the determination of the initial internal dispute but no new material claims are raised, then these Internal Dispute Resolution Procedures shall not be available with regard to such additional related subsequent unpaid invoices, and the matter shall either be submitted directly to arbitration and resolved in accordance with the arbitration procedures set forth below.

2. To the extent a party repeatedly fails to pay invoices related to the same matter and subsequently invokes these Internal Dispute Resolution Procedures multiple times concerning the same matter, the Transmission Provider may refer the matter to the Federal Energy Regulatory Commission Office of Enforcement.

B. Non-Binding Dispute Resolution Procedures:

If a party has submitted a notice of dispute pursuant to Tariff, Part I, section 7.1 and the parties are unable to resolve the dispute through unassisted or assisted negotiation within the 30 days (or such other period as the parties to the dispute may agree upon) provided in that section, and the parties cannot reach mutual agreement to pursue Tariff, Part I, section 7.2 arbitration process, a party may request that Transmission Provider engage in non-binding dispute resolution pursuant to this Tariff, Part VII, Subpart E, section 321 by providing written notice to Transmission Provider. Conversely, either party may file a request for non-binding dispute resolution pursuant to this section without first seeking mutual agreement to pursue Tariff, Part I, section 7.2 arbitration process. The process in this section shall serve as an alternative to, and not a replacement of, the Tariff, Part I, section 12.2 arbitration process. Pursuant to this process, the Transmission Provider must within 30 days of receipt of the request for this non-binding dispute resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with either party. Unless otherwise agreed to by the parties, the decision-maker shall render a decision within 60 days of appointment and shall notify the parties in writing of such decision and reasons therefore.

This decision-maker shall be authorized only to interpret and apply the provisions of the Tariff and relevant service agreement and shall have no power to modify or change any provision of the Tariff or relevant service agreement in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Tariff, Part I, section 12.2 arbitration, or in a Federal Power Act, section 206 complaint. Each party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each party to the dispute.

**Tariff, Part VII, Subpart E, section 322**  
**Responsibilities of Transmission Provider and Transmission Owners**

Transmission Provider shall be responsible for the preparation of all studies required by the Tariff. Transmission Provider may contract with consultants, including the affected Transmission Owner(s), to obtain services or expertise with respect to any such study, including but not limited to (1) the need for Interconnection Facilities, Network Upgrades, and Merchant Transmission Upgrades, (2) estimates of costs and construction times required by all such studies, and (3) information regarding distribution facilities. Transmission Owner(s) shall supply such information and data reasonably required by Transmission Provider to perform its obligations under this Part VII.

**Tariff, Part VII, Subpart E, section 323**  
**Additional Upgrades**

In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a New Service Request or Upgrade Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the New Service Request or Upgrade Request, a New Service Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its New Service Request or Upgrade Request. The remaining costs shall be borne by the Transmission Owners in accordance with Operating Agreement, Schedule 6 and, subject to FERC approval, may be included in the revenue requirements of the Transmission Owners.

**Tariff, Part VII, Subpart E, section 324**  
**IDR Transfer Agreement**

**A. Effect of IDR Transfer Agreement**

A Project Developer may modify its cost responsibility for Network Upgrades and/or Distribution Upgrades as determined under this Tariff, Part VII, Subpart E, section 324 by submitting an IDR Transfer Agreement in accordance with Tariff, Part VII, Subpart E, section 324(B) that transfers to the Project Developer Incremental Deliverability Rights associated with Merchant Transmission Facilities. As provided in Tariff, Part VII, Subpart E, section 324(B), the Project Developer's cost responsibility shall be modified only if it elects to terminate, and Transmission Provider confirms termination of, its participation in and cost responsibility for any Network Upgrade or Distribution Upgrade.

**B. IDR Transfer Agreements**

**1. Purpose**

A Project Developer (hereafter in this Tariff, Part VII, Subpart E, section 324(B) the "Buyer Customer") may acquire Incremental Deliverability Rights assigned to another Project Developer (hereafter in this Tariff, Part VII, Subpart E, section 324(B) the "Seller Customer") by entering into an IDR Transfer Agreement with the Seller Customer. Subject to the terms of this Tariff, Part VII, Subpart E, section 324(B) the Buyer Customer may rely upon such Incremental Deliverability Rights to satisfy, in whole or in part, its responsibility for Network Upgrades and/or Distribution Upgrades otherwise necessary to accommodate the Buyer Customer's Interconnection Request.

**2. Requirements**

A Buyer Customer may rely upon Incremental Deliverability Rights to satisfy, in whole or in part, the deliverability requirements applicable to its Interconnection Request only if it submits to Transmission Provider an IDR Transfer Agreement executed by both the Buyer Customer and the Seller Customer and only if such agreement meets all of the following requirements:

**a. Required Elements**

Any IDR Transfer Agreement submitted to Transmission Provider under this section:

- i. shall identify the Buyer Customer and the Seller Customer by full legal name, including the name of a contact person, with address and telephone number, for each party;**

- ii. shall identify the System Impact Study in which the Transmission Provider determined and assigned the Incremental Deliverability Rights transferred under the agreement;
- iii. if the Seller Customer acquired the Incremental Deliverability Rights to be transferred under the proffered agreement from another party, shall describe the chain of title of such Incremental Deliverability Rights from their original holder to the Seller Customer;
- iv. shall provide for the unconditional and irrevocable transfer of the subject Incremental Deliverability Rights to the Buyer Customer;
- v. shall include a warranty of the Seller Customer to the Buyer Customer and to the Transmission Provider that the Seller Customer holds, or has a legal right to acquire, the Incremental Deliverability Rights to be transferred under the proffered agreement;
- vi. shall identify the location and shall state unequivocally the quantity of Incremental Deliverability Rights transferred under the agreement, provided that the transferred quantity may not exceed the total quantity of Incremental Deliverability Rights that the Seller Customer holds or has legal rights to acquire at the relevant location; and
- vii. shall identify any IDR Transfer Agreement under which the Seller Customer previously transferred any Incremental Deliverability Rights associated with the same location.

b. Optional Election

When it submits the IDR Transfer Agreement to Transmission Provider, the Buyer Customer also (a) may identify any Network Upgrade or Distribution Upgrade for which the Buyer Customer has been assigned cost responsibility in association with a then-pending Interconnection Request submitted by it and for which it believes the Incremental Deliverability Rights transferred to it under the proffered IDR Transfer Agreement would satisfy the deliverability requirement applicable to such Interconnection Request; and (b) shall state whether it chooses to terminate its participation in (and cost responsibility for) any such Network Upgrade or Distribution Upgrade.

3. Subsequent Election

A Buyer Customer that has submitted a valid IDR Transfer Agreement may elect to terminate its participation in any Network Upgrade or Distribution Upgrade for

which it has not previously made such an election, at any time prior to its execution of an Interconnection Service Agreement related to the Interconnection Request with respect to which it was assigned responsibility for the affected facility or upgrade. The Buyer Customer must notify Transmission Provider in writing of such an election and its election shall be subject to Transmission Provider's determination and confirmation under Tariff, Part VII, Subpart E, section 324(B).

4. Confirmation by Transmission Provider:

- a. Transmission Provider shall determine whether and to what extent the Incremental Deliverability Rights transferred under an IDR Transfer Agreement would satisfy the deliverability requirements applicable to the Buyer Customer's Interconnection Request. Transmission Provider shall notify the parties to the IDR Transfer Agreement of its determination within 30 days after receipt of the agreement. If the Transmission Provider determines that the IDRs transferred under the proffered agreement would not satisfy, in whole or in part, the deliverability requirement applicable to the Buyer Customer's Interconnection Request, its notice to the parties shall explain the reasons for its determination and, to the extent of Transmission Provider's negative determination, the parties' IDR Transfer Agreement shall not be queued as an Interconnection Request pursuant to Tariff, Part VII, Subpart E, section 324. Any dispute regarding Transmission Provider's determination may be submitted to dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5.
- b. To the extent that an election of the Buyer Customer under Tariff, Part VII, Subpart E, sections 324(B)(2)(b) and 324(B)(3) to terminate participation in any Network Upgrade or Distribution Upgrade is consistent with Transmission Provider's determination, Transmission Provider shall confirm Buyer's termination election and shall recalculate accordingly the Buyer Customer's cost responsibility under Tariff, Part VII, Subpart D, section 307(A)(5), as applicable. Transmission Provider shall provide its confirmation, along with any recalculation of cost responsibility, under this section in writing to the Buyer Customer within 30 days after receipt of notice of the Buyer Customer's election to terminate participation.

5. Effect of Election on Interconnection Request

In the event that the Buyer Customer, pursuant to a confirmed election under this section 324(B), terminates its participation in any Network Upgrade or Distribution Upgrade and the Interconnection Request underlying the Incremental Deliverability Rights acquired by the Buyer Customer under its IDR Transfer Agreement subsequently is terminated and withdrawn, or deemed to be so, then the Buyer Customer's New Service Request also shall be deemed to be concurrently terminated and withdrawn.

6. Effect on Interconnection Studies

Each IDR Transfer Agreement shall be deemed to be a New Service Request and shall be queued, and shall be reflected as appropriate in subsequent System Impact Studies, with other New Service Requests received under the Tariff. The Buyer Customer shall be the Project Developer for purposes of application of the provisions of Tariff, Part VII, including, in the event that Transmission Provider determines that further analysis of the relevant IDRs is necessary, provisions relating to responsibility for the costs of Interconnection Studies.



**Tariff, Part VII, Subpart E, section 325**  
**Regional Transmission Expansion Plan**

- A. Any Interconnection Facilities, Direct Assignment Facilities, Distribution Upgrades, or Network Upgrades constructed to accommodate a New Service Request or an Affected System facility shall be included in the Regional Transmission Expansion Plan upon their identification in an interconnection-related agreement in the form set forth in Tariff, Part IX. For purposes of this Part VII, Subpart E, section 325, an Affected System facility is a facility, that in the event that interconnection of a new or expanded generation or transmission facility with an Affected System, requires Distribution Upgrades or Network Upgrades to the Transmission Provider's Transmission System.
- B. In the event that termination of a New Service Customer's participation in a previously identified Network Upgrade or Distribution Upgrade pursuant to Tariff, Part VII, Subpart E, section 324, eliminates the need for such upgrade, Transmission Provider shall offer all New Service Customers whose New Service Requests preceded the IDR Transfer Agreement that facilitated such termination an opportunity to pursue and pay for (in whole or in part) such upgrade.
- C. Transmission Provider shall remove from the Regional Transmission Expansion Plan any Network Upgrade or Distribution Upgrade in the event that the need for such upgrade is eliminated due to termination of a New Service Customer's participation in such upgrade and other New Service Customers do not pursue and pay for the upgrade pursuant to Tariff, Part VII, Subpart E, section 325(B).

**Tariff, Part VII, Subpart E, section 326**  
**Transmission Owner Construction Obligation for Necessary Facilities and Upgrades**

**A. Construction Obligation**

The determination of the Transmission Owners' obligations to build the necessary facilities and upgrades to accommodate New Service Requests, or interconnections with Affected Systems in accordance with Tariff, Part VII, Subpart G, section 336, shall be made in the same manner as such responsibilities are determined under Operating Agreement, Schedule 6. Except to the extent otherwise provided in a Generation Interconnection Agreement or Construction Service Agreement entered into pursuant to this Tariff, Part VII, the Transmission Owners shall own all Interconnection Facilities and Network Upgrades constructed to accommodate New Service Requests.

**B. Alternative Facilities and Upgrades**

Upon completion of the studies of a New Service Request or Upgrade Request prescribed in the Tariff, the Transmission Provider shall recommend the necessary facilities and upgrades to accommodate the New Service Request or Upgrade Request, and the Transmission Owner's construction obligation to build such facilities and upgrades. The Transmission Owner(s), or the Project Developer, Eligible Customer or Upgrade Customer, may offer alternatives to the Transmission Provider's recommendation. If, based upon its review of the relative costs and benefits, the ability of the alternative(s) to accommodate the New Service Request or Upgrade Request, and the alternative's(s') impact on the reliability of the Transmission System, the Transmission Provider does not adopt such alternative(s), the Transmission Owner(s), or the Project Developer, Eligible Customer, or Upgrade Customer, may require that the alternative(s) be submitted to Dispute Resolution in accordance with Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. The affected Project Developer, Eligible Customer, Upgrade Customer may participate in any such Dispute Resolution process.

**Tariff, Part VII, Subpart E, section 327**  
**Confidentiality**

Except as otherwise provided in this Tariff, Part VII, Subpart E, section 327, all information provided to Transmission Provider by Project Developers, Eligible Customers, or Upgrade Customers relating to any study of a New Service Request or Upgrade Request, required under the Tariff shall be deemed Confidential Information under Tariff, Part VII, Subpart E, section 327(A). Upon completion of each study, the study will be listed on Transmission Provider's website and, to the extent required by Commission regulations, will be made publicly available upon request. To the extent that Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of any of the studies required under the Tariff, the consultants and/or Transmission Owner(s) shall keep all information provided by Project Developers confidential, and shall use such information solely for the purpose of the study for which it was provided and for no other purpose.

A. Confidential Information

For purposes of this Tariff, Part VII, Subpart E, section 327(A), the term "party" refers to Project Developer, Eligible Customer, Upgrade Customer, Transmission Provider, or a Transmission Owner, as applicable, and the term "parties" refers to all such entities collectively, or to any two or more of them, as the context indicates. Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the party providing the information orally informs the party receiving the information that the information is confidential. If requested by any party, the disclosing party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting party may disclose such writing to an appropriate Governmental Authority. Any party shall be responsible for the costs associated with affording confidential treatment to its information.

1. Term

During the longest of the terms of (as and to the extent applicable) interconnection-related service agreement set forth in Tariff, Part IX and for a period of three years after the expiration or termination thereof, and except as otherwise provided in this Tariff, Part VII, Subpart E, section 327(A), each party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other party.

2. Scope

Confidential Information shall not include information that the receiving party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving party; (ii) was in the lawful possession of the receiving party on a non-confidential basis before receiving it from the disclosing party; (iii) was supplied to the receiving party without restriction by a third party, who, to the

knowledge of the receiving party, after due inquiry, was under no obligation to the disclosing party to keep such information confidential; (iv) was independently developed by the receiving party without reference to Confidential Information of the disclosing party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving party or breach of the requirements of this Tariff, Part VII, Subpart E, section 327(A); or (vi) is required, in accordance with Tariff, Part VII, Subpart E, section 327(A)(7) below, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Tariff or any agreement entered into pursuant thereto. Information designated as Confidential Information shall no longer be deemed confidential if the party that designated the information as confidential notifies the other parties that it no longer is confidential.

### 3. Release of Confidential Information

No party shall disclose Confidential Information to any other person, except to its Affiliates (limited by the Commission's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be, or may be considering, providing financing to or equity participation in Project Developer, Eligible Customer, or Upgrade Customer, or to potential purchasers or assignees of Project Developer, Eligible Customer, or Upgrade Customer, on a need-to-know basis in connection with the interconnected-related service agreement, unless such person has first been advised of the confidentiality provisions of this Tariff, Part VII, Subpart E, section 327(A) and has agreed to comply with such provisions. Notwithstanding the foregoing, a party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Tariff, Part VII, Subpart E, section 327(A).

### 4. Rights

Each party retains all rights, title, and interest in the Confidential Information that it discloses to any other party. A party's disclosure to another party of Confidential Information shall not be deemed a waiver by any party or any other person or entity of the right to protect the Confidential Information from public disclosure.

### 5. No Warranties

By providing Confidential Information, no party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no party obligates itself to provide any particular information or Confidential Information to any other party nor to enter into any further agreements or proceed with any other relationship or joint venture.

### 6. Standard of Care

Each party shall use at least the same standard of care to protect Confidential Information it receives as the party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each party may use Confidential Information solely to fulfill its obligations to the other parties under this Tariff, Part VII or any agreement entered into pursuant to this Tariff, Part VII.

7. Order of Disclosure

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that party shall provide the party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing party may seek an appropriate protective order or waive compliance with the terms of this Tariff, Part VII or any applicable agreement entered into pursuant to this Tariff, Part VII. Notwithstanding the absence of a protective order or agreement, or waiver, the party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the party is legally compelled to disclose. Each party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

8. Termination of Agreement(s)

Upon termination of any agreement entered into pursuant to this Tariff, Part VII for any reason, each party shall, within 10 calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

9. Disclosure to FERC or its Staff

Notwithstanding anything in this Tariff, Part VII, Subpart E, section 327(A) to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the parties that is otherwise required to be maintained in confidence pursuant to this Tariff, Part VII or any agreement entered into pursuant to this Tariff, Part VII, the party receiving such request shall provide the requested information to FERC or its staff within the time provided for in the request for information.

In providing the information to FERC or its staff, the party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other parties prior to the release of the Confidential Information to the Commission or its staff. A party shall

notify the other party(ies) to any agreement entered into pursuant to this Tariff, Part VII when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### 10. Other Disclosures

Subject to the exception in Tariff, Part VII, Subpart E, section 327(A)(9), no party shall disclose Confidential Information of another party to any person not employed or retained by the disclosing party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing party to be required in connection with a dispute between or among the parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Tariff, Part VII or any agreement entered into pursuant to this Tariff, Part VII, or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another party's Confidential Information under this Tariff, Part VII, Subpart E, section 327(A)(10), the disclosing party shall promptly notify the other parties in writing and shall assert confidentiality and cooperate with the other parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order, or other reasonable measures.

#### 11. Information in Public Domain

This confidentiality provision shall not apply to any information that was or is hereafter in the public domain, except as a result of a breach of this confidentiality provision.

#### 12. Return or Destruction of Confidential Information

If a party provides any Confidential Information to another party in the course of an audit or inspection, the providing party may request the other party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other party that it has complied with such request.

**Tariff, Part VII, Subpart E, section 328**  
**Capacity Interconnection Rights**

**A. Purpose**

Capacity Interconnection Rights shall entitle the holder to deliver the output of a Generation Capacity Resource at the bus where the Generation Capacity Resource interconnects to the Transmission System. The Transmission Provider shall plan the enhancement and expansion of the Transmission System in accordance with Operating Agreement, Schedule 6 such that the holder of Capacity Interconnection Rights can integrate its Capacity Resources in a manner comparable to that in which each Transmission Owner integrates its Capacity Resources to serve its Native Load Customers.

**B. Receipt of Capacity Interconnection Rights**

Generation accredited under the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region (“RAA”) as a Generation Capacity Resource prior to the original effective date of Tariff, Part IV shall have Capacity Interconnection Rights commensurate with the size in megawatts of the accredited generation. When a Generation Project Developer’s generation is accredited as deliverable through the applicable procedures of the Tariff, the Generation Project Developer also shall receive Capacity Interconnection Rights commensurate with the size in megawatts of the generation as identified in the Generation Interconnection Agreement. Pursuant to the applicable terms of RAA, Schedule 10, a Transmission Project Developer may combine Incremental Deliverability Rights associated with Merchant Transmission Facilities with generation capacity that is not otherwise accredited as a Generation Capacity Resource for the purposes of obtaining accreditation of such generation as a Generation Capacity Resource and associated Capacity Interconnection Rights.

**C. Loss of Capacity Interconnection Rights**

**1. Operational Standards**

To retain Capacity Interconnection Rights, the Generation Capacity Resource associated with the rights must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with RAA, Schedule 9 and the PJM Manuals. Generation Capacity Resources that meet these operational standards shall retain their Capacity Interconnection Rights regardless of whether they are available as a Generation Capacity Resource or are making sales outside the PJM Region.

**2. Failure to Meet Operational Standards**

This Tariff, Part VII, Subpart E, section 328 shall apply only in circumstances other than Deactivation of a Generation Capacity Resource. In the event a Generation Capacity Resource fails to meet the operational standards set forth in Tariff, Part



VII, Subpart E, section 328(C)(1) for any consecutive three-year period (with the first such period commencing on the date Generation Project Developer must demonstrate commercial operation of the generating unit(s) as specified in the Generation Interconnection Agreement), the holder of the Capacity Interconnection Rights associated with such Generation Capacity Resource will lose its Capacity Interconnection Rights in an amount commensurate with the loss of generating capability. Any period during which the Generation Capacity Resource fails to meet the standards set forth in Tariff, Part VII, Subpart E, section 328(C)(1) as a result of an event that meets the standards of a Force Majeure event as defined in Tariff, Part I, section 1 shall be excluded from such consecutive three-year period, provided that the holder of the Capacity Interconnection Rights exercises due diligence to remedy the event. A Generation Capacity Resource that loses Capacity Interconnection Rights pursuant to this section may continue Interconnection Service, to the extent of such lost rights, as an Energy Resource in accordance with (and for the remaining term of) its Generation Interconnection Agreement and/or applicable terms of the Tariff.

### 3. Replacement of Generation

In the event of the Deactivation of a Generation Capacity Resource (in accordance with Tariff, Part V and any Applicable Standards), or removal of Capacity Resource status (in accordance with Tariff, Attachment DD, section 6.6 or Tariff, Attachment DD, section 6.6A), any Capacity Interconnection Rights associated with such Generating Facility shall terminate one year from the Deactivation Date, or one year from the date the Capacity Resource status change takes effect, unless the holder of such rights (including any holder that acquired the rights after Deactivation or removal of Capacity Resource status) has submitted a completed Generation Interconnection Request up to one year after the Deactivation Date, or up to one year from the date the Capacity Resource status changes take effect, which claims the same Capacity Interconnection Rights in accordance with Tariff, Part VII, Subpart C, section 306(D). A Generation Project Developer must submit any claim for Capacity Interconnection Rights from deactivating units concurrently with its Application for Interconnection Service, and the claim must be received by Transmission Provider prior to the Application Deadline, or Transmission Provider will not process the claim. Such new Generation Interconnection Request may include a request to increase Capacity Interconnection Rights in addition to the replacement of the previously deactivated amount, or amount removed from Capacity Resource status, as a single Generation Interconnection Request. Transmission Provider may perform thermal, short circuit, and/or stability studies, as necessary and in accordance with the PJM Manuals, due to any changes in the electrical characteristics of any newly proposed equipment, or where there is a change in Point of Interconnection, which may result in the loss of a portion or all of the Capacity Interconnection Rights as determined by such studies.

Upon execution of a Generation Interconnection Agreement reflecting its new Generation Interconnection Request, the holder of the Capacity Interconnection



Rights will retain only such rights that are commensurate with the size in megawatts of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights associated with the facility upon Deactivation or removal of Capacity Resource status. Any desired increase in Capacity Interconnection Rights must be reflected in the new Generation Interconnection Request and be accredited through the applicable procedures in Tariff, Part IV and Tariff, Part VI. In the event the new Generation Interconnection Request to which this section refers is, or is deemed to be, terminated and/or withdrawn for any reason at any time, the pertinent Capacity Interconnection Rights shall not terminate until the end of the one-year period from the Deactivation Date, or the end of the one year period from the date the Capacity Resource status change takes effect.

#### 4. Transfer of Capacity Interconnection Rights

Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by Transmission Provider regarding such transfer and notice to Transmission Provider of any Generating Facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in Tariff, Part VII, Subpart E, section 328(C) regarding loss of Capacity Interconnection Rights.

**Tariff, Part VII, Subpart E, section 329**  
**Incremental Rights**

**A. Incremental Auction Revenue Rights**

**1. Right of Transmission Project Developer or Upgrade Customer to Incremental Auction Revenue Rights**

A Transmission Project Developer or Upgrade Customer that (a) pursuant to this Tariff, Part VII reimburses Transmission Provider for the costs of constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, shall be entitled to receive the Incremental Auction Revenue Rights as determined in accordance with this Tariff, Part VII, Subpart E, section 329(A). However, a Transmission Project Developer that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System shall be entitled to Incremental Auction Revenue Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Transmission Project Developer has elected, pursuant to Tariff, Part VII, Subpart E, section 330 to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

**2. Procedures for Assigning Incremental Auction Revenue Rights**

No less than 45 days prior to the in-service date, as determined by the Office of the Interconnection, of the applicable transmission facility or upgrade related to a New Service Request or Upgrade Request, the Office of the Interconnection shall notify the Transmission Project Developer or Upgrade Customer that has responsibility to reimburse the costs of, or responsibility for, constructing or completing the transmission facility or upgrade, that initial requests for Incremental Auction Revenue Rights associated with the transmission facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with Tariff, Part VII, Subpart E, section 329(A)(3).

In round two, two-thirds of the Incremental Auction Revenue Rights available for each requested point-to-point combination in that round will be assigned in accordance with Tariff, Part VII, Subpart E, section 329(A)(3). In round three, all

available Incremental Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with Tariff, Part VII, Subpart E, section 329(A)(3). In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental Auction Revenue Rights assignment in rounds one and two will result in the Incremental Auction Revenue Rights being available for the next round. The Incremental Auction Revenue Rights assignments made in round three will be final and binding. For each round, a request for Incremental Auction Revenue Rights shall specify a single point-to-point combination for which the Transmission Project Developer or Upgrade Customer desires Incremental Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the upgrade.

3. Determination of Incremental Auction Revenue Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Auction Revenue Rights to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VII, Subpart E, section 329(A)(2) using the tools described in Tariff, Attachment K, including an assessment of the simultaneous feasibility of any Incremental Auction Revenue Rights and all other outstanding Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system Auction Revenue Rights capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate New Service Requests or Upgrade Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the Auction Revenue Rights capability, including the impact of any new transmission facilities or upgrades. For each point-to-point combination, the Incremental Auction Revenue Rights capability shall be the difference between the Auction Revenue Rights capability in the base system analysis and the Auction Revenue Rights capability in the analysis including the impact of the new transmission facilities and upgrades. When multiple Transmission Project Developers or Upgrade Customers have cost responsibility for the same new transmission facility or upgrade, Incremental Auction Revenue Rights shall be assigned to each Transmission Project Developer or Upgrade Customer in proportion to the Transmission Project Developer's or Upgrade Customer's relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or

interfaces of the point-to-point combinations selected by the Transmission Project Developer or Upgrade Customer.

4. Duration of Incremental Auction Revenue Rights

Incremental Auction Revenue Rights received by a Transmission Project Developer or Upgrade Customer pursuant to this Tariff, Part VII, Subpart E, section 329(A) shall be available as of the first day of the first month that the Network Upgrades required to accommodate its New Service Request or Upgrade Request that are associated with the Incremental Auction Revenue Rights are included in the transmission system model for the monthly FTR auction and shall continue to be available for 30 years or for the life of the associated facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all Auction Revenue Rights (including Incremental Auction Revenue Rights) in accordance with Tariff, Attachment K - Appendix. At any time during this 30-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this 30-year Auction Revenue Right, the Transmission Project Developer or Upgrade Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the Transmission Project Developer or Upgrade Customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to Tariff, Attachment K – Appendix, section 7.4.2) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to Tariff, Attachment K – Appendix, section 7.5. A Transmission Project Developer or Upgrade Customer may return Incremental Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding Auction Revenue Rights following the return of such Auction Revenue Rights. In the event a Transmission Project Developer or Upgrade Customer returns Incremental Auction Revenue Rights, the Transmission Project Developer or Upgrade Customer shall have no further rights regarding such Incremental Auction Revenue Rights.

5. Value of Incremental Auction Revenue Rights

The value of Incremental Auction Revenue Right(s) to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VII, Subpart E, section 329(A)(2) that become effective at the beginning of a Planning Period shall be determined in the same manner as annually allocated Auction Revenue Right(s) based on the nodal prices resulting from the annual Financial Transmission Rights auction. The value of such Incremental Auction Revenue Rights that become effective after the commencement of a Planning Period shall be determined on a monthly basis for each month in the Planning Period beginning with the month the Incremental Auction Revenue Right(s) becomes effective. The value of such Incremental Auction Revenue Right shall be equal to the megawatt amount of the Incremental Auction Revenue Rights multiplied by the LMP differential between

the source and sink nodes of the corresponding FTR obligations in each prompt-month FTR auction that occurs from the effective date of the Incremental Auction Revenue Rights through the end of the relevant Planning Period. For each Planning Period thereafter, the value of such Incremental Auction Revenue Rights shall be determined in the same manner as Incremental Auction Revenue Rights that became effective at the beginning of a Planning Period.

6. Rate-based Facilities

No Incremental Auction Revenue Rights shall be received by a Transmission Project Developer, Eligible Customer, or Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

B. Incremental Capacity Transfer Rights

1. Right of Transmission Project Developer or Upgrade Customer to Incremental Capacity Transfer Rights

A Transmission Project Developer that interconnects Merchant Transmission Facilities with the Transmission System shall be entitled to receive any Incremental Capacity Transfer Rights that are associated with the interconnection of such Merchant Transmission Facilities as determined in accordance with this Tariff, Part VII, Subpart E, section 329(B). In addition, an Upgrade Customer that (a) reimburses Transmission Provider for the costs of constructing or completing Customer-Funded Upgrades, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Customer-Funded Upgrades shall be entitled to receive any Incremental Capacity Transfer Rights associated with such required facilities and upgrades as determined in accordance with this Tariff, Part VII, Subpart E, section 329(B).

a. Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities

A Transmission Project Developer (a) that interconnects Merchant D.C. transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Capacity Transfer Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under Tariff, Attachment C.

## 2. Procedures for Assigning Incremental Capacity Transfer Rights

After execution of a Study Agreement but prior to the issuance of an Interconnection Agreement or Upgrade Construction Service Agreement, a Transmission Project Developer or Upgrade Customer may request the Office of the Interconnection to determine the Incremental Capacity Transfer Rights as measured by the increase in Capacity Emergency Transfer Limit resulting from the interconnection or addition of Merchant Transmission Facilities or a Customer-Funded Upgrade identified in the System Impact Study for the related New Service Request. At the time of such request, the Transmission Project Developer or Upgrade Customer must also specify no more than three Locational Deliverability Areas in which to determine the Incremental Capacity Transfer Rights. Subject to the limitation of Tariff, Part VII, Subpart E, section 329(B)(1)(a), the Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with Merchant Transmission Facilities to the Transmission Project Developer that is interconnecting such facilities. The Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with a Customer-Funded Upgrade to the Upgrade Customer(s) bearing cost responsibility for such facility or upgrade in proportion to each Upgrade Customer's cost responsibility for the facility or upgrade.

## 3. Determination of Incremental Capacity Transfer Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Capacity Transfer Rights to be provided to Transmission Project Developers or Upgrade Customers in accordance with the applicable terms of the Reliability Pricing Model, in Tariff, Attachment DD, and pursuant to the procedures specified in the PJM Manuals.

## 4. Duration of Incremental Capacity Transfer Rights

Incremental Capacity Transfer Rights received by a Transmission Project Developer or Upgrade Customer shall be effective for 30 years from, as applicable, commencement of Interconnection Service, Transmission Service, or Network Service for the affected Transmission Project Developer or Upgrade Customer or the life of the pertinent facility or upgrade, whichever is shorter, subject to any subsequent pro-rata reallocations of all Capacity Transfer Rights (including Incremental Capacity Transfer Rights) in accordance with the PJM Manuals.

## 5. Rate-based Facilities

No Incremental Capacity Transfer Rights shall be received by a Transmission Project Developer or Upgrade Customer with respect to transmission investment

that is included in the rate base of a public utility and on which a regulated return is earned.

### C. Incremental Deliverability Rights

#### 1. Right of Transmission Interconnection Customer to Incremental Deliverability Rights

A Transmission Project Developer shall be entitled to receive the Incremental Deliverability Rights associated with its Merchant Transmission Facilities as determined in accordance with this section, provided, however, that a Transmission Project Developer that proposes to interconnect Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area shall be entitled to Incremental Deliverability Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to Tariff, Part VII, Subpart E, section 330, to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

#### 2. Procedures for Assigning Incremental Deliverability Rights

Transmission Provider shall include in the System Impact Study a determination of the Incremental Deliverability Rights associated with the Transmission Project Developer's Merchant Transmission Facilities. Transmission Provider shall post on its OASIS the Incremental Deliverability Rights that it assigns to the Transmission Project Developer under this section 329(C)(2).

#### 3. Determination of Incremental Deliverability Rights to be Provided to Transmission Project Developer

Transmission Provider shall determine the Incremental Deliverability Rights to be provided to a Transmission Project Developer associated with proposed Merchant Transmission Facilities under Tariff, Part VII, Subpart E, section 329(C)(2) pursuant to procedures specified in the PJM Manuals.

#### 4. Duration of Incremental Deliverability Rights

Incremental Deliverability Rights assigned to a Transmission Project Developer shall be effective until the earlier of the date that is one year after the commencement of Interconnection Service for such customer or the date that such Transmission Project Developer's New Service Request is withdrawn and terminated, or deemed to be so, in accordance with the Tariff. Notwithstanding the preceding sentence, Incremental Deliverability Rights that are transferred pursuant to an IDR Transfer Agreement under the Tariff shall be deemed to be Capacity



Interconnection Rights of the generation owner that acquires them under such agreement upon commencement of Interconnection Service related to the generation owner's Generating Facility and shall remain effective for the life of such Generating Facility, or for the life of the Merchant Transmission Facilities associated with the transferred IDRs, whichever is shorter. The deemed conversion of IDRs to Capacity Interconnection Rights under this Tariff, Part VII, Subpart E, section 329(C)(4) shall not affect application to such IDRs of the other provisions of this Tariff, Part VII, Subpart E, section 329(C). A Transmission Project Developer may return Incremental Deliverability Rights that it no longer desires at any time. In the event that a Transmission Project developer returns Incremental Deliverability Rights, it shall have no further rights regarding such Incremental Deliverability Rights.

5. Transfer of Incremental Deliverability Rights

Incremental Deliverability Rights may be sold or otherwise transferred at any time after they are assigned pursuant to Tariff, Part VII, Subpart E, section 329(C)(2), subject to execution and submission of an IDR Transfer Agreement in accordance with the Tariff. The transfer of Incremental Deliverability Rights shall not itself extend the periods set forth in Tariff, Part VII, Subpart E, section 329(C)(7) regarding loss of Incremental Deliverability Rights.

6. Effectiveness of Incremental Deliverability Rights

Incremental Deliverability Rights shall not entitle the holder thereof to use the capability associated with such rights unless and until Transmission Provider commences Interconnection Service related to the Merchant Transmission Facilities associated with such rights.

7. Loss of Incremental Deliverability Rights

Incremental Deliverability Rights shall be extinguished (a) in the event that the New Service Request of the Transmission Project Developer to which the rights were assigned is withdrawn and terminated, or deemed to be so, as provided in the Tariff, without regard for whether the rights have been transferred pursuant to an IDR Transfer Agreement, or (b) such rights are not transferred pursuant to an IDR Transfer Agreement on or before the date that is one year after the commencement of Interconnection Service related to the Merchant Transmission Facilities with which the rights are associated.

8. Rate-based Facilities

No Incremental Deliverability Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.



**Tariff, Part VII, Subpart E, section 330**  
**Rights for Transmission Interconnections**

**A. Transmission Injection Rights and Transmission Withdrawal Rights**

**1. Purpose**

Transmission Injection Rights shall entitle the holder, as provided in this Tariff, Part VII, Subpart E, section 330, to schedule energy transmitted on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities for injection into the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System. Transmission Withdrawal Rights shall entitle the holder, as provided in this Tariff, Part VII, Subpart E, section 330, to schedule for transmission on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities energy to be withdrawn from the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System.

**2. Receipt of Transmission Injection Rights and Transmission Withdrawal Rights**

Subject to the terms of this section 330, a Transmission Project Developer that constructs Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with the Transmission System and with another control area outside the PJM Region shall be entitled to receive Transmission Injection Rights and/or Transmission Withdrawal Rights at each terminal where such Transmission Project Developer's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. A Transmission Project Developer that is granted Firm Transmission Withdrawal Rights and/or transmission service customers that have a Point of Delivery at the border of the PJM Region where the Transmission System interconnects with the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, may be responsible for a reasonable allocation of transmission upgrade costs added to the Regional Transmission Expansion Plan, in accordance with Tariff, Part I, section 3E and Tariff, Schedule 12. Notwithstanding the foregoing, any Transmission Injection Rights and Transmission Withdrawal Rights awarded to a Transmission Project Developer that interconnects Controllable A.C. Merchant Transmission Facilities shall be, throughout the duration of the Service Agreement applicable to such interconnection, conditioned on such Transmission Project Developer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

**a. Total Capability**

A Transmission Project Developer or other party may hold Transmission Injection Rights and Transmission Withdrawal Rights simultaneously at the same terminal on the Transmission System. However, neither the aggregate Transmission Injection Rights nor the aggregate Transmission Withdrawal Rights held at a terminal may exceed the Nominal Rated Capability of the interconnected Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, as stated in the associated Service Agreement(s).

3. Determination of Transmission Injection Rights and Transmission Withdrawal Rights to be Provided to Transmission Project Developer

The Office of the Interconnection shall determine the Transmission Injection Rights and the Transmission Withdrawal Rights associated with Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities to be provided to eligible Transmission Project Developer(s) pursuant to the procedures specified in the PJM Manuals. The Office of the Interconnection shall state in the System Impact Studies the Transmission Injection Rights and Transmission Withdrawal Rights (including the quantity of each type of such rights) to be made available to the Transmission Project Developer at the terminal(s) where the pertinent Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. Such rights shall become available to the Transmission Project Developer pursuant to the Interconnection Agreement and upon commencement of Interconnection Service thereunder.

4. Duration of Transmission Injection Rights and Transmission Withdrawal Rights

Subject to the terms of Tariff, Part VII, Subpart E, section 330(A)(7), Transmission Injection Rights and/or Transmission Withdrawal Rights received by a Transmission Project Developer shall be effective for the life of the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities.

5. Rate-based Facilities

No Transmission Injection Rights or Transmission Withdrawal Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

6. Transfer of Transmission Injection Rights and Transmission Withdrawal Rights

Transmission Injection Rights and/or Transmission Withdrawal Rights may be sold or otherwise transferred subject to compliance with such procedures as

Transmission Provider may establish, by publication in the PJM Manuals, regarding such transfer and required notice to Transmission Provider of use of such rights after the transfer. The transfer of Transmission Injection Rights or of Transmission Withdrawal Rights shall not itself extend the periods set forth in Tariff, Part VII, Subpart E, section 330(A)(7) regarding loss of such rights.

7. Loss of Transmission Injection Rights and Transmission Withdrawal Rights

a. Operational Standards

To retain Transmission Injection Rights and Transmission Withdrawal Rights, the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with applicable criteria stated in the PJM Manuals. Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that meet these operational standards shall retain their Transmission Injection Rights and Transmission Withdrawal Rights regardless of whether they are used to transmit energy within or to points outside the PJM Region.

b. Failure to Meet Operational Standards

In the event that any Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities fail to meet the operational standards set forth in this Tariff, Part VII, Subpart E, section 330(A)(7) for any consecutive three-year period, the holder(s) of the associated Transmission Injection Rights and Transmission Withdrawal Rights will lose such rights in an amount reflecting the loss of first contingency transfer capability. Any period during which the transmission facility fails to meet the standards set forth in this Tariff, Part VII, Subpart E, section 330(A)(7) as a result of an event that meets the standards of a Force Majeure event shall be excluded from such consecutive three-year period, provided that the owner of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities exercises due diligence to remedy the event.

B. Interconnection Rights for Certain Transmission Interconnections

1. Qualification to Receive Certain Rights

In order to obtain the rights associated with Merchant Transmission Facilities (other than Merchant Network Upgrades) provided under the Tariff, prior to the commencement of Interconnection Service associated with such facilities, a Transmission Interconnection Customer that interconnects or adds Merchant Transmission Facilities (other than Merchant Network Upgrades) to the

Transmission System must become and remain a signatory to the Consolidated Transmission Owners Agreement.

2. Upgrades to Merchant Transmission Facilities

In the event that Transmission Provider determines in accordance with the Regional Transmission Expansion Planning Protocol of Operating Agreement, Schedule 6 that an addition or upgrade to Merchant A.C. Transmission Facilities is necessary, the owner of such Merchant A.C. Transmission Facilities shall undertake such addition or upgrade and shall operate and maintain all facilities so constructed or installed in accordance with Good Utility Practice and with applicable terms of the Operating Agreement and the Consolidated Transmission Owners Agreement, as applicable. Cost responsibility for each such addition or upgrade shall be assigned in accordance with Operating Agreement, Schedule 6. Each Transmission Owner to whom cost responsibility for such an upgrade is assigned shall further be responsible for all costs of operating and maintaining the addition or upgrade in proportion to its respective assigned cost responsibilities.

3. Limited Duration of Rights in Certain Cases

Notwithstanding any other provision of this Tariff, Part VII, Subpart E, section 330, in the case of any Merchant Transmission Facilities that solely involves advancing the construction of a transmission enhancement or expansion other than a Merchant Transmission Facility that is included in the Regional Transmission Expansion Plan, any rights available to such facility under this Tariff, Part VII, Subpart E, section 330 shall be limited in duration to the period from the inception of Interconnection Service for the affected Merchant Transmission Facilities until the time when the Regional Transmission Expansion Plan originally provided for the pertinent transmission enhancement or expansion to be completed.

**Tariff, Part VII, Subpart E, section 331**  
**Milestones**

A. In order to proceed with Generation Interconnection Agreement, within 60 days after receipt of the Phase III System Impact Study (or, if no Phase III System Impact Study was required, then after the results of either the Phase I or Phase II System Impact Study were provided on Transmission Provider's website):

1. Project Developer must demonstrate that it has:

- a. entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; and
- b. obtained any necessary local, county, and state site permits; and
- c. signed a memorandum of understanding for the acquisition of major equipment; and
- d. if applicable, obtained any necessary local, county, and state siting permits or other required approvals for the construction of its proposed Merchant D.C. Transmission Facilities or Merchant Controllable A.C. Transmission Facilities.

B. The Transmission Provider may include any additional related milestone dates beyond those included in Tariff, Part IX, Subpart B in the Generation Interconnection Agreement for the construction of the project Developer's generation project that, if not met, shall relieve the Transmission Provider and the Transmission Owner(s) from the requirement to construct the necessary facilities and upgrades.

- 1. If the milestone dates in the Generation Interconnection Agreement are not met, such Generation Interconnection Agreement may be deemed to be terminated and Transmission Provider may cancel such agreement with the Federal Energy Regulatory Commission, and the New Service Agreement may simultaneously be deemed to be terminated and withdrawn.
- 2. Such milestones may include site acquisition, permitting, regulatory certifications (if required), acquisition of any necessary third-party financial commitments, commercial operation, and similar events.
- 3. The Transmission Provider may reasonably extend any such milestone dates (including those required in order to proceed with an Generation Interconnection Agreement) in the event of delays not caused by the Project Developer, such as unforeseen regulatory or construction delays that could not be remedied by the Project Developer through the exercise of due diligence.

4. The Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B, provides Project Developer shall also have a one-time option to extend any milestone (other than any milestone related to Site Control) for a total period of one year regardless of cause. Other milestone dates stated in the Generation Interconnection Agreement shall be deemed to be extended coextensively with Project Developer's use this provision.
5. Termination and withdrawal of a New Service Request for failure to meet a milestone shall not relieve the Project Developer from reimbursing the Transmission Provider (for the benefit of the affected Transmission Owner(s)) for the costs incurred prior to such termination and withdrawal. Applicable provisions of the Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the CSA or the applicable Generation Interconnection Agreement was in effect.

**Tariff, Part VII, Subpart E, section 332**  
**Winter Capacity Interconnection Rights**

By August 31 of each calendar year, PJM shall solicit requests from Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD. Such additional Capacity Interconnection Rights would be for a one-year period as specified by PJM in the solicitation. Responses to such solicitation must be submitted by such interested Generation Owners by October 31 prior to the upcoming Base Residual Auction. Such requests shall be studied for deliverability similar to any Generation Project Developer that seeks to submit a New Service Request; however, such requests shall not be required to submit a New Service Request. PJM shall study such requests in a manner so as to prevent infringement on available system capabilities of any resource which is already in service, or which has an executed service agreement from Tariff, Part IX, or that has a valid New Service Request in a Cycle.

**Tariff, Part VII, Subpart E, section 333**  
**Interconnection Studies Processing Time and Metrics**

**A. Phase I System Impact Studies Processing Time**

- 1. Number of New Service Requests that had Phase I System Impact Studies completed within the six month reporting period.**
- 2. Number of New Service Requests that had Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 120 days, as determined in conformance with Tariff, Part VII, Subpart D, section 308(A)(1)(b).**
- 3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase I System Impact Studies exceeding 120 days, as determined in conformance with Tariff, Part VII, Subpart D, section 308(A)(1)(b).**
- 4. Mean time (in days), for Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period, from the date when Transmission Provider initiated the performance of the System Impact Studies to the date when Transmission Provider provided the completed Phase I System Impact Study to Project Developers.**
- 5. Percentage of New Service Requests with Phase I System Impact Studies exceeding 120 days as determined in conformance with Tariff, Part VII, Subpart D, section 308(A)(1)(b) to complete this six month reporting period, calculated as the sum of this section 333(A)(2) plus 333(A)(3) divided by the sum of 333(A)(1) plus 333(A)(3).**

**B. Phase II System Impact Studies Processing Time**

- 1. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period.**
- 2. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 310(A)(1)(e) after the date the end of Decision Point I.**
- 3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 310(A)(1)(e) after the end of Decision Point I.**



4. Mean time (in days), for Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period from the day after the end of Decision Point to the date when Transmission Provider provided the completed Phase II Interconnection System Impact Study to Project Developers.
5. Percentage of New Service Requests with Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 310(A)(1)(e), to complete this six month reporting period, calculated as the sum of section 333(B)(2) plus 333(B)(3) divided by the sum of section 333(B)(1) plus 333(B)(3)).

C. Phase III System Impact Studies Processing Time

1. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period.
2. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 312(A)(1)(e) after the end of Decision Point II.
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase III System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 312(A)(1)(e) after the end of Decision Point II.
4. Mean time (in days), for Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period, from the day after the end of Decision Point II to the date when Transmission Provider provided the completed Phase III Interconnection System Impact Study to the Project Developers.
5. Percentage of New Service Requests with Phase III System Impact Studies exceeding the sum of 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 312(A)(1)(e) to complete this six month reporting period, calculated as the sum of section 333(C)(2) plus 333(C)(3) divided by the sum of section 333(C)(1) plus 333(C)(3)).

D. Withdrawn New Service Requests

1. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period.

2. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period before the start of Planning Phase I.
3. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period from start of Phase I, to at or before the end of Decision Point I.
4. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point I to at or before the end of Decision Point II.
5. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point II to before execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
6. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue after execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
7. Mean time (in days), for all withdrawn New Service Requests, from the date when the request was determined to be valid to when Transmission Provider received the request to withdraw from the Cycle.

#### E. Posting Requirements

Transmission Provider is required to post on its website the measures in Tariff, Part VII, Subpart E, sections 333(A) through 333(D) for each six-month reporting period within 30 days of the end of the reporting period; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day. Transmission Provider will keep the measures posted on its website for three calendar years with the first required reporting year to be 2020.

#### F. Additional Compliance Requirements

In the event that any of the values calculated in Tariff, Part VII, Subpart E, section 333(A)(5), Tariff, Part VII, Subpart E, section 333(B)(5) or Tariff, Part VII, Subpart E, section 333(C)(5) exceeds 25 percent for two consecutive reporting periods, Transmission Provider will have to comply with the measures below for the next two six-month reporting periods and must continue reporting this information until Transmission Provider reports two consecutive six-month reporting periods without the values calculated in Tariff, Part VII, Subpart E, 333(A)(5), Tariff, Part VII, Subpart E, section 333(B)(5) or Tariff, Part VII, Subpart E, section 333(B)(5) exceeding 25 percent for two consecutive six-month reporting periods:

1. Transmission Provider must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to a New Service Request that exceeded its deadline (i.e., 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the reporting period.
2. Transmission Provider shall aggregate the total number of employee hours and third party consultant hours expended towards interconnection studies within its coordinated region that reporting period and post on its website. This information is to be posted within 30 days of the end of the reporting period.

**Tariff, Part VII, Subpart E, section 334**  
**Transmission Provider Website Postings**

Transmission Provider shall maintain, on Transmission Provider's website, with regard to Project Developers, Eligible Customers and Upgrade Customers, the following:

- A. the Project Identifier;
- B. the proposed or incremental Maximum Facility Output and Capacity Interconnection Rights;
- C. the location of the project by state;
- D. the station or transmission line or lines where the interconnection will be made;
- E. the project's projected in-service date;
- F. the project's status;
- G. the type of service requested;
- H. the availability of any related studies;
- I. the type of project to be constructed.

Tariff, Part VII, Subpart F  
WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL  
AGREEMENTS

**Tariff, Part VII, Subpart E, section 335**  
**Wholesale Market Participation Agreement/Non-Jurisdictional Agreements**

- A. In some instances, Generation Project Developer may physically connect its Generating Facility to non-jurisdictional distribution or sub-transmission facilities in order to access the electrical Point of Interconnection on the Transmission System (the “POI”), for the purpose of engaging in FERC-jurisdictional Wholesale Transactions. In those instances, Generation Project Developer must enter into both a (1) non-jurisdictional interconnection agreement with the owner or operator of the non-jurisdictional distribution or sub-transmission facilities, which governs the physical connection of the Generating Facility to those non-jurisdictional facilities; and (2) a three-party Wholesale Market Participation Agreement (“WMPA”) with PJM and the affected Transmission Owner in order to effectuate Wholesale Transactions in PJM’s markets.
- B. Generation Project Developer shall follow the Application Rules of Tariff, Part VII, Subpart C, section 306 that apply to a Generating Facility, and shall complete the Form of Application and System Impact Studies Agreement set forth in Tariff, Part IX, Subpart A (the “Application”). In the Application, Generation Project Developer shall indicate its intent to physically connect its Generating Facility to distribution or sub-transmission facilities that currently are not subject to FERC jurisdiction, for the purpose of injecting energy at the POI and engaging in FERC-jurisdictional Wholesale Transactions.
- C. Generation Project Developer shall provide with the Application a copy of the executed interconnection agreement that governs the physical connection of the Generating Facility to the non-jurisdictional distribution or sub-transmission facilities, if the interconnection agreement is available. If the interconnection agreement is not yet available, Generation Project Developer shall provide with the Application all available documentation demonstrating that Generation Project Developer has requested or applied for interconnection through the relevant non-jurisdictional process, and Generation Project Developer shall provide a status report.
- D. In order to proceed to the execution of a WMPA, Generation Project Developer must demonstrate that it has executed the non-jurisdictional interconnection agreement by no later than Decision Point III in the applicable Cycle.

Tariff, Part VII, Subpart G  
AFFECTED SYSTEM RULES

**Tariff, Part VII, Subpart G, section 336**  
**Affected System Rules**

**A. New Service Request Affected System Rules Where Affected System is an Electric System other than Transmission Provider's Transmission System**

**1. The Transmission Provider will coordinate with Affected System Operators the conduct of any studies required to determine the impact of a New Service Request on any Affected System and will include those results in the Phase II System Impact Study, if available from the Affected System.**

**a. The Transmission Provider will invite such Affected System Operators to participate in meetings held with the Project Developer as necessary, as determined by the Transmission Provider.**

**b. The Project Developer or Eligible Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate the New Service Request.**

**c. Transmission Provider shall contact any potential Affected System Operators and provide or otherwise coordinate information regarding each relevant New Service Request as required for the Affected System Operator's studies of the effects of such request.**

**d. If an affected system study agreement is required by the Affected System Operator, in order to remain in the relevant Cycle, Project Developer or Eligible Customer shall enter into an affected system study agreement with the Affected System Operator the later of: (i) the conclusion of Decision Point II of the relevant Cycle, or (ii) 60 days of Transmission Provider sending notification to Project Developer or Eligible Customer of the need to enter into such Affected System Study Agreement. If Project Developer or Eligible Customer fails to comply with these requirements, its New Service Request at issue shall be deemed terminated and withdrawn.**

**e. Affected System Study results will be provided by Phase II of the relevant Cycle, if available. To the extent Affected System results are included in the Phase II System Impact Study, the Project Developer shall be provided the opportunity to review such study results consistent with Tariff, Part VII, Subpart D, section 310, as applicable**

**f.**

**i. The Project Developer or Eligible Customer shall be responsible for the costs of any identified facilities commensurate with the Affected System Operator's tariff's allocation of responsibility for such costs to such Project Developer or Eligible Customer if their project**



request has been initiated pursuant to such Affected System Operator's tariff.

ii. Neither the Transmission Provider, the relevant Transmission Owner(s) associated with such New Service Request, nor the Affected System Operator shall be responsible for making arrangements for any necessary engineering, permitting, and/or construction of transmission or distribution facilities on any Affected System or for obtaining any regulatory approval for such facilities.

(a) The Transmission Provider and the relevant Transmission Owner(s) will undertake Reasonable Efforts to assist the Project Developer or Eligible Customer in obtaining such arrangements, including, without limitation, providing any information or data required by such other Affected System Operator pursuant to Good Utility Practice.

2. In no event shall the need for upgrades to an Affected System delay Initial Operation of a Project Developer's Generating Facility or Merchant Transmission Facility. Notwithstanding the start of Initial Operation, Transmission Provider reserves the right to limit Generating Facility injections in the event of potential Affected System impacts, in accordance with Good Utility Practice. Total injections may be limited pending coordination and completion of any necessary deliverability studies by the Affect System Operator.

B. Affected System Rules Where Transmission Provider's Transmission System is the Affected System

1. An Affected System Customer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider's Transmission System must contact Transmission Provider as set forth in the PJM Manuals. Upon contact by the Affected System Customer, Transmission Provider will provide Affected System Customer with an Affected System Customer Facility Study Agreement (a form of which is found in Tariff, Part IX). The Affected System Customer must electronically sign Affected System Customer Facility Study Agreement, and concurrently provide the required Study Deposit, by wire transfer, of \$100,000.

a. Affected System Customer shall include the project identification or reference number assigned to the Affected System Facility by the Affected System Operator and attach the relevant Affected System Operator Study that identified the need for such Facilities Study Agreement.

i. Transmission Provider shall assign to Affected System Customer's project the same project identification or reference number used by the Affected System Operator.

- b. Transmission Provider shall not start the review of the Affected System Customer Facility Study Agreement until such agreement is complete and the required Study Deposit is received by the Transmission Provider.
        - c. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
          - i. Affected System Customer is responsible for, and must pay, all actual study costs.
          - ii. If Transmission Provider sends Affected System Customer notification of additional study costs, then Affected System Customer must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Affected System Customer Facility Study Agreement. If Affected System Customer fails to complete either (i) or (ii), then Transmission Provider shall deem the Affected System Customer Facility Study Agreement to be terminated and withdrawn.
  - 2. Transmission Provider shall cooperate with the Affected System Operator in all matters related to the conduct of studies and the determination of modifications to Transmission Provider's Transmission System.
  - 3. Upon receipt of the Affected System Customer Facility Study report, Transmission Provider and the Affected System Customer shall enter into a stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades if a Construction Service Agreement is required, or for each set of Common Use Upgrades on the system of such Transmission Owner if a Network Upgrade Cost Responsibility Agreement is required. Transmission Provider shall provide in electronic form a draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form.
    - a. For purposes of applying the stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) to the construction of such upgrades, the developer of the Affected System Facility shall be deemed to be a Project Developer pursuant to Tariff, Part VII.
    - b. Such stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) shall be negotiated and executed within 60 days of the Transmission Provider's issuance of a draft version thereof. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day. The 60 days shall run concurrently with the relevant Cycle process.

- i. Security is required within 30 days of the Transmission Provider's issuance of the draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX). The Security obligation may be adjusted based on additional factors, including, but not limited to, New Service Requests or Upgrade Requests being withdrawn in the relevant Cycle. If the 30th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
  - ii. Parties may use not more than 60 days to conduct negotiations concerning the draft Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement. Upon receipt of the draft agreement(s), Affected System Customer and Transmission Owner(s), as applicable, shall have no more than 20 Business Days to return written comments on the draft agreement(s). Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised draft(s) of the agreement(s) in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.
- c. If the Affected System Customer or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement with the FERC.
- d. Not later than 15 Business Days after receipt of the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement, Project Developer or Affected System Customer shall elect one of the following:
  - i. to execute the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form and return it to Transmission Provider electronically;
  - ii. to request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

- iii. to request in writing that Transmission Provider file with FERC the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement unexecuted, with terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.
  - e. If Affected System Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:
    - i. execute the final Construction Service Agreement in electronic form and return it to Transmission Provider electronically;
    - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
    - iii. request in writing that Transmission Provider file with FERC the final Construction Service Agreement in unexecuted form.
      - (a) The unexecuted Construction Service Agreement shall contain terms and conditions deemed appropriate by Transmission Provider.
  - f. Parties may not proceed under such Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

Tariff, Part VII, Subpart H  
UPGRADE REQUESTS

**Tariff, Part VII, Subpart H, section 337**  
**Upgrade Requests**

A. Applicability

Tariff, Part VII Subpart H applies to valid Upgrade Requests submitted on or after October 1, 2020 and up to and including September 10, 2021, and sets forth the procedures and other terms governing the Transmission Provider's administration of Upgrade Requests for Upgrade Customers; procedures and other terms regarding studies and other processing of Upgrade Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to Upgrade Customers.

1. The Upgrade Request process applies to:

- a. Incremental Auction Revenue Rights (IARRs) requested Pursuant to the Operating Agreement of the PJM Interconnection, L.L.C. (Operating Agreement), Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8; and
- b. Merchant Network Upgrades that either upgrade facilities or advance existing Network Upgrades

B. Overview

1. Upgrade Requests are initiated by submission of a complete and executed Upgrade Application and Studies Agreement (a form of which is located in Tariff, Part IX, Subpart K).

- a. Upgrade Requests are processed serially, in the order in which an Upgrade Request is received.
  - i. An Upgrade Request shall be assigned a Request Number.
  - ii. Priority for Upgrade Requests is determined by the Request Number assigned.
  - iii. If the Upgrade Request is withdrawn or deemed to be terminated, such Upgrade Request project shall concurrently lose its priority position and will not be included in any further studies.
- b. Transmission Provider will use Reasonable Efforts to process an Upgrade Request within 15 months of receiving a valid Upgrade Request.
  - i. A valid Upgrade Request that completes the Upgrade Request process shall ultimately enter into an Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E)
  - ii. If the Transmission Provider is unable to process an Upgrade Request within 15 months of receiving a valid Upgrade Request, the

Transmission Provider shall notify the impacted Upgrade Customer by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete the Upgrade Request process.

2. Required Study Deposits and Readiness Deposits.

a. Upgrade Customers must submit, by wire transfer, a \$150,000 Study Deposit together with a completed and fully executed Upgrade Request. Ten percent of the Study Deposit is non-refundable. Upgrade Customers are responsible for actual study costs, which may exceed the Study Deposit amount.

i. If a Study Deposit monies remain after the System Impact Study is completed and any outstanding monies owed by Upgrade Customer in connection with outstanding invoices related to the present or prior Upgrade Requests or other New Service Requests have been paid, such remaining deposit monies shall be either:

(a) If Upgrade Customer decides to remain in the Upgrade Request process, applied to the Facilities Study; or

(b) If Upgrade Customer decides to withdraw its Upgrade Request from the Upgrade Request process, such remaining monies shall be returned, less actual study costs incurred, to the Upgrade Customer at the conclusion of the required studies for the Upgrade Request.

ii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.

(a) Upgrade Customer is responsible for, and must pay, all actual study costs.

(b) If Transmission Provider sends Upgrade Customer notification of additional study costs, then Upgrade Customer must either: (i) pay all additional study costs within 20 days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Upgrade Request. If Upgrade Customer fails to complete either (i) or (ii), then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn.

b. If, after receiving the System Impact Study report, Upgrade Customer decides to remain in the Upgrade Request process, then Upgrade Customer must submit by wire transfer a Readiness Deposit within 30 days from the date that Transmission Provider provides the System Impact Study Report. The Readiness Deposit shall equal 20 percent of the cost of the Network

Upgrades identified in the Upgrade Customer's System Impact Study. If the 30th day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.

i. Readiness Deposit refunds will be handled as follows:

(a) If the Upgrade Request is withdrawn or terminated after the Readiness Deposit has been provided, the Readiness Deposit refund amount will be determined by point at which the Upgrade Request was withdrawn or terminated, and the need for any additional subsequent restudies as a result of the withdraw or termination.

(b) If the project proceeds to a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), the Readiness Deposit will be refunded upon Upgrade Customer fully executing such agreement.

c. Study Deposits and Readiness Deposits are non-transferrable. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific Upgrade Request be applied in whole or in part to a different Upgrade Request, a New Service Request, or any other type of request.

3. Upgrade Request scope cannot include upgrades that are already included in the Regional Transmission Expansion Plan (with the exception of advancements) or subject to an existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

4. No Incremental Auction Revenue Rights shall be received by an Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

5. An Upgrade Customer cannot transfer, combine, swap or exchange all or part of an Upgrade Request with any other Upgrade Request or any other New Service Request within the same cycle.

6. Tariff, Part VII, Subpart C (Base Case Data) requirements shall apply to Upgrade Requests. Transmission Provider will coordinate with Affected Systems as needed as set forth in the PJM Manuals.

7. Prior to entering into a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), an Upgrade Customer may assign its Upgrade Request to another entity only if the acquiring entity accepts and acquires all rights and obligations as identified in the Upgrade Request for such project.



8. Cost Allocation: Each Upgrade Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its Upgrade Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such Upgrade Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the Upgrade Request; or the construction of Supplemental Projects.
9. Where the Upgrade Request calls for accelerating the construction of a Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Upgrade Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

C. Initiating an Upgrade Request

An Upgrade Customer must submit to Transmission Provider, electronically through Transmission Provider's website, a completed and signed Upgrade Application and Studies Agreement ("Application"), a form of which is provided in Tariff, Part IX, Subpart K, including the required Study Deposit.

1. A Request Number shall be assigned based upon the date and time a completed and executed Upgrade Application and Studies Agreement and deposit is received by the Transmission Provider.
2. A valid Upgrade Request shall be established when the Transmission Provider receives the last required agreement element, including the required deposits, from the Upgrade Customer, and the deficiency review for such Upgrade Request is complete.
  - a. Application Requirements for Upgrade Requests Pursuant to Operating Agreement, Schedule 1, section 7.8

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

- i. The MW amount of requested Incremental Auction Revenue Rights (IARRs), including the source and sink locations and desired commencement date, and;
- ii. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VII, Subpart H, section 337(B)(2), above.

b. Application Requirements for Merchant Network Upgrade Requests

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

- i. the MVA or MW amount by which the normal or emergency rating of the identified facility is to be increased, together with the desired in-service date; or the Regional Transmission Expansion Plan project number and planned and requested advancement dates;
- ii. the substation or transmission facility or facilities where the upgrade(s) will be made;
- iii. the increase in capability (in MW or MVA) of the proposed Merchant Network Upgrade;
- iv. if requesting Incremental Capacity Transfer Rights (ICTRs), identification of up to three Locational Deliverability Areas (LDAs) in which to determine the ICTRs;
5. the planned date the proposed Merchant Network Upgrade will be in service, such date to be no more than seven years from the date the request is received by the Transmission Provider, unless the Upgrade Customer demonstrates that engineering, permitting, and construction of the Merchant Network Upgrade will take more than seven years; and
6. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VII, Subpart H, section 337(B)(2), above.

D. Deficiency Review

Upon receiving a completed and executed Application, together with the Study Deposit, Transmission Provider will review the Application and establish the validity of the request, beginning with a deficiency review, as follows:

1. Transmission Provider will exercise Reasonable Efforts to inform Upgrade Customer of Application deficiencies within 15 Business Days after Transmission Provider's receipt of the completed Application.

2. Upgrade Customer then has 10 Business Days to respond to Transmission Provider's deficiency determination.
3. Transmission Provider then will exercise Reasonable Efforts to review Upgrade Customer's response within 15 Business Days, and then will either validate or reject the Application.

E. System Impact Study

After receiving a valid Upgrade Request, the Transmission Provider, in collaboration with the Transmission Owner, shall conduct a System Impact Study. Prior to the commencement of the System Impact Study, the Transmission Provider may have a scoping meeting with the Upgrade Customer to discuss the Upgrade Request.

1. System Impact Study Requirements

The System Impact Study shall identify the system constraints, identified with specificity by transmission element or flowgate, relating to the Upgrade Request included therein and any resulting Network Upgrades or Contingent Facilities required to accommodate such Upgrade Request.

The System Impact Study shall also include:

- a. the list and facility loading of all reliability criteria violations specific to the Upgrade Request.
- b. estimates of cost responsibility and construction lead times for new facilities and system upgrades.
- c. include the amount of incremental rights available, as applicable

2. Contingent Facilities.

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Network Upgrades, upon which the Upgrade Customer's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the Upgrade Request or reassessment of the unbuilt Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies), including why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall also provide, upon request of the Upgrade Customer, the Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

a. Minimum Thresholds to Identify Contingent Facilities

(i) Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least five percent distribution factor (DFAX) or

contributing at least five percent of the facility rating in the applicable model.

(ii) Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

(iii) Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

3. System Impact Study Results

Transmission Provider shall conduct a System Impact Study, and provide the Upgrade Customer a System Impact report on Transmission Provider's website.

To proceed with the Upgrade Request process, within 30 days of Transmission Provider issuing the System Impact Study report, Transmission Provider must receive from the Upgrade Customer:

- a. a Readiness Deposit, by wire transfer, equal to 20 percent of the cost allocation for the Network Upgrades as calculated in the System Impact Study report.
- b. Notification in writing that Upgrade Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its Upgrade Request.

If the 30th day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.

- c. If Transmission Provider does not receive the Readiness Deposit equal to 20 percent from the Upgrade Customer within 30 days of Transmission Provider issuing the System Impact Study report, then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn, and the Upgrade Request will be removed from all studies and will lose its priority position.
- d. No modifications of any type for any reason are permitted to the Upgrade Request at this point in the Upgrade Request process.
- e. Upgrade Customer may not elect Option to Build after such date.

- 4. If the Readiness Deposit is received by the Transmission Provider within 30 days of the Transmission Provider issuing the System Impact Study report, Transmission Provider will proceed with the Facilities Study for the Upgrade Request.

F. Facilities Study

The Facilities Study will provide the final details regarding the type, scope and construction schedule of Network Upgrades and any other facilities that may be required to accommodate the Upgrade Request, and will provide the Upgrade Customer with a final estimate of the Upgrade Customer's cost responsibility for the Upgrade Request. Upon completion of the Facilities Study the Transmission Provider will provide the Facilities Study report on Transmission Provider's website, and provide a draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E).

G. Upgrade Customer Final Agreement Negotiation Phase

1. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the tendering of the Facilities Study. The purpose of the Final Agreement Negotiation Phase is to negotiate and enter into a final Upgrade Construction Service Agreement found in Tariff, Part IX, Subpart E; conduct any remaining analyses or updated analyses and adjust the Security obligation based on higher priority Upgrade Request(s) withdrawn during the Final Agreement Negotiation Phase. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.

a. If an Upgrade Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the Upgrade Request from the Cycle, and adjust the Security obligations of other Upgrade Requests based on the withdrawal.

2. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:

Transmission Provider shall provide in electronic form a draft Upgrade Construction Service Agreement to the parties to such agreement prior to the start of the Final Agreement Negotiation Phase.

a. Security is required within 30 days of the Transmission Provider's issuance of the draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E). If the 30th day does not fall on a Business Day, the security due date shall be extended to end on the next Business Day.

b. Negotiation

Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60th day is not a Business Day, negotiations shall conclude on the next Business Day. Upon receipt of the draft agreements, Upgrade Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements

in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

c. Impasse

If the Upgrade Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

d. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final Upgrade Construction Service Agreement, to the parties in electronic form.

i. Not later than 15 Business Days after receipt of the final interconnection related agreement, Upgrade Customer shall elect one of the following:

(a) to execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;

(b) to request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

(c) to request in writing that Transmission Provider file with FERC the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement unexecuted, with terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.

ii. If an Upgrade Customer executes the final Upgrade Construction Service Agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:

(a) execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;

(b) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

(c) request in writing that Transmission Provider file with FERC the final Upgrade Construction Service Agreement in unexecuted form.

The unexecuted Upgrade Construction Service Agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the Upgrade Request.

iii. Parties may not proceed under such Upgrade Construction Service Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

#### H. Upgrade Construction Service Agreement

In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Upgrade Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system. In order to exercise the Option to Build, as set forth in Upgrade Construction Service Agreement, Tariff, Part IX, Subpart E, Appendix III, section 6.2.1, Upgrade Customer must provide Transmission Provider and the Transmission Owner with written notice of its election to exercise the option no later than 30 days from the date the Upgrade Customer receives the results of the Facilities Study (or the System Impact performed, if a Facilities Study was not required).

##### 1. Cost Reimbursement

Pursuant to the Upgrade Construction Service Agreement, a Upgrade Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owners) for the Costs, determined in accordance with Tariff, Part VII, Subpart D, section 307(A)(5), of constructing Distribution Upgrades, and/or Network Upgrades necessary to accommodate its New Service Request to the extent that the Transmission Owner is responsible for building such facilities pursuant to Tariff, Part VII and the applicable Upgrade Construction Service Agreement. The Upgrade Construction Service Agreement shall obligate the Upgrade Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the Transmission Owner's expenditures for the design, engineering, and construction of the facilities that it is responsible for building pursuant to the Upgrade Construction Service Agreement are made. The Transmission Provider shall distribute the revenues received under this Tariff, Part VII, Subpart H, section 337(H)(1) to the affected Transmission Owner(s).



## 2. Upgrade-Related Rights

The Upgrade Construction Service Agreement shall specify Upgrade-Related Rights to which the Upgrade Customer is entitled pursuant to Tariff, Part VII, Subpart E, sections 324, 328, 329, and 330, except to the extent the applicable terms of Tariff, Part VII, Subpart E, sections 324, 328, 329, and 330 provide otherwise.

## 3. Specification of Transmission Owners Responsible for Facilities and Upgrades

The Facilities Study (or the System Impact Study, if a Facilities Study is not required) shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Upgrade Construction Service Agreement, for the construction of facilities and upgrades, determined in a manner consistent with Operating Agreement, Schedule 6.

## I. Withdraw or Termination

1. If an Upgrade Customer decides to withdraw its Upgrade Request, Transmission Provider must receive written notification from the Upgrade Customer of Upgrade Customer's decision to withdraw its Upgrade Request.

2. Transmission Provider may deem an Upgrade Request terminated and withdrawn for failing to meet any of the requirements, as set forth in this Tariff, Part VII, Subpart H.

3. If an Upgrade Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the Upgrade Request process and all relevant models, and, as applicable, the Readiness Deposits and Study Deposits will be disbursed as follows:

a. For Readiness Deposits: At the conclusion of Transmission Provider's Facility Study, refund to the Upgrade Customer 100 percent of Readiness Deposit paid by the Upgrade Customer.

b. For Study Deposits: At the point at which the Upgrade Customer requested to withdraw the Upgrade Request or the Transmission Provider terminated the Upgrade Request, refund to the Upgrade Customer up to 90 percent of its Study Deposit submitted with its Upgrade Request during the Application less any actual costs for studies conducted up to and including the point of withdraw or termination of such Upgrade Request.

c. Up to and including the point of withdraw or termination of such Upgrade Request.

## J. Transmission Provider Website Postings

The Transmission Provider shall maintain on the Transmission Provider's website a list of all Upgrade Requests. The list will identify, as applicable:

1. the increase in capability in megawatts (MW) or megavolt-amperes (MVA);

2. the megawatt amount of requested Incremental Auction Revenue Rights (IARRs);



3. the station or transmission line or lines where the upgrade(s) will be made;
4. the requested source and sink locations
5. the proposed in-service or commencement date;
6. the status of the Upgrade Request, including its Request Number;
7. the availability of any studies related to the Upgrade Request;
8. the date of the Upgrade Request; and
9. for each Upgrade Request that has not resulted in a completed upgrade, an explanation of why it was not completed.

Tariff, Part VII, sections 338 – 399  
[Reserved]

Tariff, Part IX

FORMS OF INTERCONNECTION-RELATED AGREEMENTS

### **Tariff, Part IX, Section 500, Execution Deadlines**

Unless otherwise stated in a specific agreement, the following provisions shall apply to any agreement under Tariff, Part IX, between Transmission Provider, a Project Developer, Eligible Customer or Upgrade Customer, and, where applicable, a Transmission Owner. In addition to any other requirements under such agreement, no later than 15 Business Days after Transmission Provider's tender for execution of such agreement, Project Developer, Eligible Customer or Upgrade Customer, shall either: (i) execute the agreement; (ii) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or (iii) request in writing that the agreement be filed unexecuted with FERC. Such agreement shall be deemed to be terminated and withdrawn if Project Developer, Eligible Customer or Upgrade Customer, fails to comply with these requirements. If a Transmission Owner is party to the agreement, following tender of the agreement and no later than 15 Business Days after PJM sends notification to the relevant Transmission Owner that the Project Developer, Eligible Customer or Upgrade Customer has executed the agreement, Transmission Owner shall either: (i) execute the agreement; (ii) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or (iii) request in writing that the agreement be filed unexecuted with FERC. Following execution by Transmission Owner (or by the Project Developer if there is not Transmission Owner that is subject to the agreement) Transmission Provider shall either: (i) execute the agreement; (ii) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or (iii) file with FERC the agreement in unexecuted form. Transmission Provider may also file the agreement with FERC in unexecuted form if Transmission Owner does not comply with the requirements above.

With the filing of any unexecuted agreement, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between the parties.

## Tariff, Part IX, Subpart A

### Form of Application and Studies Agreement

1. This Application and Studies Agreement (“Application” or “Agreement”), dated \_\_\_\_\_, is entered into by and between \_\_\_\_\_ (Project Developer or Eligible Customer, hereafter “Applicant”) and PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”) (individually a “Party” and together the “Parties”) pursuant to PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part VIII, Subpart B. Capitalized terms used in this Application, unless otherwise indicated, shall have the meanings ascribed to them in Tariff, Part VIII, Subpart A, section 400.
2. Prior to the Application Deadline, Applicant must electronically provide to Transmission Provider through the PJM website or OASIS, as applicable, all applicable information identified below, which is then subject to validation during the Application Phase as set forth in Tariff, Part VIII, Subparts B and C and the PJM Manuals. Only valid New Service Requests will proceed past the Application Phase.
3. Before Transmission Provider will review or process the Application, in addition to submitting a completed and signed Application prior to the Application Deadline, Applicant must electronically submit to Transmission Provider prior to the Application Deadline the (i) required cash Study Deposit by wire transfer and (ii) required Readiness Deposit by wire transfer or letter of credit. Applicant’s wire transfer(s) or letter(s) of credit must specify the Application reference number to which the Study Deposit and Readiness Deposit correspond, or Transmission Provider will not review or process the Application.

### SECTION 1: APPLICANT INFORMATION

4. Name, address, telephone number, and e-mail address of Applicant. If Applicant has designated an agent, include the agent’s contact information.

#### Applicant

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

#### Applicant’s Agent (if applicable)

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Agent's contact person: \_\_\_\_\_

5. An Internal Revenue Service Form W-9 or comparable state-issued document for Applicant.

6. Documentation proving the existence of a legally binding relationship between Applicant and any entity with a vested interest in this Application and associated project (e.g., a parent company, a subsidiary, or financing company acting as agent for Applicant). Such documentation may include, but is not limited to, Applicant's Articles of Organization and Operating Agreement describing the nature of the legally binding relationship.

7. Applicant's banking information, or the banking information of any entity with a legally binding relationship to Applicant that wishes to make payments and receive refunds on behalf of Applicant, in association with this Application and corresponding project:

Bank Name: \_\_\_\_\_

Account Holder Name: \_\_\_\_\_

ABA number: \_\_\_\_\_

Account Number: \_\_\_\_\_

Company: \_\_\_\_\_

Tax Reporting Name: \_\_\_\_\_

Tax ID: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

8. If the Application is a request for long-term firm transmission service, see section 3.

9. Location of the proposed Point of Interconnection (POI) to the Transmission System, including the substation name or the name of the line to be tapped (including the voltage), the estimated distance from the substation endpoints of a line tap, address, and GPS coordinates.

POI substation name: \_\_\_\_\_ or  
POI line name: \_\_\_\_\_ (endpoint 1) to \_\_\_\_\_ (endpoint 2)  
POI Distance from endpoint 1: \_\_\_\_\_ miles  
POI Distance from endpoint 2: \_\_\_\_\_ miles  
Interconnection voltage: \_\_\_\_\_ kV  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
GPS Coordinates: \_\_\_\_\_ N \_\_\_\_\_ W

10. If the project is a Merchant Transmission Facility, see section 4.

## **SECTION 2: GENERATING FACILITY SPECIFICATIONS**

11. Specify the nature of the Generating Facility project.

\_\_\_\_\_ New Generating Facility

\_\_\_\_\_ Increase in generation capability of an existing Generating Facility

\_\_\_\_\_ Replacement of existing Generating Facility with no increase in generation capability

12. Specify the type of Interconnection Service requested for the Generating Facility.

\_\_\_\_\_ Energy Resource only

\_\_\_\_\_ Capacity Resource (includes Energy Resource) with Capacity Interconnection Rights

13. Provide the following information about the Generating Facility:

a. Generating Facility location and site plan:

Provide a physical address or equivalent written description of the location of the Generating Facility, as well as global positioning system (GPS) coordinates. When known, provide GPS coordinates for the location of the Generating Facility's main power transformer(s).

Provide a current site plan in PDF depicting the (1) property boundaries; (2) Generating Facility layout, including the Generating Facility's collector substation (if applicable) or interconnection switchyard (if required); and (3) Interconnection

Facilities extending from the Generating Facility's main power transformer(s) to the proposed POI.

b. Generating Facility Site Control:

In accordance with Tariff, Part VIII, Subpart B, section 402, provide evidence of an ownership interest in, or right to acquire or control through a deed, lease, or option for at least a one-year term beginning from the Application Deadline, 100 percent of the Site for the Generating Facility, including the location of the high-voltage side of the Generating Facility's main power transformer(s). In addition, provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further at PJM's request, Applicant shall provide copies of landowner attestations or county recordings.

c. Will the Generating Facility physically connect to distribution or sub-transmission facilities currently not subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC), for the purpose of injecting energy at the POI and engaging in FERC-jurisdictional Wholesale Transactions, as described in Tariff, Part VIII, Subpart F? (Y/N)

If yes, if available, provide with this Application a copy of the executed interconnection agreement between Applicant and the owner of the distribution or sub-transmission facilities to which the Generating Facility will physically connect. If the two-party interconnection agreement is not yet available, provide any available documentation demonstrating that Applicant has requested or applied for interconnection through the relevant non-jurisdictional process, and provide a status report.

d. For the Generating Facility, has Applicant obtained, or does Applicant intend to obtain, Qualifying Facility status under the Public Utility Regulatory Policies Act? (Y/N)

If yes, provide evidence of Qualifying Facility status or eligibility. Further, verify that Applicant intends that the Qualifying Facility will engage in Wholesale Transactions in PJM's FERC-jurisdictional wholesale markets (Y/N).

e. Will the Generating Facility share Project Developer's Interconnection Facilities with another Generating Facility, either existing or planned? (Y/N)



If yes, demonstrate that the relevant parties have entered into, or will enter into, a shared facilities agreement with respect to the shared Interconnection Facilities.

f. Maximum Facility Output and Capacity Interconnection Rights:

i. For a new Generating Facility, provide the following information:

<u>Total Requested Maximum Facility Output (maximum injection at the POI), in Megawatts</u>	
<u>Total Requested Capacity Interconnection Rights, in Megawatts</u>	

ii. For a requested increase in generation capability of an existing Generating Facility, identify the Generating Facility and provide the following information:

	<u>Existing</u>	<u>Requested Increase</u>	<u>Total</u>
<u>Maximum Facility Output (maximum injection at the POI), in Megawatts</u>			
<u>Capacity Interconnection Rights, in Megawatts</u>			

iii. For a new Behind the Meter Generating Facility, provide the following information:

<u>Gross Output in Megawatts</u>	
<u>Behind the Meter Load in Megawatts (the sum of auxiliary load and any other load to be served behind the meter)</u>	
<u>Total Requested Maximum Facility Output (maximum injection at the POI), in Megawatts</u>	

<u>Total Requested Capacity Interconnection Rights, in Megawatts</u>	
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- iv. For a requested increase in generation capability of an existing Behind the Meter Generating Facility, identify the Generating Facility and provide the following information:

	<u>Existing</u>	<u>Increase</u>	<u>Total</u>
<u>Gross Output in Megawatts</u>			
<u>Behind the Meter Load in Megawatts (the sum of auxiliary load and any other load to be served behind the meter)</u>			
<u>Maximum Facility Output (maximum injection at the POI), in Megawatts</u>			
<u>Capacity Interconnection Rights, in Megawatts</u>			

- g. Provide a description of the equipment configuration and electrical design specifications for the Generating Facility, as further defined in the PJM Manuals and reflected in the single-line diagram.

- h. Specify the fuel type of the Generating Facility.

- i. If the Generating Facility will be a multi-fuel Generating Facility, or if a proposed increase in generation capability of an existing Generating Facility will create a multi-fuel Generating Facility, describe the physical and electrical configuration in as much detail as possible.

- j. If the Generating Facility will include storage device(s), will the storage device(s) be charged using energy from the Transmission System at any time? (Y/N)

If yes, specify the maximum that will be withdrawn from the Transmission System at any time: \_\_\_\_\_ MWh (or kWh)

If yes, provide other technical and operating information on the storage device(s) as set forth in the PJM Manuals, including MWh stockpile and hour class, as applicable.

k. If the Generating Facility will include storage, provide the primary frequency response operating range for the electric storage component, as described in the PJM Manuals.

Minimum State of Charge: \_\_\_\_\_ Maximum State of Charge: \_\_\_\_\_

l. For a Behind the Meter Generating Facility, provide the following information (note that all of the provisions in Tariff, Part VIII, Subpart E, section 415 apply):

i. Identify the type and size of the load co-located (or to be co-located) with the Generating Facility, and attach a detailed single-line diagram in PDF depicting the electrical location of the load in relation to the Generating Facility.

ii. Describe the electrical connections between the Generating Facility and the co-located load, as shown in the single-line diagram.

m. Provide the date that the new Generating Facility, or the increase in generation capability of an existing Generating Facility, will be in service.

n. Provide other relevant information for the Generating Facility including, but not limited to, identifying whether Applicant has submitted a previous Application; and, if this Application proposes an increase in generation capability of a Generating Facility, identify whether the Generating Facility is subject to an existing PJM Service Agreement; and, if so, provide those details.

**SECTION 3: LONG-TERM FIRM TRANSMISSION SERVICE**

14. Request:

<u>OASIS Request</u>	<u>Start</u>	<u>Stop</u>	<u>Amount</u>	<u>Path</u>	<u>Date &amp; Time Request</u>

15. PURPOSE: A Phase I System Impact Study, incorporated within a Cycle's System Impact Studies, is used to determine whether the Transmission System is adequate to accommodate all or part of an Applicant's request for long-term firm transmission service under Tariff, Part II (POINT-TO-POINT TRANSMISSION SERVICE) and Tariff, Part III (NETWORK INTEGRATION TRANSMISSION SERVICE). The FERC comparability standard is applied in evaluating the impact of all requests.
16. SCOPE OF WORK AND STUDY DEPOSIT: PJM will perform a Phase I System Impact Study to determine if the PJM network has sufficient capability to grant Applicant's request for long-term firm transmission service, based on expected system conditions and topology. The required cash Study Deposit for the Phase I System Impact Study, as described in Tariff, Part VIII, Subpart B, section 403(A), is due prior to the Application Deadline.
17. NETWORK ANALYSIS AND DELIVERABILITY TEST: PJM evaluates requests for long-term firm transmission service using deliverability tests commensurate with the testing employed for evaluating Interconnection Requests. The energy from a Generating Facility or the energy delivered using long-term firm transmission service that is ultimately committed to meet resource requirements must be deliverable to where it is needed in the event of a system emergency. Therefore, there must be sufficient transmission network transfer capability within the control area. PJM determines the sufficiency of network transfer capability through a series of "deliverability tests." All Interconnection Requests and long-term firm transmission service requests in PJM are subjected to the same deliverability tests. The FERC comparability standard is applied in evaluating the impact of all requests.
18. Skip to section 5.

#### **SECTION 4: MERCHANT TRANSMISSION FACILITY SPECIFICATIONS**

19. Applicant requests interconnection to the Transmission System of Merchant Transmission Facilities with the following specifications:
  - a. Location of proposed facilities:  

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  - b. Substation(s) where Applicant proposes to interconnect or add its facilities:  

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  - c. Proposed voltage and nominal capability of new facilities or increase in capability of existing facilities:  

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d. Description of proposed facilities and equipment:

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e. Planned date the proposed facilities or increase in capability will be in service:

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f. Will the proposed facilities be Merchant A.C. or Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities?

A.C. \_\_\_\_\_ or D.C. \_\_\_\_\_ or Controllable A.C. \_\_\_\_\_

i. If the proposed facilities will be Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, does Applicant elect to receive either:

\_\_\_\_\_ (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR)

OR

\_\_\_\_\_ (2) Incremental Deliverability Rights, Incremental Auction Revenue Rights, and Incremental Available Transfer Capability Revenue Rights.

If Applicant elects (1) above, provide the following:

\_\_\_\_\_ Total project MWs to be evaluated as Firm (capacity) injection for TIR.

\_\_\_\_\_ Total project MWs to be evaluated as Non-firm (energy) injection for TIR.

\_\_\_\_\_ Total project MWs to be evaluated as Firm (capacity) withdrawal for TWR.

\_\_\_\_\_ Total project MWs to be evaluated a Non-firm (energy) withdrawal for TWR.

If Applicant elects (2) above, state the location on the Transmission System where Applicant proposes to receive Incremental Deliverability Rights associated with its proposed facilities:

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ii. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Applicant contractually binds itself in the Service Agreement related to its project always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the Service Agreement will provide Applicant with the same types of transmission rights that are available under the Tariff for Merchant D.C. Transmission Facilities. For purposes of this Agreement, Applicant represents that, should it execute a Service Agreement for its project described herein, it will agree in the Service Agreement to operate its facilities continuously in a controllable mode.

iii. If the proposed facilities will be Merchant A.C. Transmission Facilities without continuous controllability as described in the preceding paragraph, specify the location on the Transmission System where Applicant proposes to receive any Incremental Deliverability Rights associated with its proposed facilities:

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20. Site Control: In accordance with Tariff, Part VIII, Subpart A, section 402, provide evidence of an ownership interest in, or right to acquire or control through a deed, lease, or option for at least a one-year term beginning from the Application Deadline, 100 percent of the Site for Applicant's major equipment (e.g., converter station). In addition, provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further at PJM's request, Applicant shall provide copies of landowner attestations or county recordings.

## **SECTION 5: SCOPE AND TIMING OF SYSTEM IMPACT STUDIES**

21. Transmission Provider, in consultation with the affected Transmission Owner(s), will conduct System Impact Studies, in three phases, to provide Applicant with information on the required Interconnection Facilities and Network Upgrades needed to support Applicant's New Service Request.
22. Consistent with Tariff, Part VIII, Subparts C and D, the Phase I System Impact Study begins at the end of the 90-day Application Review Phase, and runs for 120 days followed by a 30-day Decision Point I period for withdrawal or modification. If no withdrawal, the Phase II System Impact Study begins at the end of the Decision Point I period and runs for 180 days followed by a 30-day Decision Point II period for withdrawal or modification. If no withdrawal, the Phase III System Impact Study begins at the end of the Decision Point II period and runs for 180 days followed by release of the Phase III System Impact Study report and the start of final agreement negotiations. If a phase or period does not end on a Business Day, the phase or period shall be extended to end on the next Business Day.
23. The System Impact Studies include good faith estimates that attempt to determine the cost

of necessary facilities, and upgrades to existing facilities, to accommodate Applicant's New Service Request, and to identify Applicant's cost responsibility, but those estimates shall not be deemed final or binding. The scope of the System Impact Studies may include, but are not limited to, short circuit analyses, stability analyses, an interconnection facilities study, and a system upgrades facilities study.

24. The System Impact Studies necessarily will employ various assumptions regarding Applicant's New Service Request, other New Service Requests, and PJM's Regional Transmission Expansion Plan at the time of study. IN NO EVENT SHALL THIS AGREEMENT OR THE SYSTEM IMPACT STUDIES IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR TRANSMISSION OWNERS TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF APPLICANT EITHER AT THIS POINT IN TIME OR IN THE FUTURE.
25. Consistent with Tariff, Part VIII, Subpart G, Transmission Provider will coordinate with Affected System Operators the conduct of studies required to determine the impact of a New Service Request on any Affected System, and will include those results in the Phase II System Impact Study if available from the Affected System. Applicant will cooperate with Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate Applicant's New Service Request.

#### **SECTION 6: CONFIDENTIALITY**

26. Applicant agrees to provide all information requested by Transmission Provider necessary to complete and review this Application. Subject to this section 6, and to the extent required by Tariff, Part VIII, Subpart E, section 425, information provided pursuant to this Application shall be and remain confidential.
27. Upon completion of each System Impact Study for a New Service Request, the corresponding reports will be listed on Transmission Provider's website and, to the extent required by Tariff, Part VIII, Subpart E, section 425 or Commission regulations, will be made publicly available. Applicant acknowledges and consents to such disclosures as may be required under Tariff, Part VIII, Subpart E, section 425 or Commission regulations.
28. Applicant acknowledges that, consistent with the confidentiality provisions of Tariff, Part VIII, Subpart E, section 425, Transmission Provider may contract with consultants, including Transmission Owners, to provide services or expertise in the study process, and Transmission Provider may disseminate information as necessary to those consultants, and rely upon them to conduct part or all of the System Impact Studies.

#### **SECTION 7: COST RESPONSIBILITY**

29. Transmission Provider shall apply Applicant's Study Deposit in payment of the invoices for the costs of the System Impact Studies.

30. Actual study costs may exceed the Study Deposit. Notwithstanding the amount of the Study Deposit, Applicant shall reimburse Transmission Provider for all, or for Applicant's allocated portion of, the actual cost of the System Impact Studies in accordance with Applicant's cost responsibility. Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 days (or, if the 20<sup>th</sup> day is not a Business Day, then the next Business Day) of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

#### **SECTION 8: DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

31. In completing the System Impact Studies, Transmission Provider, Transmission Owner(s), and any other subcontractors employed by Transmission Provider must rely on information provided by Applicant and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDIES. Applicant acknowledges that it has not relied on any representations or warranties not specifically set forth herein, and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the System Impact Studies prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by Transmission Provider or Transmission Owner(s) to provide Interconnection Service or transmission service to or on behalf of Applicant either at this time or in the future.
32. In no event will Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this agreement or otherwise, even if Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of Transmission Provider's obligations under this Agreement.

#### **SECTION 9: MISCELLANEOUS**

33. Any notice, demand, or request required or permitted to be given by any Party to another



and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

Applicant:

\_\_\_\_\_  
\_\_\_\_\_

34. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
35. This Agreement, or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties.
36. This Agreement shall be binding upon the Parties, their heirs, executors, administrators, successors, and assigns.
37. This Agreement shall become effective on the date it is executed by both Parties and shall remain in effect until the earlier of (a) the date on which Applicant enters into a final Service Agreement with PJM (and Transmission Owner as applicable) in accordance with Tariff, Part VIII, Subpart D or (b) termination or withdrawal of this Application.
38. Governing Law, Regulatory Authority, and Rules:  
This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal laws and/or laws of the State of Delaware without regard to conflicts of law provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
39. No Third-Party Beneficiaries:

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest, and where permitted their assigns.

40. Multiple Counterparts:

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all of which constitute one and the same instrument.

41. No Partnership:

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

42. Severability:

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

43. Reservation of Rights:

Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; and Applicant shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

Applicant: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

Tariff, Part IX, Subpart B

FORM OF  
GENERATION INTERCONNECTION AGREEMENT COMBINED WITH  
CONSTRUCTION SERVICE AGREEMENT

Service Agreement No. [ ]

(Project Identifier # )

**GENERATION INTERCONNECTION AGREEMENT**

**By and Between**

**PJM INTERCONNECTION, L.L.C.**

**And**

**And**

**GENERATION INTERCONNECTION AGREEMENT**

**By and Between**

**PJM Interconnection, L.L.C.**

**And**

**[Name of Project Developer]**

**And**

**[Name of Transmission Owner]**

**(Project Identifier # )**

- 1.0 Parties. This Generation Interconnection Agreement (“GIA”) including the Specifications, Schedules and Appendices attached hereto and incorporated herein, is entered into by and between PJM Interconnection, L.L.C., the Regional Transmission Organization for the PJM Region (hereinafter “Transmission Provider” or “PJM”), (“Project Developer” [OPTIONAL: or “[short name]”]) and (“Transmission Owner” [OPTIONAL: or “[short name]”]). All capitalized terms herein shall have the meanings set forth in the appended definitions of such terms as stated in Part I of the PJM Open Access Transmission Tariff (“Tariff”). [Use as/when applicable: This GIA supersedes the {insert details to identify the agreement being superseded, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}]. [Use as/when applicable: Pursuant to the terms of an Agreement to Amend signed by all Parties effective {INSERT DATE}, this GIA reflects amends the {ISA/GIA} entered into by {Party 1}, {Party 2}, and Transmission Provider effective {INSERT DATE} and designated as Service Agreement No. {INSERT NUMBER}.]
- 2.0 Authority. This GIA is entered into pursuant to the Generation Interconnection Procedures set forth in [instruction: {use Part VII if this is a transition period GIA subject to Tariff, Part VII} {use Part VIII if this a new rules GIA subject to Part VIII}] of the Tariff. Project Developer has requested a Generation Interconnection Agreement under the Tariff, and Transmission Provider has determined that Project Developer is eligible under the Tariff to obtain this GIA. The standard terms and conditions for interconnection as set forth in Appendix 2 to this GIA are hereby specifically incorporated as provisions of this GIA. Transmission Provider, Transmission Owner, and Project Developer agree to and assume all of the rights and obligations of the Transmission Provider, Transmission Owner, and Project Developer, respectively, as set forth in Appendix 2 to this GIA.
- 3.0 Generating Facility or Merchant Transmission Facility Specifications. Attached are Specifications for the Generating Facility or Merchant Transmission Facility that Project Developer proposes to interconnect with the Transmission System. Project Developer represents and warrants that, upon completion of construction of such facilities, it will own or control the Generating Facility or Merchant Transmission Facility identified in section 1.0 of the Specifications attached hereto and made a part hereof. In the event that Project Developer will not own the Generating Facility or Merchant Transmission Facility, Project

Developer represents and warrants that it is authorized by the owner(s) thereof to enter into this GIA and to represent such control.

4.0 Effective Date. Subject to any necessary regulatory acceptance, this GIA shall become effective on the date it is executed by all Interconnection Parties, or, if the agreement is filed with FERC unexecuted, upon the date specified by FERC. This GIA shall terminate on such date as mutually agreed upon by the parties, unless earlier terminated in accordance with the terms set forth in Appendix 2 to this GIA. The term of the GIA shall be as provided in section 1.3 of Appendix 2 to this GIA. Interconnection Service shall commence as provided in section 1.2 of Appendix 2 to this GIA.

5.0 Security. In accord with the GIP, Project Developer shall provide the Transmission Provider (for the benefit of the Transmission Owner) with a letter of credit from an agreed provider or other form of security reasonably acceptable to the Transmissions Provider and that names the Transmission Provider as beneficiary ("Security") in the amount of \$ . Such Security can also be applied to unpaid Cancellation Costs and for completion of some or all of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades. This amount represents the sum of the estimated Costs, determined in accordance with the GIP for which the Project Developer will be responsible, less any Costs already paid by Project Developer. Project Developer acknowledges that its ultimate cost responsibility will be based upon the actual Costs of the facilities described in the Specifications, whether greater or lesser than the amount of the payment security provided under this section.

6.0 Project Specific Milestones. In addition to the milestones stated in the GIP as applicable, during the term of this GIA, Project Developer shall ensure that it meets each of the following development milestones:

[Specify Project Specific Milestones]

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand (sections should be renumbered as appropriate):]

6.1 Substantial Site work completed. On or before , Project Developer must demonstrate completion of at least 20 percent of project site construction. At this time, Project Developer must submit to Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Project Developer Interconnection Facilities.

6.2 Delivery of major electrical equipment. On or before , Project Developer must demonstrate that generating units have been delivered to Project Developer's project site.

[Instructions: the following provisions can be used be as mutually agreed upon, and as an alternative to the milestones set forth in the GIP (renumber sections as appropriate):]

6.2.1 Fuel delivery agreement and water agreement. Project Developer must demonstrate it has entered into a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnection by \_\_\_\_\_.

6.2.2 Local, county, and state site permits. Project Developer must obtain all necessary local, county, and state site permits by \_\_\_\_\_.

[Instruction to be used if the Project Developer has not provided evidence of the 100 percent Site Control for the Project Developer's Interconnection Facilities, and any Transmission Owner's Interconnection Facilities or Transmission Owner Upgrades at the Point of Interconnection that the Project Developer will develop prior to entering to a GIA (renumber remaining sections as appropriate):]

6.2.3 Project Developer shall provide evidence of 100 percent Site Control for the Generating Facility or Merchant Transmission Facility, Interconnection Facilities, and, if applicable, the Stand Alone Network Upgrades necessary to interconnect the project to the Transmission System consistent with GIP no later than six months after the effective date of this GIA. Notwithstanding any other provisions of this GIA, no extension of this milestone shall be granted and if the Project Developer fails to meet this milestone, its Interconnection Request and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

6.3 Commercial Operation. On or before \_\_\_\_\_, Project Developer must demonstrate commercial operation of all generating units in order to achieve the full Maximum Facility Output set forth in section 1.0(c) of the Specifications to this GIA. Failure to achieve this Maximum Facility Output may result in a permanent reduction in Maximum Facility Output of the Generating Facility, and if, necessary, a permanent reduction of the Capacity Interconnection Rights, to the level achieved. Demonstrating commercial operation includes achieving Initial Operation in accordance with section 1.4 of Appendix 2 to this GIA and making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[Instructions: If this GIA is for an incremental increase in output for a facility that already is in commercial operation (i.e., an uprate), then, instead of the above, use the following language for the Commercial Operation milestone.]

[For an uprate where MFO and CIRs will increase, use this alternate language:]

Commercial Operation. On or before \_\_\_\_\_, Project Developer must demonstrate commercial operation of an incremental increase over Project



Developer's previous interconnection, as set forth in Specifications, section 1.0(c) of this GIA for increases in Maximum Facility Output and in Specifications, section 2.1 of this GIA for increases in Capacity Interconnection Rights. This incremental increase is a result of the Interconnection Request associated with this GIA. Failure to achieve this Maximum Facility Output shall result in a permanent reduction in Maximum Facility Output of the Generating Facility, and if, necessary, a permanent reduction of the Capacity Interconnection Rights, to the level achieved. Demonstrating commercial operation includes making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[For CIR-only uprates, use the alternate language that follows. The September 1, \_\_\_\_\_ date for CIR-only uprates is meant to align with Summer Capability Testing for the unit(s). Without this Commercial Operation milestone that is specific to CIR-only uprates, it can be difficult to implement or enforce a Commercial Operation milestone for CIR-only uprates, because the unit is already in Commercial Operation at its specified MFO:]

Commercial Operation. On or before September 1, \_\_\_\_\_, Project Developer must demonstrate commercial operation of an incremental increase in Capacity Interconnection Rights over Project Developer's previous interconnection, as set forth in Specifications, section 2.1 of this GIA. Failure to achieve this level of Capacity Interconnection Rights shall result in a permanent reduction of the Capacity Interconnection Rights to the level achieved. This incremental increase in Capacity Interconnection Rights is a result of the Interconnection Request associated with this GIA. Demonstrating commercial operation includes making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[Additional instructions (separate from the Commercial Operation Date provisions): if a specific situation requires a separate Construction Service Agreement by a certain date then use the following:]

Construction Service Agreement. On or before \_\_\_\_\_, Project Developer must have either (a) executed a Construction Service Agreement for Interconnection Facilities or Transmission Owner Upgrades for which Project Developer has cost responsibility; (b) requested dispute resolution under section 12 of the PJM Tariff, or if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"); or (c) requested that the Transmission Provider file the Construction Service Agreement unexecuted with FERC.

6.4 Within one month following commercial operation of generating unit(s), Project Developer must provide certified documentation demonstrating that “as-built” Generating Facility or the Merchant Transmission Facilities, and Project Developer Interconnection Facilities are in accordance with applicable PJM studies and agreements. Project Developer must also provide PJM with “as-built” electrical modeling data or confirm that previously submitted data remains valid.

**[Add Additional Project Specific Milestones as appropriate]**

Project Developer shall demonstrate the occurrence of each of the foregoing milestones to Transmission Provider’s reasonable satisfaction. Transmission Provider may reasonably extend any such milestone dates, in the event of delays that Project Developer (i) did not cause and (ii) could not have remedied through the exercise of due diligence. Project Developer shall also have a one-time option to extend its milestone (other than any milestone related to Site Control) for a total period of one year regardless of cause. This option may only be applied one time for an Interconnection Request, and may only be applied to one single milestone specified in this GIA. Other milestone dates stated in this GIA shall be deemed to be extended coextensively with Project Developer’s use of this provision. Once this extension is used, it is no longer available with regard to any other milestones or other deadlines in this GIA. If the Project Developer fails to meet any of the milestones set forth above, including any extended milestones, its Interconnection Request shall be terminated and withdrawn, in accordance with the provisions of Appendix 2, sections 15 and 16. Transmission Provider shall take all necessary steps to effectuate this termination, including submitting the necessary filings with FERC.

7.0 Provision of Interconnection Service. Transmission Provider and Transmission Owner agree to provide for the interconnection to the Transmission System in the PJM Region of Project Developer’s Generating Facility or Merchant Transmission Facility identified in the Specifications in accordance with the GIP, the Operating Agreement, and this GIA, as they may be amended from time to time.

8.0 Assumption of Tariff Obligations. Project Developer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement and the PJM Manuals.

9.0 System Impact Study(ies) and/or Facilities Study(ies). In analyzing and preparing the [System Impact Study(ies) and/or Facilities Study(ies)], and in designing and constructing the Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades and/or Transmission Owner Interconnection Facilities described in the Specifications attached to this GIA, Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely on information provided by Project Developer and possibly by third parties and may not have control over

the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(s), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR TRANSMISSION OWNER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDY(IES) AND/OR FACILITIES STUDY(IES) OF THE DISTRIBUTION UPGRADES, NETWORK UPGRADES, STAND ALONE NETWORK UPGRADES AND/OR TRANSMISSION OWNER INTERCONNECTION FACILITIES. Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

10.0 Construction of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades

10.1. Cost Responsibility. Project Developer shall be responsible for and shall pay upon demand all Costs associated with the interconnection of the Generating Facility or Merchant Transmission Facility as specified in the GIP. These Costs may include, but are not limited to, a Distribution Upgrades charge, Network Upgrades charge, Stand Alone Network Upgrades charge, Transmission Owner Interconnection Facilities charge and other charges. A description of the facilities required and an estimate of the Costs of these facilities are included in sections 3.0 and 4.0 of the Specifications to this GIA.

10.2. Billing and Payments. Transmission Provider shall bill the Project Developer for the Costs associated with the facilities contemplated by this GIA, estimates of which are set forth in the Specifications to this GIA, and the Project Developer shall pay such Costs, in accordance with section 11 of Appendix 2 to this GIA and the applicable provisions of Schedule L. Upon receipt of each of Project Developer's payments of such bills, Transmission Provider shall reimburse the applicable Transmission Owner. Project Developer requests that Transmission Provider provide a quarterly cost reconciliation:

Yes

No

10.3. Contract Option. In the event that the Project Developer and Transmission Owner agree to utilize the Negotiated Contract Option as set forth in Schedule L, Appendix 1 to establish, subject to FERC acceptance, non-standard terms regarding cost responsibility, payment, billing and/or financing, the terms of sections 10.1 and/or 10.2 of this section 10.0 shall be superseded to the extent required to conform to

such negotiated terms, as stated in Schedule L to this GIA. The Negotiated Option can only be used in connection with a Network Upgrade subject to the Network Upgrade Cost Responsibility Agreement if all Project Developers and the relevant Transmission Owner agree.

Yes

No

#### 10.4 Interconnection Construction Terms and Conditions

10.4.1 Schedule L of this GIA sets forth the additional terms and conditions of service that apply in the event there are any there are Project Developer Interconnection Facilities, Transmission Owner Interconnection Facilities, or Transmission Owner Upgrades subject to this Agreement. In the event there is an additional Transmission Owner listed in Specification section 3.0(c), Transmission Provider, Project Developer and the additional Transmission Owner shall be required to enter into a separate Interconnection Construction Service Agreement in the form set forth in Tariff, Part IX, Subpart J. In the event there are any Common Use Upgrades listed in Specification section 3.0 of this GIA, Transmission Provider and Project Developer, along with the other relevant Project Developers, shall also be required to enter into a separate Network Upgrade Cost Responsibility Agreement in the form set forth in Tariff, Part IX, Subpart H.

10.4.2 In the event that the Project Developer elects to construct some or all of the Transmission Owner Interconnection Facilities or Stand Alone Network Upgrades under the Option to Build, billing and payment for the Costs associated with the facilities contemplated by this GIA shall relate only to such portion of the Interconnection Facilities and Transmission Owner Upgrades as the Transmission Owner is responsible for building.

#### 11.0 Interconnection Specifications

11.1 Point of Interconnection. The Point of Interconnection shall be as identified on the one-line diagram attached as Schedule B to this GIA.

11.2 List and Ownership of Interconnection Facilities and Transmission Owner Upgrades. The Interconnection Facilities and Transmission Owner Upgrades and Transmission Owner Upgrades to be constructed and ownership of the components thereof are identified in section 3.0 of the Specifications attached to this GIA.

11.3 Ownership and Location of Metering Equipment. The Metering Equipment to be constructed, the capability of the Metering Equipment to be constructed, and the ownership thereof, are identified on the attached Schedule C to this GIA.

11.4 Applicable Technical Standards. The Applicable Technical Requirements and Standards that apply to the Generating Facility or Merchant Transmission Facility and the Interconnection Facilities and Transmission Owner Upgrades are identified in Schedule D to this GIA.

## 12.0 Power Factor Requirement.

Consistent with section 4.6 of Appendix 2 to this GIA, the power factor requirement is as follows:

[For Generation Project Developers]

{The following language should be included for new large and small synchronous generation facilities that will have the Tariff specified power factor. This section does not apply if the Interconnection Request is for an incremental increase in generating capability.}

The Project Developer shall design its Generating Facility with the ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{Include the following language if the Interconnection Request is for an incremental increase in capacity or energy output to a synchronized generation facility}

The existing      MW portion of the Generating Facility shall retain its existing ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

The increase of      MW to the Generating Facility associated with this GIA shall be designed with the ability to maintain a power factor of at least 1.0 (unity) to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{For new wind or non-synchronous generation facilities which have submitted a New Service Request. after November 1, 2016, the following applies:}

The Generation Project Developer shall design its [wind-powered] [non-synchronous] Generating Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue after November 1, 2016, and were not commercially operable prior to November 1, 2016 include the following requirements:}

The existing [wind-powered] [non-synchronous]      MW portion of the Customer Facility

shall retain the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

The increase of      MW to the [wind-powered] [non-synchronous] Customer Facility associated with this GIA shall be designed with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

[For Transmission Project Developers]

{The following language should be included only for new Merchant Transmission Facilities}

Transmission Project Developer shall design its Merchant D.C. Transmission Facilities and/ or Controllable A.C. Merchant Transmission Facilities, to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when such Generating Facility is operating at any level within its approved operating range.

- 13.0 Charges. In accordance with sections 10 and 11 of Appendix 2 to this GIA, the Project Developer shall pay to the Transmission Provider the charges applicable after Initial Operation, as set forth in Schedule E to this GIA. Promptly after receipt of such payments, the Transmission Provider shall forward such payments to the appropriate Transmission Owner.
- 14.0 Third Party Beneficiaries. No third party beneficiary rights are created under this GIA, except, however, that, subject to modification of the payment terms stated in section 10 of this GIA pursuant to the Negotiated Contract Option, payment obligations imposed on Project Developer under this GIA are agreed and acknowledged to be for the benefit of the Transmission Owner(s). Project Developer expressly agrees that the Transmission Owner(s) shall be entitled to take such legal recourse as it deems appropriate against Project Developer for the payment of any Costs or charges authorized under this GIA or the GIP with respect to Interconnection Service for which Project Developer fails, in whole or in part, to pay as provided in this GIA, the GIP and/or the Operating Agreement.
- 15.0 Waiver. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this GIA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 16.0 Amendment. Except as set forth in Appendix 2, section 12.0 of this GIA, this GIA or any part thereof, may not be amended, modified, or waived other than by a written document signed by all parties hereto. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.

17.0 Construction With Other Parts of The Tariff. This GIA shall not be construed as an application for service under Part II or Part III of the Tariff.

18.0 Notices. Any notice or request made by either party regarding this GIA shall be made, in accordance with the terms of Appendix 2 to this GIA, to the representatives of the other party and as applicable, to the Transmission Owner(s), as indicated below:

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

Project Developer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Transmission Owner:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

19.0 Incorporation of Other Documents. All portions of the Tariff and the Operating Agreement pertinent to the subject matter of this GIA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.

20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service. Subject to FERC approval, the parties agree that the terms and conditions set forth in Schedule F hereto are hereby incorporated herein by reference and be made a part of this GIA. In the event of any conflict between a provision of Schedule F that FERC has accepted and any provision of Appendix 2 to this GIA that relates to the same subject matter, the pertinent provision of Schedule F shall control.

21.0 Addendum of Project Developer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status. To the extent required, in accordance with section 24.1 of Appendix 2 to this GIA, Schedule G to this GIA shall set forth the Project Developer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

22.0 Addendum of Interconnection Requirements for all Wind or Non-synchronous Generation Facilities. To the extent required, Schedule H to this GIA sets forth interconnection requirements for a wind or non-synchronous generation facilities and is hereby incorporated by reference and made a part of this GIA.

23.0 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All interconnection parties agree to comply with all infrastructure security requirements of the North American Electric Reliability Corporation. All Transmission Providers, Transmission Owners, market participants, and Project Developers interconnected with electric systems are to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

24.0 This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction.



IN WITNESS WHEREOF, Transmission Provider, Project Developer and Transmission Owner have caused this GIA to be executed by their respective authorized officials.

(Project Identifier # \_\_\_\_\_)

Transmission Provider: **PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**SPECIFICATIONS FOR  
GENERATION INTERCONNECTION AGREEMENT**

**By and Among  
PJM INTERCONNECTION, L.L.C.**

**And  
[Name of Project Developer]  
And  
[Name of Transmission Owner]  
(Project Identifier # \_\_\_\_\_)**

1.0 Description of [Generating Facility] [Merchant Transmission Facilities] to be interconnected with the Transmission System in the PJM Region:

a. Name of Generating Facility or Merchant Transmission Facility:

\_\_\_\_\_  
\_\_\_\_\_

b. Location of Generating Facility or Merchant Transmission Facility:

\_\_\_\_\_  
\_\_\_\_\_

c. Size in megawatts of Generating Facility or Merchant Transmission Facility:

{The following language should be included only for generating units

For Generation Project Developer:

{Use the following language for all resources}

Maximum Facility Output of \_\_\_\_\_ MW

{Include the following language for Energy Storage Resources}

Maximum load capacity of \_\_\_\_\_ MW)

Minimum State of Charge: \_\_\_\_\_; and

Maximum State of Charge: \_\_\_\_\_.

{The following language applies when a Generation Interconnection Request involves an increase of the capacity of an existing Generating Facility:

The stated size of the generating unit includes an increase in the Maximum Facility Output of the generating unit of \_\_\_ MW over Project Developer’s previous interconnection. This increase is a result of the Interconnection Request associated with this Generation Interconnection Agreement.}

{The following language should be included only for Merchant Transmission Facilities

For Transmission Project Developer:

Nominal Rated Capability: \_\_\_\_\_ MW}

d. Description of the equipment configuration:

## 2.0 Rights

[for Generation Project Developers]

2.1 Capacity Interconnection Rights: {Instructions: this section will not apply if the Generating Facility is exclusively an Energy Resource and thus is granted no CIRs; see alternate section 2.1 below}

Pursuant to and subject to the applicable terms of the GIP, the Project Developer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Generation Interconnection Agreement in the amount of \_\_\_ MW. {Instructions: this number is the total of the Capacity Interconnection Rights that are granted as a result of the Interconnection Request, plus any prior Capacity Interconnection Rights}

{OR: Instructions: include the following options when the projected Initial Operation is in advance of the study year used for the System Impact Study and Capacity Interconnection Rights are only interim until the study year:}

Pursuant to and subject to the applicable terms of the GIP, the Project Developer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Generation Interconnection Agreement in the amount of \_\_\_ MW commencing \_\_\_\_\_ {e.g., June 1, 2023}. During the time period from the effective date of this GIA until \_\_\_\_\_ {e.g., May 31, 2023} (the “interim

time period”), the Project Developer may be awarded interim Capacity Interconnection Rights in the amount not to exceed \_\_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and the results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_\_ {e.g., May 31, 2023}.

{OR: Instructions: include the following options when there are a combination of previously awarded CIRs and interim CIRs that have a termination date or event:}

Pursuant to and subject to the applicable terms of the GIP, the Project Developer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this GIA in the amount of \_\_\_\_\_ MW commencing \_\_\_\_\_ {e.g., June 1, 2023}. From the effective date of this GIA until \_\_\_\_\_ {e.g., May 31, 2023} (the “interim time period”), in addition to the \_\_\_\_\_ MW of Capacity Interconnection Rights the Project Developer had at the same Point of Interconnection prior to its Interconnection Request associated with this GIA, the Project Developer also may be awarded interim Capacity Interconnection Rights in an amount not to exceed \_\_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_\_ {e.g., May 31, 2023}.

{OR: Instructions: include the following language in the case of combined Cycle Positions with a combination of (1) already studied, and confirmed deliverable, CIRs for the first Interconnection Request; and (2) potential interim CIRs for the second Interconnection Request, subject to an interim deliverability study:}

Pursuant to and subject to the applicable terms of the Tariff, the Project Developer shall have Capacity Interconnection Rights at the Point of Interconnection specified in this GIA in the amount of \_\_\_\_\_ MW commencing \_\_\_\_\_ {e.g., June 1, 2023}. From the effective date of this GIA until \_\_\_\_\_ {e.g., May 31, 2023} (the “interim time period”), in addition to the \_\_\_\_\_ MW of Capacity Interconnection Rights the Project Developer will have commencing \_\_\_\_\_ {e.g., June 1, 2022} at the Point of Interconnection pursuant to the \_\_\_\_\_ Interconnection Request, the Project Developer also may be awarded interim Capacity Interconnection Rights at the Point of Interconnection in an amount not to exceed \_\_\_\_\_ MW pursuant to the \_\_\_\_\_ Interconnection Request. Accordingly, during the interim time period, the Project Developer shall have \_\_\_\_\_ MW of previously studied and awarded Capacity Interconnection Rights, and may be awarded interim Capacity Interconnection

Rights in an amount not to exceed \_\_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_\_ {e.g., May 31, 2023}.

{Add to address partial deactivations:}

Pursuant to and subject to the applicable terms of the Tariff, the Interconnection Customer shall have Capacity Interconnection Rights at the Point of Interconnection specified in this Interconnection Service Agreement in the amount of \_\_\_\_\_ MW commencing \_\_\_\_\_ {e.g., June 1, 2022}. From the effective date of this GIA until \_\_\_\_\_ {e.g., May 31, 2023} (the "interim time period"), in addition to the \_\_\_\_\_ MW of Capacity Interconnection Rights the Interconnection Customer will have commencing \_\_\_\_\_ {e.g., June 1, 2023} at the Point of Interconnection pursuant to the \_\_\_\_\_ Interconnection Request, the Interconnection Customer also may be awarded interim Capacity Interconnection Rights at the Point of Interconnection in an amount not to exceed \_\_\_\_\_ MW pursuant to the \_\_\_\_\_ Interconnection Request. Accordingly, during the interim time period, the Interconnection Customer shall have \_\_\_\_\_ MW of previously studied and awarded Capacity Interconnection Rights, and may be awarded interim Capacity Interconnection Rights in an amount not to exceed \_\_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_\_ {e.g., May 31, 2023}.

{OR: Instruction: include the following language to the extent applicable for interconnection of additional generation at an existing Generating Facility:}

The amount of Capacity Interconnection Rights specified above ( \_\_\_\_\_ MW) includes \_\_\_\_\_ MW of Capacity Interconnection Rights that the Project Developer had at the same Point(s) of Interconnection prior to its Interconnection Request associated with this GIA, and \_\_\_\_\_ MW of Capacity Interconnection Rights granted as a result of such Interconnection Request.

{OR: Instructions: include the following language when the CIRs are only interim and have a termination date or event:}

Project Developer shall have \_\_\_\_\_ MW of Capacity Interconnection Rights for the time period from \_\_\_\_\_ to \_\_\_\_\_. These Capacity Interconnection Rights are interim

and will terminate upon {Instructions: explain circumstances – e.g. interim agreement; completion of another facility, etc.}

- 2.2 To the extent that any portion of the Generating Facility described in section 1.0 is not a Capacity Resource with Capacity Interconnection Rights, such portion of the Generating Facility shall be an Energy Resource. PJM reserves the right to limit total injections to the Maximum Facility Output in the event reliability would be affected by output greater than such quantity.

{Instructions: this version of section 2.1 will be used in lieu of section 2.1 above when a Generating Facility will be an Energy Resource and therefore will not be granted any CIRs:}

- [2.3 The generating unit(s) described in section 1.0 shall be an Energy Resource. Pursuant to this GIA, the generating unit will be permitted to inject \_\_\_\_\_ MW (nominal) into the system. PJM reserves the right to limit injections to this quantity in the event reliability would be affected by output greater than such quantity. ]

[for Transmission Project Developers]

- 2.4 Transmission Injection Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to the GIP, Project Developer shall have Transmission Injection Rights at each indicated Point of Interconnection in the following quantity(ies):

- 2.5 Transmission Withdrawal Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to the GIP, Project Developer shall have Transmission Withdrawal Rights at each indicated Point of Interconnection in the following quantity(ies):

[Include section 2.3 only if customer is interconnecting Controllable A.C. Merchant Transmission Facilities]

- 2.6 Project Developer is interconnecting Controllable A.C. Merchant Transmission Facilities as defined in the Part I of the Tariff, and has elected, pursuant to the GIP, to receive Transmission Injection Rights and Transmission Withdrawal Rights in lieu of the other applicable rights for which it may be eligible the GIP. Accordingly, Project Developer hereby agrees that the Transmission Injection Rights and Transmission Withdrawal Rights awarded to it pursuant to the GIP and this GIA are, and throughout the duration of this GIA shall be, conditioned on Project Developer's continuous operation of its Controllable A.C. Merchant Transmission

Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

{Instructions – use for Merchant Transmission Developers as applicable}

2.7 Incremental Deliverability Rights:

Pursuant to Tariff, Part VIII, Subpart E, section 427(C), Project Developer shall have Incremental Deliverability Rights at each indicated Point of Interconnection in the following quantity(ies):

2.8 Incremental Auction Revenue Rights:

Pursuant to Tariff, Part VIII, Subpart E, section 427(A), Project Developer shall have Incremental Auction Revenue Rights in the following quantities:

2.9 Incremental Capacity Transfer Rights:

Pursuant to Tariff, Part VIII, Subpart E, section 427(B), Project Developer shall have Incremental Capacity Transfer Rights between the following associated source(s) and sink(s) in the indicated quantities:

3.0 Construction Responsibility and Ownership of Interconnection Facilities and Transmission Owner Upgrades/Scope of Work.

a. Project Developer.

(1) Project Developer shall construct and, unless otherwise indicated, shall own, the following Interconnection Facilities:

**[Specify Facilities to Be Constructed or state “None”]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Project Developer has sole cost responsibility
- ii. Facilities for which a Network Upgrade Cost Responsibility Agreement is required.

(2) In the event that Project Developer has exercised the Option to Build, it is hereby permitted to build in accordance with and subject to the conditions and limitations set forth in Attachment L, the following portions of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades which constitute or are part of the Generating Facility or Merchant Transmission Facility:

**[Specify Facilities to Be Constructed or state “None”]**

Ownership of the facilities built by Project Developer pursuant to the Option to Build shall be as provided in Schedule L.

b. Transmission Owner {or Name of Transmission Owners if more than one Transmission Owner}

**[Specify Facilities to Be Constructed and Owned or state “None”]**

[Use the following if facilities are to be constructed or owned]

i. Facilities for which the Project Developer has sole cost responsibility

ii. Facilities for which a Network Upgrade Cost Responsibility Agreement is required.

c. [if applicable, include the following][Name of any additional Transmission Owner constructing facilities with which Project Developer and Transmission Provider will also execute an Interconnection Construction Service Agreement]

**[Specify Facilities to Be Constructed and Owned]**

[Use the following if facilities are to be constructed or owned]

i. Facilities for which the Project Developer has sole cost responsibility

ii. Facilities for which a Network Upgrade Cost Responsibility Agreement is required.

d. [if applicable] Additional Contingent Facilities which must be completed prior to Commercial Operation of the Generating Facility or Merchant Transmission Facility

**[Specify Facilities to Be Constructed and Owned]**

4.0 Subject to modification pursuant to the Negotiated Contract Option and/or the Option to Build, Project Developer shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with Appendix 2, section 11 of this GIA and Schedule L, section 9.0 {instruction - to be included if there is an additional Transmission Owner that has a separate CSA [and in Appendix 2, section 3.2.3.2 of the Construction Service Agreement with [insert Transmission Owner name].]} {Instruction - to be included if there is a Network Upgrade Cost Responsibility Agreement [and in [insert reference to NUCRA provisions]]}



4.1 Transmission Owner Interconnection Facilities Charge: \$

[Optional: Provide Charge and Identify Transmission Owner]

4.2 Network Upgrades Charge: \$

[Optional: Provide Breakdown of Charge Based on Transmission Owner responsibilities and costs subject to the Network Upgrade Cost Responsibility Agreement]

4.3 Distribution Upgrades Charge: \$

[Optional: Provide Breakdown of Charge Based on Transmission Owner responsibilities]

4.4 Other Charges: \$

[Optional: Provide Breakdown of Charge Based on Transmission Owner responsibilities]

4.5 Cost breakdown:

\$ Direct Labor  
\$ Direct Material  
\$ Indirect Labor  
\$ Indirect Material

[Additional items for breakdown as necessary]

\$ Total

4.6 Security Amount Breakdown:

\$ Estimated Cost of Network Upgrades, Distribution Upgrades, and Other Charges

plus \$ Option to Build Security for Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades (including Cancellation Costs)

\$ Sum of Security required for costs listed in Specifications sections 4.1 through 4.4 of this GIA

less \$ Portion of Costs already paid by Project Developer

\$            Net Security {Instructions: **if the resultant is negative, use:** reduction with  
this GIA; **if the resultant is zero or positive use:** amount required} {Instructions: this  
value should be in section 5.0 of this GIA}

## APPENDICES:

- APPENDIX 1 - DEFINITIONS
- APPENDIX 2 - STANDARD TERMS AND CONDITIONS FOR INTERCONNECTIONS

## SCHEDULES:

- SCHEDULE A - CUSTOMER FACILITY LOCATION/SITE PLAN
- SCHEDULE B - SINGLE-LINE DIAGRAM
- SCHEDULE C - LIST OF METERING EQUIPMENT
- SCHEDULE D - APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS
- SCHEDULE E - SCHEDULE OF CHARGES
- SCHEDULE F - SCHEDULE OF NON-STANDARD TERMS & CONDITIONS
- SCHEDULE G - PROJECT DEVELOPER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS
- SCHEDULE H - INTERCONNECTION REQUIREMENTS FOR ALL WIND, SOLAR AND NON-SYNCHRONOUS GENERATION FACILITIES
- SCHEDULE I – INTERCONNECTION SPECIFICATIONS FOR AN ENERGY STORAGE RESOURCE
- SCHEDULE J – SCHEDULE OF TERMS AND CONDITIONS FOR SURPLUS INTERCONNECTION SERVICE
- SCHEDULE K – REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL ELECTRICAL GENERATING CAPABILITY
- SCHEDULE L – INTERCONNECTION CONSTRUCTION TERMS AND CONDITIONS
- SCHEDULE L, APPENDIX 1 – NEGOTIATED CONTRACT OPTION TERMS

**APPENDIX 1**

**DEFINITIONS**

**From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement**

## APPENDIX 2

### STANDARD TERMS AND CONDITIONS FOR INTERCONNECTIONS

## **1 Commencement, Term of and Conditions Precedent to Interconnection Service**

### **1.1 Commencement Date:**

The effective date of a Generation Interconnection Agreement shall be the date provided in section 4.0 of the Generation Interconnection Agreement. Interconnection Service under this Generation Interconnection Agreement shall commence upon the satisfaction of the conditions precedent set forth in section 1.2 below.

### **1.2 Conditions Precedent:**

The following conditions must be satisfied prior to the commencement of Interconnection Service under this Generation Interconnection Agreement:

(a) This Generation Interconnection Agreement, if filed with FERC, shall have been accepted for filing by the FERC;

(b) All requirements for Initial Operation as specified in section 1.4 below shall have been met and Initial Operation of the Generating Facility or Merchant Transmission Facility shall have been completed.

(c) Project Developer shall be in compliance with all Applicable Technical Requirements and Standards for interconnection under the Tariff (as determined by the Transmission Provider).

### **1.3 Term:**

This Generation Interconnection Agreement shall remain in full force and effect until it is terminated in accordance with section 16 of this Appendix 2.

### **1.4 Initial Operation:**

The following requirements shall be satisfied prior to Initial Operation of the Generating Facility or Merchant Transmission Facility:

1.4.1 The construction of all Interconnection Facilities and Transmission Owner Upgrades necessary for the interconnection of the Generating Facility or Merchant Transmission Facility has been completed;

1.4.2 The Transmission Owner has accepted any Interconnection Facilities and Stand Alone Network Upgrades constructed by Project Developer pursuant to this GIA;

1.4.3 The Project Developer and the Transmission Owner have all necessary systems and personnel in place to allow for parallel operation of their respective facilities;

1.4.4 The Transmission Owner has received all applicable documentation for the Interconnection Facilities built by the Project Developer, certified as correct, including, but not limited to, access

to the field copy of marked-up drawings reflecting the as-built condition, pre-operation test reports, and instruction books; and

1.4.5 Project Developer shall have received any necessary authorization from Transmission Provider to synchronize with the Transmission System or to energize, as applicable per the determination of Transmission Provider, the Generating Facility or Merchant Transmission Facility and Interconnection Facilities.

#### **1.4A Other Interconnection Options**

##### **1.4A.1 Limited Operation:**

If any of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades are not reasonably expected to be completed prior to the Project Developer's planned date of Initial Operation, and provided that the Transmission Owner has accepted the Project Developer Interconnection Facilities pursuant to this GIA, Transmission Provider shall, upon the request and at the expense of Project Developer, perform appropriate power flow or other operating studies on a timely basis to determine the extent to which the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities may operate prior to the completion of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and the Generation Interconnection Agreement. In accordance with the results of such studies and subject to such conditions as Transmission Provider determines to be reasonable and appropriate, Transmission Provider shall (a) permit Project Developer to operate the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, and (b) grant Project Developer limited, interim Interconnection Rights commensurate with the extent to which operation of the Generating Facility or Merchant Transmission Facility is permitted.

##### **1.4A.2 Provisional Interconnection Service:**

Upon the request of Project Developer, and prior to completion of requisite Interconnection Facilities, Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades, or system protection facilities Project Developer may request limited Interconnection Service at the discretion of Transmission Provider based upon an evaluation that will consider the results of available studies, which terms shall be memorialized in the Generation Interconnection Agreement to be tendered by Transmission Provider to Project subject to the execution timelines and provisions set forth in Tariff, Part IX, section 500.

Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Project Developer interconnects without modifications to the Generating Facility or Merchant Transmission Facility or the Transmission System. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or Stand Alone Network Upgrades, or system protection facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or

expanded Generating Facility or Merchant Transmission Facility are in place prior to the commencement of Interconnection Service from the Generating Facility or Merchant Transmission Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Distribution Upgrades, or Stand Alone Network Upgrades, and/or system protection facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility or Merchant Transmission Facility are not currently in place, Transmission Provider will perform a study, at the Project Developer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility or Merchant Transmission Facility shall be studied and updated annually and at the Project Developer's expense. The results will be communicated to the Project Developer in writing upon completion of the study. Project Developer assumes all risk and liabilities with respect to the Provisional Interconnection Service, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, or Stand Alone Network Upgrades, and/or system protection facilities cost responsibilities.

### **1.5 Survival:**

The Generation Interconnection Agreement shall continue in effect after termination to the extent necessary to provide for final billings and payments; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while the Generation Interconnection Agreement was in effect; and to permit each Interconnection Party to have access to the real property, including but not limited to leased property and easements of the other Interconnection Parties pursuant to section 16 of this Appendix 2 to disconnect, remove or salvage its own facilities and equipment.



## **2 Interconnection Service**

### **2.1 Scope of Service:**

Interconnection Service shall be provided to the Project Developer at the Point of Interconnection (a) in the case of interconnection of the Generating Facility of a Generation Project Developer, up to the Maximum Facility Output, and (b) in the case of interconnection of the Merchant Transmission Facility of a Transmission Project Developer, up to the Nominal Rated Capability. The location of the Point of Interconnection shall be mutually agreed by the Interconnected Entities, provided, however, that if the Interconnected Entities are unable to agree on the Point of Interconnection, the Transmission Provider shall determine the Point of Interconnection, provided that Transmission Provider shall not select a Point of Interconnection that would impose excessive costs on either of the Interconnected Entities and shall take material system reliability considerations into account in such selection. Specifications for the Generating Facility or Merchant Transmission Facility and the location of the Point of Interconnection shall be set forth in an appendix to the Generation Interconnection Agreement and shall conform to those stated in the System Impact Study(ies).

### **2.2 Non-Standard Terms:**

The standard terms and conditions of this Appendix 2 shall not apply, to such extent as Transmission Provider determines to be reasonably necessary to accommodate such circumstances, in the event that the Project Developer acquires an ownership interest in facilities which, under the standard terms and conditions of this GIA would be part of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. In such circumstances and to the extent determined by Transmission Provider to be reasonably necessary, non-standard terms and conditions mutually agreed upon by all Interconnection Parties shall apply, subject to FERC and any other necessary regulatory acceptance or approval. In addition, a Project Developer that acquires an ownership interest in such facilities shall become, and shall remain for so long as it retains such interest, a signatory to the Consolidated Transmission Owners Agreement.

### **2.3 No Transmission Services:**

The execution of a Generation Interconnection Agreement does not constitute a request for transmission service, or entitle Project Developer to receive transmission service, under Part II or Part III of the Tariff. Nor does the execution of a Generation Interconnection Agreement obligate the Transmission Owner or Transmission Provider to procure, supply or deliver to Project Developer or the Generating Facility or Merchant Transmission Facility any energy, capacity, Ancillary Services or Station Power (and any associated distribution services).

### **2.4 Use of Distribution Facilities:**

To the extent that a Generation Project Developer uses distribution facilities for the purpose of delivering energy to the Transmission System, Interconnection Service under this Tariff shall include the construction and/or use of such distribution facilities. In such cases, to such extent as Transmission Provider determines to be reasonably necessary to accommodate such

circumstances, the Generation Interconnection Agreement may include non-standard terms and conditions mutually agreed upon by all Interconnection Parties as needed to conform with Applicable Laws and Regulations and Applicable Standards relating to such distribution facilities.

### **3 Modification of Facilities**

#### **3.1 General:**

Subject to Applicable Laws and Regulations and to any applicable requirements or conditions of the Tariff and the Operating Agreement, either Interconnected Entity may undertake modifications to its facilities (“Planned Modifications”). In the event that an Interconnected Entity plans to undertake a modification, that Interconnected Entity, in accordance with Good Utility Practice, shall provide notice to the other Interconnection Parties with sufficient information regarding such modification, including any modification to its project that causes the project’s capacity, location, configuration or technology to differ from any corresponding information provided in the Interconnection Request, so that the other Interconnection Parties may evaluate the potential impact of such modification prior to commencement of the work. The Interconnected Entity desiring to perform such modification shall provide the relevant drawings, plans, specifications and models to the other Interconnection Parties in advance of the beginning of the work. Transmission Provider and the applicable Interconnection Entity shall enter into a Necessary Studies Agreement, a form is located in the Tariff, Part IX, pursuant to which Transmission Provider agrees to conduct the necessary studies to determine whether the Planned Modifications will have a permanent material impact on the Transmission System or would constitute a Material Modification, and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the Planned Modifications.

The Interconnected Entity shall provide the information required by the Necessary Study Agreement and provide the required deposit. Transmission Provider, upon completion of the Necessary Studies, shall provide the Interconnected Entity (i) the type and scope of the permanent material impact, if any, the Planned Modifications will have on the Transmission System; (ii) the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications; and (iii) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications. In the event such Planned Modification have a permanent material impact on the Transmission System or would constitute a Material Modification, Project Developer shall then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

#### **3.2 Interconnection Request:**

This section 3 shall not apply to any proposed modifications by Project Developer to its facilities for which Project Developer must make an Interconnection Request under the Tariff. In such circumstances, the Project Developer and Transmission Provider shall follow the requirements set forth in the GIP.

#### **3.3 Standards:**

Any additions, modifications, or replacements made to an Interconnected Entity's facilities shall be constructed and operated in accordance with Good Utility Practice, Applicable Standards and Applicable Laws and Regulations.

### **3.4 Modification Costs:**

Unless otherwise required by Applicable Laws and Regulations or this Appendix 2 and, with respect to a Transmission Project Developer, subject to the terms of the GIP,:

(a) Project Developer shall not be responsible for the costs of any additions, modifications, or replacements that the Transmission Owner in its discretion or at the direction of Transmission Provider makes to the Interconnection Facilities and Transmission Owner Upgrades or the Transmission System in order to facilitate the interconnection of a third party to the Interconnection Facilities and Transmission Owner Upgrades or the Transmission System, or to provide transmission service under the Tariff to a third party.

(b) Project Developer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities and Transmission Owner Upgrades or the Transmission System that are required, in accord with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, in order to accommodate additions, modifications, or replacements made by Project Developer to the Generating Facility or Merchant Transmission Facility or to the Project Developer Interconnection Facilities.

(c) Project Developer shall be responsible for the costs of any additions, modifications, or replacements to the Project Developer Interconnection Facilities or the Generating Facility or Merchant Transmission Facility that are required, in accord with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, in order to accommodate additions, modifications, or replacements that Transmission Provider or the Transmission Owner makes to the Transmission System or to the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, but only to the extent that Transmission Provider's or the Transmission Owner's changes to the Transmission System or the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades are made pursuant to Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards.

## **4 Operations**

### **4.1 General:**

Each Interconnected Entity shall operate, or shall cause operation of, its facilities in a safe and reliable manner in accord with (i) the terms of this Appendix 2; (ii) Applicable Standards; (iii) applicable rules, procedures and protocols set forth in the Tariff and the Operating Agreement, as any or all may be amended from time to time; (iv) Applicable Laws and Regulations, and (v) Good Utility Practice.

#### **4.1.1 Project Developer Initial Drawings:**

On or before the applicable date specified in the Milestones of the Generation Interconnection Agreement, Project Developer shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Project Developer Interconnection Facilities. Transmission Owner and Transmission Provider shall review the drawings to assess the consistency of Project Developer's design of the Project Developer Interconnection Facilities with the design that was analyzed in the planning model as described in PJM Manuals. After consulting with the Transmission Owner, Transmission Provider shall provide comments on the drawings to Project Developer within 45 days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

##### **4.1.1.1 Effect of Review:**

Transmission Owner's and Transmission Provider's reviews of Project Developer's initial drawings of the Project Developer Interconnection Facilities shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, Project Developer shall make such changes to the design of the Project Developer Interconnection Facilities as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Project Developer Interconnection Facilities meet Applicable Standards and, to the extent that design of the Project Developer Interconnection Facilities is included in the System Impact Study(ies), to ensure that such facilities conform with the System Impact Study(ies).

#### **4.1.2 Project Developer "As-Built" Drawings:**

Within 120 days after the date of Initial Operation, unless the Interconnection Parties agree on another mutually acceptable deadline, the Project Developer shall deliver to the Transmission Provider and the Transmission Owner final, "as-built" drawings, information and documents regarding the Project Developer Interconnection Facilities, including, as and to the extent applicable: a one-line diagram, a site plan showing the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, plan and elevation drawings showing the layout of the Project Developer Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Project Developer's step-up transformers, the facilities connecting the

Generating Facility or Merchant Transmission Facility to the step-up transformers and the Project Developer Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Generating Facility or Merchant Transmission Facility. As applicable, the Project Developer shall provide Transmission Provider and the Transmission Owner Specifications for the excitation system, automatic voltage regulator, Generating Facility or Merchant Transmission Facility control and protection settings, transformer tap settings, and communications. Transmission Provider and Transmission Owner shall have the right to review such drawings, and charge Project Developer their actual costs of conducting such review.

#### **4.2 Project Developer Obligations:**

Project Developer shall obtain Transmission Provider's approval prior to either synchronizing with the Transmission System or energizing, as applicable per the determination of Transmission Provider, the Generating Facility or Merchant Transmission Facility or, except in an Emergency Condition, disconnecting the Generating Facility or Merchant Transmission Facility from the Transmission System, and shall coordinate such synchronizations, energizations, and disconnections with the Transmission Owner.

#### **4.3 Transmission Project Developer Obligations:**

A Transmission Project Developer that will be a Merchant Transmission Provider is subject to the terms and conditions in the GIP.

#### **4.4 Permits and Rights-of-Way:**

Each Interconnected Entity at its own expense shall maintain in full force and effect all permits, licenses, rights-of-way and other authorizations as may be required to maintain the Generating Facility or Merchant Transmission Facility and the Interconnection Facilities and Transmission Owner Upgrades that the entity owns, operates and maintains and, upon reasonable request of the other Interconnected Entity, shall provide copies of such permits, licenses, rights-of-way and other authorizations at its own expense to the requesting party.

#### **4.5 No Ancillary Services:**

Except as provided in section 4.6 of this Appendix 2, nothing in this Appendix 2 is intended to obligate the Project Developer to supply Ancillary Services to either Transmission Provider or the Transmission Owner.

#### **4.6 Reactive Power and Primary Frequency Response**

##### **4.6.1 Reactive Power**

##### **4.6.1.1 Reactive Power Design Criteria**

##### **4.6.1.1.1 New Facilities:**

For all new Generating Facilities to be interconnected pursuant to the Tariff, other than wind-powered and other non-synchronous generation facilities, the Generation Project Developer shall design its Generating Facility to maintain a composite power delivery at continuous rated power output at a power factor of at least 0.95 leading to 0.90 lagging. For all new wind-powered and other non-synchronous generation facilities the Generation Project Developer shall design its Generating Facility with the ability to maintain a composite power delivery at a power factor of at least 0.95 leading to 0.95 lagging across the full range of continuous rated power output. For all wind-powered and other non-synchronous generation facilities that submitted a New Services Request on or after November 1, 2016, the power factor requirement shall be measured at the high-side of the facility substation transformers. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two.

For new generation resources of more than 20 MW, other than wind-powered and other non-synchronous Generating Facilities, the power factor requirement shall be measured at the generator's terminals. For new generation resources of 20 MW or less the power factor requirement shall be measured at the Point of Interconnection. Any different reactive power design criteria that Transmission Provider determines to be appropriate for a wind-powered or other non-synchronous generation facility shall be stated in the Generation Interconnection Agreement.

A Transmission Project Developer interconnecting Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities shall design its Generating Facility to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when the Generating Facility is operating at any level within its approved operating range.

#### **4.6.1.1.2      Increases in Generating Capacity or Energy Output:**

All increases in the capacity or energy output of any generation facility interconnected with the Transmission System, other than wind-powered and other non-synchronous Generating Facilities, shall be designed with the ability to maintain a composite power delivery at continuous rated power output at a power factor for all incremental MW of capacity or energy output, of at least 1.0 (unity) to 0.90 lagging. Wind-powered generation facilities and other non-synchronous generation facilities that submitted a New Services Request on or after November 1, 2016, shall be designed with the ability to maintain a composite power delivery at a power factor for all incremental MW of capacity or energy output of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers across the full range of continuous rated power output. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two.

The power factor requirement associated with increases in capacity or energy output of more than 20 MW to synchronous generation facilities interconnected with the Transmission System shall be measured at the generator's terminals. The power factor requirement associated with increases in capacity or energy output of 20 MW or less to synchronous generation facilities interconnected to

the Transmission System shall be measured at the Point of Interconnection; however, if the aggregate capacity or energy output of Generating Facility is or will be more than 20 MW, the power factor requirement shall be measure at the generator's terminals.

#### **4.6.1.2 Obligation to Supply Reactive Power:**

Project Developer agrees, as and when so directed by Transmission Provider or when so directed by the Transmission Owner acting on behalf or at the direction of Transmission Provider, to operate the Generating Facility to produce reactive power within the design limitations of the Generating Facility pursuant to voltage schedules, reactive power schedules or power factor schedules established by Transmission Provider or, as appropriate, the Transmission Owner. Transmission Provider shall maintain oversight over such schedules to ensure that all sources of reactive power in the PJM Region, as applicable, are treated in an equitable and not unduly discriminatory manner. Project Developer agrees that Transmission Provider and the Transmission Owner, acting on behalf or at the direction of Transmission Provider, may make changes to the schedules that they respectively establish as necessary to maintain the reliability of the Transmission System.

#### **4.6.1.3 Deviations from Schedules:**

In the event that operation of the Generating Facility or Merchant Transmission Facility of an Project Developer causes the Transmission System or the Transmission Owner's facilities to deviate from appropriate voltage schedules and/or reactive power schedules as specified by Transmission Provider or the Transmission Owner's operations control center (acting on behalf or at the direction of Transmission Provider), or that otherwise is inconsistent with Good Utility Practice and results in an unreasonable deterioration of the quality of electric service to other customers of Transmission Provider or the Transmission Owner, the Project Developer shall, upon discovery of the problem or upon notice from Transmission Provider or the Transmission Owner, acting on behalf or at the direction of Transmission Provider, take whatever steps are reasonably necessary to alleviate the situation at its expense, in accord with Good Utility Practice and within the reactive capability of the Generating Facility or Merchant Transmission Facility. In the event that the Project Developer does not alleviate the situation within a reasonable period of time following Transmission Provider's or the Transmission Owner's notice thereof, the Transmission Owner, with Transmission Provider's approval, upon notice to the Project Developer and at the Project Developer's expense, may take appropriate action, including installation on the Transmission System of power factor correction or other equipment, as is reasonably required, consistent with Good Utility Practice, to remedy the situation cited in Transmission Provider's or the Transmission Owner's notice to the Project Developer under this section.

#### **4.6.1.4 Payment for Reactive Power:**

Any payments to the Project Developer for reactive power shall be in accordance with Tariff, Schedule 2.

#### **4.6.2 Primary Frequency Response:**

Generation Project Developer shall ensure the primary frequency response capability of its



Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Generation Project Developer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Generating Facility’s real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Generating Facility’s real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Generation Project Developer shall notify Transmission Provider that the primary frequency response capability of the Generating Facility has been tested and confirmed during commissioning. Once Generation Project Developer has synchronized the Generating Facility with the Transmission System, Generation Project Developer shall operate the Generating Facility consistent with the provisions specified in sections 4.6.2.1 and 4.6.2.2 of this agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Generating Facilities.

#### **4.6.2.1 Governor or Equivalent Controls:**

Whenever the Generating Facility is operated in parallel with the Transmission System, Generation Project Developer shall operate the Generating Facility with its governor or equivalent controls in service and responsive to frequency. Generation Project Developer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Generation Project Developer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Generation Project Developer needs to operate the Generating Facility with its governor or equivalent controls not in service, Generation Project Developer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned

to service. Generation Project Developer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Generation Project Developer shall make Reasonable Efforts to keep outages of the Generating Facility's governor or equivalent controls to a minimum whenever the Generating Facility is operated in parallel with the Transmission System.

#### **4.6.2.2 Timely and Sustained Response:**

Generation Project Developer shall ensure that the Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Generating Facility has operating capability in the direction needed to correct the frequency deviation. Generation Project Developer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

#### **4.6.2.3 Exemptions:**

Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from sections 4.6.2, 4.6.2.1, and 4.6.2.2 of this agreement. Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in section 4.6.2, but shall be otherwise exempt from the operating requirements in sections 4.6.2, 4.6.2.1, 4.6.2.2, and 4.6.2.4 of this agreement.

#### **4.6.2.4 Energy Storage Resources:**

Generation Project Developer interconnecting an Energy Storage Resource shall establish an operating range in Schedule I of this GIA that specifies a minimum state of charge and a maximum state of charge between which the Energy Storage Resource will be required to provide primary frequency response consistent with the conditions set forth in sections 4.6.2, 4.6.2.1, 4.6.2.2, and 4.6.2.3 of this agreement. Schedule I shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the Energy Storage Resource; (5) operational limitations of the Energy Storage Resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Generation Project Developer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If

the operating range is dynamic, then Schedule I must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Generation Project Developer's Energy Storage Resource is required to provide timely and sustained primary frequency response consistent with section 4.6.2.2 of this agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the Energy Storage Resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Generation Project Developer's Energy Storage Resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Generation Project Developer's Energy Storage Resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

#### **4.7 Under- and Over-Frequency and Under- and Over- Voltage Conditions:**

The Generation Project Developer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Generating Facility. The Generation Project Developer shall enable these capabilities such that its Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to section 1.4.4 of Appendix 2 of this Generation Interconnection Agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the PJM Region on a comparable basis. The Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Generation Project Developer's Generating Facility to stay connected to and synchronized with the Transmission System or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the PJM Region on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the PJM Region on a comparable basis.

The Transmission System is designed to automatically activate a load-shed program as required by NERC and each Applicable Regional Entity in the event of an under-frequency system disturbance. A Generation Project Developer shall implement under-frequency and over-frequency relay set points for the Generating Facility as required by NERC and each Applicable Regional Entity to ensure “frequency ride through” capability of the Transmission System. The response of a Generation Project Developer’s Generating Facility to frequency deviations of predetermined magnitudes, both under-frequency and over-frequency deviations shall be studied and coordinated with the Transmission Provider in accordance with Good Utility Practice.

#### **4.8 System Protection and Power Quality:**

##### **4.8.1 System Protection:**

Project Developer shall, at its expense, install, operate and maintain such System Protection Facilities as may be required in connection with operation of the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities consistent with Applicable Technical Requirements and Standards. Transmission Owner shall install any System Protection Facilities that may be required, as determined by Transmission Provider, on the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades or the Transmission System in connection with the operation of the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities. Responsibility for the cost of any System Protection Facilities required on the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades or the Transmission System shall be allocated as provided in the GIP.

##### **4.8.2 Power Quality:**

The Generating Facility or Merchant Transmission Facility and Project Developer Interconnection Facilities shall not cause excessive deviations from the power quality criteria set forth in the Applicable Technical Requirements and Standards.

#### **4.9 Access Rights:**

Each Interconnected Entity shall provide the other Interconnected Entity access to areas under its control as reasonably necessary to permit the other Interconnected Entity to perform its obligations under this Appendix 2, including operation and maintenance obligations. An Interconnected Entity that obtains such access shall comply with all safety rules applicable to the area to which access is obtained. Each Interconnected Entity agrees to inform the other Interconnected Entity’s representatives of safety rules applicable to an area.

#### **4.10 Switching and Tagging Rules:**

The Interconnected Entities shall comply with applicable Switching and Tagging Rules in obtaining clearances for work or for switching operations on equipment. Such Switching and Tagging Rules shall be developed in accordance with OSHA standards codified at 29 C.F.R. part

1910, or successor standards. Each Interconnected Entity shall provide the other Interconnected Entity a copy of its Switching and Tagging Rules that are applicable to the other Interconnected Entity's activities.

#### **4.11 Communications and Data Protocol:**

The Interconnected Entities shall comply with any communications and data protocol that the Transmission Provider may establish.

#### **4.12 Nuclear Generating Facilities:**

In the event that the Generating Facility is a nuclear Generating Facility, the Interconnection Parties shall agree to such non-standard terms and conditions as are reasonably necessary to accommodate the Project Developer's satisfaction of Nuclear Regulatory Commission requirements relating to the safety and reliability of operations of such facilities.

## **5 Maintenance**

### **5.1 General:**

Each Interconnected Entity shall maintain, or shall cause the maintenance of, its facilities in a safe and reliable manner in accord with (i) the terms of this Appendix 2; (ii) Applicable Standards; (iii) applicable rules, procedures and protocols set forth in the Tariff and the Operating Agreement, as any or all may be amended from time to time; (iv) Applicable Laws and Regulations, and (v) Good Utility Practice.

### **5.2 Outage Authority and Coordination:**

#### **5.2.1 Coordination:**

The Interconnection Parties agree to confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Generating Facility or Merchant Transmission Facility, the Project Developer Interconnection Facilities and any Transmission Owner Interconnection Facilities. In the event an Interconnection Construction Service Agreement is required, the Construction Parties acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing all Interconnection Facilities. The Interconnection Parties, and where applicable, any Construction Parties, further acknowledge and agree that any such outages shall be coordinated by and through the Transmission Provider.

#### **5.2.2 Authority:**

Each Interconnected Entity may, in accordance with Good Utility Practice, remove from service its facilities that may affect the other Interconnected Entity's facilities in order to perform maintenance or testing or to install or replace equipment. Except in the event of an Emergency Condition, the Project Developer proposing to remove such facilities from service shall provide prior notice of such activities to the Transmission Provider and the Transmission Owner, and the Interconnected Entities shall coordinate all scheduling of planned facility outages with Transmission Provider, in accordance with applicable sections of the Operating Agreement, the PJM Manuals and any other applicable operating guidelines or directives of the Transmission Provider. Subject to the foregoing, the Interconnected Entity scheduling a facility outage shall use Reasonable Efforts to coordinate such outage with the other Interconnected Entity's scheduled outages.

#### **5.2.3 Outages Required for Maintenance:**

Subject to any necessary approval by Transmission Provider, each Interconnected Entity shall provide necessary equipment outages to allow the other Interconnected Entity to perform periodic maintenance, repair or replacement of its facilities and such outages shall be provided at mutually agreeable times, unless conditions arise which an Interconnected Entity believes, in accordance with Good Utility Practice, may endanger persons or property.

#### **5.2.4 Rescheduling of Planned Outages:**

To the extent so provided by the Tariff, the Operating Agreement, and the PJM Manuals, an Interconnected Entity may seek compensation from Transmission Provider for any costs related to rejection by Transmission Provider of a request of such Interconnected Entity for a planned maintenance outage.

#### **5.2.5 Outage Restoration:**

If an outage on an Interconnected Entity's facilities adversely affects the other Interconnected Entity's facilities, the Interconnected Entity that owns or controls the facility that is out of service shall use Reasonable Efforts to restore the facility to service promptly.

#### **5.3 Inspections and Testing:**

Each Interconnected Entity shall perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Generating Facility or Merchant Transmission Facility with the Transmission System in a safe and reliable manner. Each Interconnected Entity shall have the right, upon advance written notice, to request reasonable additional testing of an Interconnected Entity's facilities for good cause, as may be in accordance with Good Utility Practice.

#### **5.4 Right to Observe Testing:**

Each Interconnected Entity shall notify the other Interconnected Entity in advance of its performance of tests of its portion of the Interconnection Facilities. The other Interconnected Entity shall, at its own expense, have the right, but not the obligation, to:

- (a) Observe the other Party's tests and/or inspection of any of its system protection facilities and other protective equipment, including power system stabilizers;
- (b) Review the settings of the other Party's system protection facilities and other protective equipment;
- (c) Review the other Party's maintenance record relative to the Interconnection Facilities, system protection facilities and other protective equipment; and
- (d) Exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party.

#### **5.5 Secondary Systems:**

Each Interconnected Entity agrees to cooperate with the other in the inspection, maintenance, and testing of those Secondary Systems directly affecting the operation of an Interconnected Entity's facilities and equipment which may reasonably be expected to affect the other Interconnected



Entity's facilities. Each Interconnected Entity shall provide advance notice to the other Interconnected Entity before undertaking any work on such equipment, especially in electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.

#### **5.6 Access Rights:**

Each Interconnected Entity shall provide the other Interconnected Entity access to areas under its control as reasonably necessary to permit the other Interconnected Entity to perform its obligations under this Appendix 2, including operation and maintenance obligations. An Interconnected Entity that obtains such access shall comply with all safety rules applicable to the area to which access is obtained. Each Interconnected Entity agrees to inform the other Interconnected Entity's representatives of safety rules applicable to an area.

#### **5.7 Observation of Deficiencies:**

If an Interconnection Party observes any Abnormal Condition on, or becomes aware of a lack of scheduled maintenance and testing with respect to, an Interconnection Party's facilities and equipment that might reasonably be expected to adversely affect the observing Interconnection Party's facilities and equipment, the observing Interconnection Party shall provide prompt notice under the circumstances to the appropriate Interconnection Party, and such Interconnection Party shall consider such notice in accordance with Good Utility Practice. Any Interconnection Party's review, inspection, and approval related to the other Interconnection Party's facilities and equipment shall be limited to the purpose of assessing the safety, reliability, protection, and control of the Transmission System and shall not be construed as confirming or endorsing the design of such facilities and equipment, or as a warranty of any type, including safety, durability, or reliability thereof. Notwithstanding the foregoing, the observing Interconnection Party shall have no liability whatsoever for failure to give a deficiency notice to the other Interconnection Party and the Interconnected Entity that owns the relevant Interconnection Facilities and Transmission Owner Upgrades shall remain fully liable for its failure to determine and correct deficiencies and defects in its facilities and equipment.



## **6 Emergency Operations**

### **6.1 Obligations:**

Subject to Applicable Laws and Regulations, each Interconnection Party shall comply with the Emergency Condition procedures of NERC, the Applicable Regional Entity, Transmission Provider, the Transmission Owner and Project Developer.

### **6.2 Notice:**

Each Interconnection Party shall notify the other parties promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect operation of the Generating Facility or Merchant Transmission Facility, the Project Developer Interconnection Facilities, the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, or the Transmission System. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the facilities and/or operation thereof, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.

### **6.3 Immediate Action:**

An Interconnection Party becoming aware of an Emergency Condition may take such action, including disconnection of the Generating Facility or Merchant Transmission Facility from the Transmission System, as is reasonable and necessary in accord with Good Utility Practice (i) to prevent, avoid, or mitigate injury or danger to, or loss of, life or property; (ii) to preserve the reliability of, in the case of Project Developer, the Generating Facility or Merchant Transmission Facility, or, in the case of Transmission Provider or the Transmission Owner, the Transmission System and interconnected sub-transmission and distribution facilities; or (iii) to expedite restoration of service. Unless, in Project Developer's reasonable judgment, immediate action is required to prevent imminent loss of life or property, Project Developer shall obtain the consent of Transmission Provider and the Transmission Owner prior to performing any manual switching operations at the Generating Facility or Merchant Transmission Facility or the Generation Interconnection Facilities. Each Interconnection Party shall use Reasonable Efforts to minimize the effect of its actions during an Emergency Condition on the facilities and operations of the other Interconnection Parties.

### **6.4 Record-Keeping Obligations:**

Each Interconnection Party shall keep and maintain records of actions taken during an Emergency Condition that may reasonably be expected to affect the other parties' facilities and make such records available for audit in accordance with section 19.3 of this Appendix 2.

## 7 Safety

### 7.1 General:

Each Interconnected Entity and, as applicable, each Construction Party shall perform all work under this Appendix 2 that may reasonably be expected to affect the other Interconnected Entity and, as applicable, the other Construction Party in accordance with Good Utility Practice and all Applicable Laws and Regulations pertaining to the safety of persons or property. An Interconnected Entity and, as applicable, a Construction Party performing work within the boundaries of the other Interconnected Entity's facilities and, as applicable, the other Construction Party's facilities must abide by the safety rules applicable to the site. Each party agrees to inform the other party's representatives of applicable safety rules that must be obeyed on the premises. A Construction Party performing work within an area controlled by another Construction Party must abide by the safety rules applicable to the area.

### 7.2 Environmental Releases:

Each Interconnected Entity and, as applicable, each Construction Party shall notify the other Interconnection Parties and, as applicable, Construction Parties, first orally and promptly thereafter in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities, related to the Generating Facility or Merchant Transmission Facility or the Interconnection Facilities and Transmission Owner Upgrades, any of which may reasonably be expected to affect one or both of the other parties. The notifying party shall (i) provide the notice as soon as possible; (ii) make a good faith effort to provide the notice within 24 hours after the party becomes aware of the occurrence; and (iii) promptly furnish to the other parties copies of any publicly available reports filed with any governmental agencies addressing such events.

## **8 Metering**

### **8.1 General:**

Project Developer shall have the right to install, own, operate, test, and maintain the necessary Metering Equipment. In the event that Project Developer exercises this option, the Transmission Owner shall have the right to install its own check meter(s), at its own expense, at or near the location of the Metering Equipment. If both Project Developer and Transmission Owner install meters, the meter installed by the Project Developer shall control unless it is determined by testing to be inaccurate. If the Project Developer does not exercise the option provided by the first sentence of this section, the Transmission Owner shall have the option to install, own, operate, test and maintain all necessary Metering Equipment at Project Developer's expense. If the Transmission Owner does not exercise this option, the Project Developer shall install, own, operate, test and maintain all necessary Metering Equipment. Transmission Provider shall determine the location where the Metering Equipment shall be installed, after consulting with Project Developer and the Transmission Owner. All Metering Equipment shall be tested prior to any operation of the Generating Facility or Merchant Transmission Facility. Power flows to and from the Generating Facility or Merchant Transmission Facility shall be compensated to the Point of Interconnection, or, upon the mutual agreement of the Transmission Owner and the Project Developer, to another location.

### **8.2 Standards:**

All Metering Equipment installed pursuant to this Appendix 2 to be used for billing and payments shall be revenue quality Metering Equipment and shall satisfy applicable ANSI standards and Transmission Provider's metering standards and requirements. Nothing in this Appendix 2 precludes the use of Metering Equipment for any retail services of the Transmission Owner provided, however, that in such circumstances Applicable Laws and Regulations shall control.

### **8.3 Testing of Metering Equipment:**

The Interconnected Entity that, pursuant to section 8.1 of this Appendix 2, owns the Metering Equipment shall operate, maintain, inspect, and test all Metering Equipment upon installation and at least once every two years thereafter. Upon reasonable request by the other Interconnected Entity, the owner of the Metering Equipment shall inspect or test the Metering Equipment more frequently than every two years, but in no event more frequently than three times in any 24-month period. The owner of the Metering Equipment shall give reasonable notice to the Interconnection Parties of the time when any inspection or test of the owner's Metering Equipment shall take place, and the other parties may have representatives present at the test or inspection. If Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced in order to provide accurate metering. Where the Transmission Owner owns the Metering Equipment, the expense of such adjustment, repair or replacement shall be borne by the Project Developer, except that the Project Developer shall not be responsible for such expenses where the inaccuracy or defect is caused by the Transmission Owner. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than 1 percent from the measurement made by the standard meter used in the test, the owner of the Metering Equipment

shall inform Transmission Provider, and the Transmission Provider shall inform the other Interconnected Entity, of the need to correct all measurements made by the inaccurate meter for the period during which the inaccurate measurements were made, if the period can be determined. If the period of inaccurate measurement cannot be determined, the correction shall be for the period immediately preceding the test of the Metering Equipment that is equal to one-half of the time from the date of the last previous test of the Metering Equipment, provided that the period subject to correction shall not exceed nine months.

#### **8.4 Metering Data:**

At Project Developer's expense, the metered data shall be telemetered (a) to a location designated by Transmission Provider; (b) to a location designated by the Transmission Owner, unless the Transmission Owner agrees otherwise; and (c) to a location designated by Project Developer. Data from the Metering Equipment at the Point of Interconnection shall be used, under normal operating conditions, as the official measurement of the amount of energy delivered from or to the Generating Facility or Merchant Transmission Facility to the Point of Interconnection, provided that the Transmission Provider's rules applicable to Station Power as set forth at Tariff, Attachment K-Appendix, section 1.7.10(d) shall control with respect to a Generation Project Developer's consumption of Station Power.

#### **8.5 Communications**

##### **8.5.1 Project Developer Obligations:**

Project Developer shall install and maintain satisfactory operating communications with Transmission Provider's system dispatcher or its other designated representative and with the Transmission Owner. Project Developer shall provide standard voice line, dedicated voice line, and electronic communications at its Generating Facility or Merchant Transmission Facility control room. Project Developer also shall provide and maintain backup communication links with both Transmission Provider and Transmission Owner for use during abnormal conditions as specified by Transmission Provider and Transmission Owner, respectively. Project Developer further shall provide the dedicated data circuit(s) necessary to provide Project Developer data to the Transmission Provider and Transmission Owner as necessary to conform with Applicable Technical Requirements and Standards.

##### **8.5.2 Remote Terminal Unit:**

Unless otherwise deemed unnecessary by Transmission Provider and Transmission Owner, as indicated in the Generation Interconnection Agreement, prior to any operation of the Generating Facility or Merchant Transmission Facility, a remote terminal unit, or equivalent data collection and transfer equipment acceptable to the Interconnection Parties, shall be installed by Project Developer, or by the Transmission Owner at Project Developer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Provider and Transmission Owner through use of a dedicated point-to-point data circuit(s) as indicated in section 8.5.1 of this Appendix 2. Instantaneous, bi-directional real power and, with respect to a Generation Project Developer's Generating Facility or Merchant Transmission Facility, reactive

power flow information, must be telemetered directly to the location(s) specified by Transmission Provider and the Transmission Owner.

### **8.5.3 Phasor Measurement Units (PMUs):**

A Project Developer entering the New Services Queue on or after October 1, 2012, with a proposed new Generating Facility that has a Maximum Facility Output equal to or greater than 100 MW shall install and maintain, at its expense, phasor measurement units (“PMUs”). PMUs shall be installed on the Generating Facility low side of the generator step-up transformer, unless it is a non-synchronous generation facility, in which case the PMUs shall be installed on the Generating Facility side of the Point of Change of Ownership. The PMUs must be capable of performing phasor measurements at a minimum of 30 samples per second which are synchronized via a high-accuracy satellite clock. To the extent Project Developer installs similar quality equipment, such as relays or digital fault recorders, that can collect data at least at the same rate as PMUs and which data is synchronized via a high-accuracy satellite clock, such equipment would satisfy this requirement. As provided for in the PJM Manuals, a Project Developer shall be required to install and maintain, at its expense, PMU equipment which includes the communication circuit capable of carrying the PMU data to a local data concentrator, and then transporting the information continuously to the Transmission Provider; as well as store the PMU data locally for 30 days. Project Developer shall provide to Transmission Provider all necessary and requested information through the Transmission Provider synchrophasor system, including the following: (a) gross MW and MVAR measured at the Generating Facility side of the generator step-up transformer (or, for a non-synchronous generation facility, to be measured at the Generating Facility side of the Point of Interconnection); (b) generator terminal voltage; (c) generator terminal frequency; and (d) generator field voltage and current, where available. The Transmission Provider will install and provide for the ongoing support and maintenance of the network communications linking the data concentrator to the Transmission Provider. Additional details regarding the requirements and guidelines of PMU data and telecommunication of such data are contained in the PJM Manuals.

## **9 Force Majeure**

### **9.1 Notice:**

An Interconnection Party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify the other parties in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **9.2 Duration of Force Majeure:**

A party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance. The party affected has a continuing notice obligation to the other parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The affected party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such party shall resume performance and give prompt written notice thereof to the other parties.

### **9.3 Obligation to Make Payments:**

Any Interconnection Party's obligation to make payments for services shall not be suspended by Force Majeure.

### **9.4 Definition of Force Majeure:**

For the purposes of this section, shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a party's control that, in any of the foregoing cases, by exercise of due diligence, such party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected party.

## 10 Charges

### 10.1 Specified Charges:

If and to the extent required by the Transmission Owner, after the Initial Operation of the Generating Facility or Merchant Transmission Facility, Project Developer shall pay one or more of the types of recurring charges described in this section to compensate the Transmission Owner for costs incurred in performing certain of its obligations under this Appendix 2. All such charges shall be stated in Schedule E of the Generator Interconnection Agreement. Permissible charges under this section may include:

(a) Administration Charge – Any such charge may recover only the costs and expenses incurred by the Transmission Owner in connection with administrative obligations such as the preparation of bills, the processing of Generating Facility- or Merchant Transmission Facility-specific data on energy delivered at the Point of Interconnection and costs incurred in similar types of administrative processes related to Project Developer's Interconnection Service. An Administration Charge shall not be permitted to the extent that the Transmission Owner's other charges to the Project Developer under the same Generator Interconnection Agreement include an allocation of Transmission Owner's administrative and general expenses and/or other corporate overhead costs.

(b) Metering Charge – Any such charge may recover only the Transmission Owner's costs and expenses associated with operation, maintenance, inspection, testing, and carrying or capital replacement charges for any Metering Equipment that is owned by the Transmission Owner.

(c) Telemetry Charge – Any such charge may recover only the Transmission Owner's costs and expenses associated with operation, maintenance, inspection, testing, and carrying or capital replacement charges for any telemetry equipment that is owned by the Transmission Owner and that is used exclusively in conjunction with Interconnection Service for the Project Developer.

(d) Generating Facility or Merchant Transmission Facility Operations and Maintenance Charge – Any such charge may recover only the Transmission Owner's costs and expenses associated with operation, maintenance, inspection, testing, modifications, taxes, and carrying or capital replacement charges for Transmission Owner Interconnection Facilities and Transmission Owner Upgrades related to the Project Developer's Interconnection Service and that are owned by the Transmission Owner, provided that

(i) any such charge shall exclude costs and expenses associated with Transmission Owner Interconnection Facilities and Transmission Owner Upgrades owned by the Transmission Owner that are radial line facilities that serve load in addition to an Project Developer; and

(ii) except as otherwise provided by Applicable Laws and Regulations, any such charge may include only an allocated share, derived in accordance with the allocations

contained in the System Impact Study(ies), of costs and expenses associated with Transmission Owner Interconnection Facilities and Transmission Owner Upgrades owned by the Transmission Owner that are radial line facilities that serve more than one Project Developer. At the discretion of the affected Interconnected Entities, a Generating Facility or Merchant Transmission Facility Operations and Maintenance Charge authorized under this section may apply on a per-incident basis or on a monthly or other periodic basis.

(e) Other Charges – Any other charges applicable to the Project Developer, as mutually agreed upon by the Project Developer and the Transmission Owner.

## **10.2 FERC Filings:**

To the extent required by law or regulation, each Interconnection Party shall seek FERC acceptance or approval of its respective charges or the methodology for the calculation of such charges. If such filing is required, Transmission Owner shall provide Transmission Provider and Project Developer with appropriate cost data, schedules and/or written testimony in support of any charges under this section in such manner and at such time as to allow Transmission Provider to include such materials in its filing of the Generation Interconnection Agreement with the FERC.



## **11 Security, Billing and Payments**

### **11.1 Recurring Charges Pursuant to section 10:**

The following provisions shall apply with respect to recurring charges applicable to Interconnection Service after Initial Operation of the Generating Facility or Merchant Transmission Facility pursuant to section 10 of this Appendix 2.

#### **11.1.1 General:**

Except as, and to the extent, otherwise provided in the Generation Interconnection Agreement, billing and payment of any recurring charges applicable to Interconnection Service after Initial Operation of the Generating Facility or Merchant Transmission Facility pursuant to section 10 of this Appendix 2 shall be in accordance with section 7 of the Tariff. The Transmission Owner shall provide Transmission Provider with all necessary information and supporting data that Transmission Provider may reasonably require to administer billing for and payment of applicable charges under this Appendix 2. Transmission Provider shall remit to the Transmission Owner revenues received in payment of Transmission Owner's charges to Project Developer under this Appendix 2 upon Transmission Provider's receipt of such revenues. At Transmission Provider's reasonable discretion, charges to Project Developer and remittances to Transmission Owner under this Appendix 2 may be netted against other amounts owed by or to such parties under the Tariff.

#### **11.1.2 Billing Disputes:**

In the event of a billing dispute between Transmission Provider and Project Developer, Transmission Provider shall continue to provide interconnection service under this Appendix 2 as long as Project Developer (i) continues to make all payments not in dispute, and (ii) pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Project Developer fails to meet these two requirements for continuation of service, then Transmission Provider shall so inform the Interconnection Parties and may provide notice to Project Developer of a Breach pursuant to section 15 of this Appendix 2. Within 30 days after the resolution of the dispute, the Interconnection Party that owes money to the other Interconnection Party shall pay the amount due with interest calculated in accord with section 11.4.

### **11.2 Costs for Transmission Owner Interconnection Facilities and Transmission Owner Upgrades:**

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Project Developer is responsible.

#### **11.2.1 Adjustments to Security:**

The Security provided by Project Developer at or before execution of the Generation Interconnection Agreement (a) shall be reduced as portions of the work are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Project Developer's cost

responsibility, as determined in accordance with the GIP, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

### **11.2.2 Invoice:**

The Transmission Owner shall provide Transmission Provider a quarterly statement of the Transmission Owner's scheduled expenditures during the next three months for, as applicable (a) the design, engineering and construction of, and/or for other charges related to, construction of the Interconnection Facilities and Transmission Owner Upgrades for which the Transmission Owner is responsible under the GIA, or (b) in the event that the Project Developer exercises the Option to Build, for the Transmission Owner's oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Project Developer is complying with the Transmission Owner's standards and Specifications for the construction of facilities) associated with Project Developer's building Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Transmission Owner oversight costs shall be consistent with Schedule L of this GIA. Transmission Provider shall bill Project Developer on behalf of the Transmission Owner, for the Transmission Owner's expected Costs during the subsequent three months. Project Developer shall pay each bill within 20 days after receipt thereof. Upon receipt of each of Project Developer's payments of such bills, Transmission Provider shall reimburse the Transmission Owner. Project Developer may request that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of Costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that section 11.2.3 of this Appendix 2 shall govern the timing of the final cost reconciliation upon completion of the work.

### **11.2.3 Final Invoice:**

Within 120 days after the Transmission Owner completes construction and installation of the Interconnection Facilities and Transmission Owner Upgrades for which the Transmission Owner is responsible under the Generation Interconnection Agreement, Transmission Provider shall provide Project Developer with an accounting of, and the appropriate Interconnection Party, and where applicable, the Construction Party shall make any payment to the other that is necessary to resolve, any difference between (a) Project Developer's responsibility under the Tariff for the actual Cost of such facilities, and (b) Project Developer's previous aggregate payments to Transmission Provider for the Costs of such facilities. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to either the Project Developer or the Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Interconnection Party, and where applicable, the Construction Party owing the payment.

### **11.2.4 Disputes:**

In the event of a billing dispute between any of the Interconnection Parties, and where applicable, the Construction Parties, Transmission Provider and the Transmission Owner shall continue to

perform their respective obligations pursuant to this Generation Interconnection Agreement and any related Interconnection Construction Service Agreements so long as (a) Project Developer continues to make all payments not in dispute, and (b) the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute, or (c) Project Developer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Project Developer fails to meet any of these requirements, then Transmission Provider shall so inform the other Interconnection Parties and Construction Parties and Transmission Provider or the Transmission Owner may provide notice to Project Developer of a Breach pursuant to section 15 of this Appendix 2.

### **11.3 No Waiver:**

Payment of an invoice shall not relieve Project Developer from any other responsibilities or obligations it has under this Appendix 2, nor shall such payment constitute a waiver of any claims arising hereunder.

### **11.4 Interest:**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

## **12 Assignment**

### **12.1 Assignment with Prior Consent:**

Except as provided in section 12.2 to this Appendix 2, no Interconnection Party shall assign its rights or delegate its duties, or any part of such rights or duties, under the Generation Interconnection Agreement without the written consent of the other Interconnection Parties, which consent shall not be unreasonably withheld, conditioned, or delayed. Any such assignment or delegation made without such written consent shall be null and void. An Interconnection Party may make an assignment in connection with the sale, merger, or transfer of a substantial portion or all of its properties including the Interconnection Facilities and Transmission Owner Upgrades which it owns or will own upon completion of construction and the transfer of title required as set forth in section 23 of this Appendix 2, so long as the assignee in such a sale, merger, or transfer assumes in writing all rights, duties and obligations arising under this Generation Interconnection Agreement. In addition, the Transmission Owner shall be entitled, subject to Applicable Laws and Regulations, to assign the Generation Interconnection Agreement to any Affiliate or successor that owns and operates all or a substantial portion of the Transmission Owner's transmission facilities.

### **12.2 Assignment Without Prior Consent**

#### **12.2.1 Assignment to Owners:**

Project Developer may assign the Generation Interconnection Agreement without the Transmission Owner's or Transmission Provider's prior consent to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, provided that prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical and operational competence to comply with the requirements of this Generation Interconnection Agreement and assumes in a writing provided to the Transmission Owner and Transmission Provider all rights, duties, and obligations of Project Developer arising under this Generation Interconnection Agreement. However, any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Provider, such consent not to be unreasonably withheld, conditioned or delayed. Project Developer shall provide Transmission Provider with notice of any such assignment in accordance with the PJM Manuals.

#### **12.2.2 Assignment to Lenders:**

Project Developer may, without the consent of the Transmission Provider or the Transmission Owner, assign the Generation Interconnection Agreement to any Project Finance Entity(ies), provided that such assignment does not alter or diminish Project Developer's duties and obligations under this Generation Interconnection Agreement. If Project Developer provides the Transmission Owner with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entities as contacts for notice purposes pursuant to section 21 of this Appendix 2, the Transmission Provider or Transmission Owner shall provide notice and

reasonable opportunity for such entity(ies) to cure any Breach under this Generation Interconnection Agreement in accordance with this Generation Interconnection Agreement. Transmission Provider or Transmission Owner shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment and status of the Generation Interconnection Agreement, provided that such documents do not alter or diminish the rights of the Transmission Provider or Transmission Owner under this Generation Interconnection Agreement, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider and/or the Transmission Owner's invoice therefor, Project Developer shall pay the Transmission Provider and/or the Transmission Owner's reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Owner and Transmission Provider.

### **12.3 Successors and Assigns:**

This Generation Interconnection Agreement and all of its provisions are binding upon, and inure to the benefit of, the Interconnection Parties and their respective successors and permitted assigns.

## 13 Insurance

### 13.1 Required Coverages For Generation Resources Of More Than 20 Megawatts or Merchant Transmission Facilities:

Each Interconnected Entity and, as applicable, Constructing Entity shall maintain insurance at its own expense as described in paragraphs (a) through (d) below. In addition, if there any construction activities associated with this GIA, each Interconnected Entity and, as applicable, Constructing Entity shall maintain insurance at its own expense as described in paragraph (e). All insurance shall be procured from insurance companies rated "A-", VII, or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities and Transmission Owner Upgrades are or will be located. Failure to maintain required insurance shall be a Breach of the Generation Interconnection Agreement.

(a) Workers Compensation insurance with statutory limits, as required by the state and/or jurisdiction in which the work is to be performed, and employer's liability insurance with limits of not less than one million dollars (\$1,000,000).

(b) Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available, and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.

(c) Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of not less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

(d) Excess and/or Umbrella Liability Insurance with a limit of liability of not less than twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer's liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

(e) In addition, if there are construction activities required in connection with this GIA, the following Professional Liability Insurance requirements shall apply:

Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Interconnected Entity or Constructing Entity's duties, responsibilities and performance outlined in Schedule L to this GIA, with limits of liability as follows:

\$10,000,000 each occurrence

\$10,000,000 aggregate

An Interconnected Entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities and Transmission Owner Upgrades necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 13.1(e), and providing evidence of such insurance to the other Interconnected Entity. Such insurance shall be procured from companies rated “A-”, VII, or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities and Transmission Owner Upgrades are located. Nothing in this section relieves the Interconnected Entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the Interconnected Entity’s insurance obligations under this section become invalid for any reason, including but not limited to, (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the Tariff; Interconnected Entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage.

#### **13.1A Required Coverages for Generation Resources of 20 Megawatts or Less:**

Each Interconnected Entity and, as applicable, Constructing Entity shall maintain the types of insurance as described in section 13.1 paragraphs (a) through (e) in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Additional insurance may be required by the Project Developer, as a function of owning and operating a Generating Facility. All insurance shall be procured from insurance companies rated “A-”, VII, or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities and Transmission Owner Upgrades are located. Failure to maintain required insurance shall be a Breach of the Generation Interconnection Agreement.

#### **13.2 Additional Insureds:**

The Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability policies procured by each Interconnected Entity (the “Insuring Interconnected Entity”) shall include each other Interconnection Party (the “Insured Interconnection Party”), and its respective officers, agents and employees as additional insureds, and as applicable each other Construction Party (“Insured Construction Party”) its officers, agents and employees as additional insureds, providing all standard coverages and covering liability of the Insured Interconnection Party, and as applicable Insured Construction Party arising out of bodily injury and/or property damage (including loss of use) in any way connected with the operations, performance, or lack of performance under this Generation Interconnection Agreement.

#### **13.3 Other Required Terms:**

The above-mentioned insurance policies (except workers' compensation) shall provide the following:

(a) Each policy shall contain provisions that specify that it is primary and non-contributory for any liability arising out of that party's negligence, and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Insuring Interconnected Entity shall be responsible for its respective deductibles or retentions.

(b) If any coverage is written on a Claims First Made Basis, continuous coverage shall be maintained or an extended discovery period will be exercised for a period of not less than two years after termination of the Generation Interconnection Agreement.

(c) Provide for a waiver of all rights of subrogation which the Insuring Interconnected Entity's insurance carrier might exercise against the Insured Interconnection Party.

### **13.3A No Limitation of Liability:**

The requirements contained herein as to the types and limits of all insurance to be maintained by the Interconnected Entities are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Interconnection Parties under the Generation Interconnection Agreement.

### **13.4 Self-Insurance:**

Notwithstanding the foregoing, each Interconnected Entity may self-insure to meet the minimum insurance requirements of this section 13 of this Appendix 2 to the extent it maintains a self-insurance program, provided that such Interconnected Entity's senior secured debt is rated at investment grade or better by Standard & Poor's and its self-insurance program meets the minimum insurance requirements of this section 13. For any period of time that an Interconnected Entity's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under this section 13. In the event that an Interconnected Entity is permitted to self-insure pursuant to this section, it shall notify the other Interconnection Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in section 13.5 of this Appendix 2.

### **13.5 Notices; Certificates of Insurance:**

All policies of insurance shall provide for 30 days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide 30 days prior notice of cancellation or material adverse change, each Interconnected Entity shall provide the other Interconnected Entities with 30 days prior written notice of cancellation or material adverse change to any of the insurance required in this agreement. Each Interconnected Entity shall



provide the other with certificates of insurance prior to Initial Operation of the Generating Facility or Merchant Transmission Facility and thereafter at such time intervals as they shall mutually agree upon, provided that such interval shall not be less than one year. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation included in favor of the other Interconnected Entities.

In the event the construction activities pursuant to Schedule L are required, the following provisions will apply, in addition to the provisions set forth above: Prior to the commencement of work pursuant to Schedule L, the Constructing Entities agree to furnish each other with certificates of insurance evidencing the insurance coverage obtained in accordance with section 13.1 of this Appendix 2.

### **13.6 Subcontractor Insurance:**

In accord with Good Utility Practice, each Interconnected Entity shall require each of its subcontractors to maintain and provide evidence of insurance coverage of types, and in amounts, commensurate with the risks associated with the services provided by the subcontractor. Bonding of contractors or subcontractors shall be at the hiring Interconnected Entity's discretion, but regardless of bonding, the hiring principal shall be responsible for the performance or non-performance of any contractor or subcontractor it hires.

### **13.7 Reporting Incidents:**

The Interconnection Parties shall report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of the Generation Interconnection Agreement.

## **14 Indemnity**

### **14.1 Indemnity:**

Each Interconnection Party shall indemnify and hold harmless the other Interconnection Parties, and the other Interconnection Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying Interconnection Party's breach of any of the representations or warranties made in, or failure of the indemnifying Interconnection Party or any of its subcontractors to perform any of its obligations under, this Generation Interconnection Agreement (including Appendix 2), or (ii) the negligence or willful misconduct of the indemnifying Interconnection Party or its contractors; provided, however, that no Interconnection Party shall have any indemnification obligations under this section 14.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Interconnection Party seeking indemnity.

### **14.2 Indemnity Procedures:**

Promptly after receipt by a Person entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in section 14.1 may apply, the Indemnified Person shall notify the indemnifying Interconnection Party of such fact. Any failure of or delay in such notification shall not affect an Interconnection Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Interconnection Party. The Indemnified Person shall cooperate with the indemnifying Interconnection Party with respect to the matter for which indemnification is claimed. The indemnifying Interconnection Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Interconnection Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Interconnection Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Interconnection Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Interconnection Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying Interconnection Party. Notwithstanding the foregoing, the indemnifying Interconnection Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential

imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the indemnifying Interconnection Party, in such event the indemnifying Interconnection Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

#### **14.3 Indemnified Person:**

If an Indemnified Person is entitled to indemnification under this section 14 as a result of a claim by a third party, and the indemnifying Interconnection Party fails, after notice and reasonable opportunity to proceed under section 14.2 of this Appendix 2, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Interconnection Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

#### **14.4 Amount Owing:**

If an indemnifying Interconnection Party is obligated to indemnify and hold any Indemnified Person harmless under this section 14, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

#### **14.5 Limitation on Damages:**

Except as otherwise provided in this section 14, the liability of an Interconnection Party under this Appendix 2 shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Interconnection Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Interconnection Party, whether in tort, contract or other basis in law or equity for any special, indirect punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 14.5 are without regard to the cause or causes related thereto, including the negligence of any Interconnection Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Interconnection Party's rights to obtain equitable relief as otherwise provided in this Appendix 2. The provisions of this section 14.5 shall survive the termination or expiration of the Generation Interconnection Agreement.

#### **14.6 Limitation of Liability in Event of Breach:**

An Interconnection Party ("Breaching Party") shall have no liability hereunder to the other Interconnection Parties, and the other Interconnection Parties hereby release the Breaching Party, for all claims or damages that either of them incurs that are associated with any interruption in the availability of the Generating Facility or Merchant Transmission Facility, Interconnection Facilities and Transmission Owner Upgrades, Transmission System or Interconnection Service or damages to an Interconnection Party's facilities, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this Generation Interconnection Agreement (including Appendix 2).

#### **14.7 Limited Liability in Emergency Conditions:**

Except as otherwise provided in the Tariff or the Operating Agreement, no Interconnection Party shall be liable to any other Interconnection Party for any action that it takes in responding to an Emergency Condition, so long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or of the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Project Developer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.

## **15 Breach, Cure and Default**

### **15.1 Breach:**

A Breach of this Generation Interconnection Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Appendix 2 or of the other portions of the Generation Interconnection Agreement or any attachments or Schedule hereto, including but not limited to any material breach of a representation, warranty or covenant (other than in subsections (a) and (c)-(e) of this section) made in this Appendix 2 or any provisions of Schedule L;
- (c) Assignment of the Generation Interconnection Agreement in a manner inconsistent with its terms;
- (d) Failure of an Interconnection Party to provide access rights, or an Interconnection Party's attempt to revoke or terminate access rights, that are provided under this Appendix 2; or
- (e) Failure of an Interconnection Party to provide information or data required to be determined under this Appendix 2 to another Interconnection Party for such other Interconnection Party to satisfy its obligations under this Appendix 2.

### **15.2 Continued Operation:**

In the event of a Breach or Default by either Interconnected Entity, and subject to termination of the Generation Interconnection Agreement under section 16 of this Appendix 2, the Interconnected Entities shall continue to operate and maintain, as applicable, such DC power systems, protection and Metering Equipment, telemetering equipment, SCADA equipment, transformers, Secondary Systems, communications equipment, building facilities, software, documentation, structural components, and other facilities and appurtenances that are reasonably necessary for Transmission Provider and the Transmission Owner to operate and maintain the Transmission System and the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades and for Project Developer to operate and maintain the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, in a safe and reliable manner.

### **15.3 Notice of Breach:**

An Interconnection Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Interconnection Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider or the Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the

notifying Interconnection Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 21 of this Appendix 2.

#### **15.4 Cure and Default:**

An Interconnection Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 15.4 is automatically in Default of this Appendix 2 and of the Generation Interconnection Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

##### **15.4.1 Cure of Breach:**

15.4.1.1 Except for the event of Breach set forth in section 15.1(a) above, the Breaching Interconnection Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.

15.4.1.2 In an event of Breach set forth in section 15.1(a), the Breaching Interconnection Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

#### **15.5 Right to Compel Performance:**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Interconnection Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 20.1, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **16 Termination**

### **16.1 Termination of the Generation Interconnection Agreement:**

This Generation Interconnection Agreement and Interconnection Service under this Generation Interconnection Agreement may be terminated by the following means:

#### **16.1.1 By Mutual Consent:**

Interconnection Service may be terminated as of the date on which the Interconnection Parties mutually agree to terminate the Generation Interconnection Agreement.

#### **16.1.2 By Project Developer:**

Subject to its payment of Cancellation Costs, Project Developer may unilaterally terminate the Generation Interconnection Agreement pursuant to Applicable Laws and Regulations upon providing Transmission Provider and the Transmission Owner 60 days prior written notice thereof.

#### **16.1.3 Upon Default of Project Developer:**

Transmission Provider may terminate the Generation Interconnection Agreement upon the Default of Project Developer of its obligations under the Generation Interconnection Agreement by providing Project Developer and the Transmission Owner prior written notice of termination.

#### **16.1.4 Cancellation Cost Responsibility upon Termination:**

In the event of cancellation pursuant to Appendix 2, section 16.1 of this GIA, the Project Developer shall be liable to pay to the Transmission Owner or Transmission Provider all Cancellation Costs in connection with the GIA. Cancellation costs may include costs for Network Upgrades assigned to Project Developer, in accordance with the Tariff and as reflected in this GIA, which remain the responsibility of Project Developer under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Project Developers in the Cycle. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Project Developer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. The Project Developer shall pay the Transmission Provider each bill for Cancellation Costs within 30 days after, as applicable, the Transmission Owner's or Transmission Provider's presentation to the Project Developer of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing party seeks to collect. Upon receipt of each of Project Developer's payments of such bills of the Transmission Owner, Transmission Provider shall reimburse the Transmission Owner for Cancellation Costs incurred by the latter.

### **16.2 Disposition of Facilities upon Termination:**

#### **16.2.1 Disconnection:**

Upon termination of the Generation Interconnection Agreement in accordance with this section 16, Transmission Provider and/or the Transmission Owner shall, in coordination with Project Developer, physically disconnect the Generating Facility or Merchant Transmission Facility from the Transmission System, except to the extent otherwise allowed by this Appendix 2.

#### **16.2.2 Network Facilities:**

At the time of termination, the Transmission Provider and the Interconnected Entities shall keep in place any portion of the Interconnection Facilities and Transmission Owner Upgrades that the Transmission Provider deems necessary for the safety, integrity and/or reliability of the Transmission System. Otherwise, Transmission Provider may, in its discretion, within 30 days following termination of Interconnection Service, require the removal of all or any part of the Interconnection Facilities and Transmission Owner Upgrades.

**16.2.2.1:** In the event that (i) the Generation Interconnection Agreement and Interconnection Service under this Appendix 2 are terminated and (ii) Transmission Provider determines that some or all of the Interconnection Facilities and Transmission Owner Upgrades that are owned by the Project Developer are necessary for the safety, integrity and/or reliability of the Transmission System, Project Developer, subject to Applicable Laws and Regulations, shall transfer to the Transmission Owner title to the Interconnection Facilities and Transmission Owner Upgrades that Transmission Provider has determined to be necessary for the safety, integrity and/or reliability of the Transmission System.

**16.2.2.2:** In the event that removal of some or all of the Interconnection Facilities and Transmission Owner Upgrades is necessary to maintain compliance with Applicable Standards, Project Developer shall be responsible for the costs of any such removal. Project Developer shall have the right to take or retain title to equipment and/or facilities that are removed pursuant to this section; alternatively, in the event that the Project Developer does not wish to retain title to removed equipment and/or facilities that it owns, the Transmission Owner may elect to pay the Project Developer a mutually agreed amount to acquire and own such equipment and/or facilities.

#### **16.2.3 Request for Disposition Determination:**

Project Developer may request a determination from the Transmission Provider whether any Interconnection Facilities and Transmission Owner Upgrades will be removed in the event of any termination of Interconnection Service to the Generating Facility or Merchant Transmission Facility within the following year. Transmission Provider shall respond to that request no later than 60 days after receipt.

#### **16.3 FERC Approval:**

Notwithstanding any other provision of this Appendix 2, no termination hereunder shall become effective until the Interconnected Entities and/or Transmission Provider have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with the



FERC of a notice of termination of the Generation Interconnection Agreement, and acceptance of such notice for filing by the FERC.

#### **16.4 Survival of Rights:**

Termination of this Generation Interconnection Agreement shall not relieve any Interconnection Party of any of its liabilities and obligations arising under this Generation Interconnection Agreement (including Appendix 2) prior to the date on which termination becomes effective, and each Interconnection Party may take whatever judicial or administrative actions it deems desirable or necessary to enforce its rights hereunder. Applicable provisions of this Appendix 2 will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the Generation Interconnection Agreement was in effect.

In the event activities under Schedule L are required, the following provisions will apply, in addition to the provisions set forth above:

The obligations of the Construction Parties hereunder with respect to payments, Cancellation Costs, warranties, liability and indemnification shall survive termination to the extent necessary to provide for the determination and enforcement of said obligations arising from acts or events that occurred while GIA was in effect. In addition, applicable provisions of this GIA will continue in effect after expiration, cancellation or termination to the extent necessary to provide for final billings, payments, and billing adjustments.

## **17 Confidentiality:**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Interconnection Party providing the information orally informs the Interconnection Party receiving the information that the information is confidential. If requested by any Interconnection Party, the disclosing Interconnection Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Interconnection Party may disclose such writing to an appropriate Governmental Authority. Any Interconnection Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **17.1 Term:**

During the term of the Generation Interconnection Agreement, and for a period of three years after the expiration or termination of the Generation Interconnection Agreement, except as otherwise provided in this section 17, each Interconnection Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other Interconnection Party.

### **17.2 Scope:**

Confidential Information shall not include information that the receiving Interconnection Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Interconnection Party; (ii) was in the lawful possession of the receiving Interconnection Party on a non-confidential basis before receiving it from the disclosing Interconnection Party; (iii) was supplied to the receiving Interconnection Party without restriction by a third party, who, to the knowledge of the receiving Interconnection Party, after due inquiry, was under no obligation to the disclosing Interconnection Party to keep such information confidential; (iv) was independently developed by the receiving Interconnection Party without reference to Confidential Information of the disclosing Interconnection Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Interconnection Party or breach of this Appendix 2; or (vi) is required, in accordance with section 17.7 of this Appendix 2, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Generation Interconnection Agreement. Information designated as Confidential Information shall no longer be deemed confidential if the Interconnection Party that designated the information as confidential notifies the other Interconnection Parties that it no longer is confidential.

### **17.3 Release of Confidential Information:**

No Interconnection Party shall disclose Confidential Information to any other person, except to its Affiliates (limited by FERC's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be or considering providing financing to or equity participation in Project Developer or to potential purchasers or assignees of Project Developer, on a need-to-know basis in connection with the Generation Interconnection Agreement, unless such person has first been advised of the confidentiality provisions of this section 17 and has agreed to comply

with such provisions. Notwithstanding the foregoing, an Interconnection Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this section 17.

#### **17.4 Rights:**

Each Interconnection Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Interconnection Party. An Interconnection Party's disclosure to another Interconnection Party of Confidential Information shall not be deemed a waiver by any Interconnection Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **17.5 No Warranties:**

By providing Confidential Information, no Interconnection Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Interconnection Party obligates itself to provide any particular information or Confidential Information to any other Interconnection Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **17.6 Standard of Care:**

Each Interconnection Party shall use at least the same standard of care to protect Confidential Information it receives as the Interconnection Party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Interconnection Party may use Confidential Information solely to fulfill its obligations to the other Interconnection Parties under the Generation Interconnection Agreement or to comply with Applicable Laws and Regulations.

#### **17.7 Order of Disclosure:**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires an Interconnection Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Interconnection Party shall provide the Interconnection Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Interconnection Party may seek an appropriate protective order or waive compliance with the terms of this Appendix 2 or the Generation Interconnection Agreement. Notwithstanding the absence of a protective order or agreement, or waiver, the Interconnection Party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Interconnection Party is legally compelled to disclose. Each Interconnection Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **17.8 Termination of Generation Interconnection Agreement:**

Upon termination of the Generation Interconnection Agreement for any reason, each Interconnection Party shall, within 10 calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

### **17.9 Remedies:**

The Interconnection Parties agree that monetary damages would be inadequate to compensate an Interconnection Party for another Interconnection Party's Breach of its obligations under this section 17. Each Interconnection Party accordingly agrees that the other Interconnection Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Interconnection Party breaches or threatens to breach its obligations under this section 17, which equitable relief shall be granted without bond or proof of damages, and the receiving Interconnection Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section 17, but shall be in addition to all other remedies available at law or in equity. The Interconnection Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Interconnection Party, however, shall be liable for indirect, incidental or consequential or punitive damages of any nature or kind resulting from or arising in connection with this section 17.

### **17.10 Disclosure to FERC or its Staff:**

Notwithstanding anything in this section 17 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Interconnection Parties that is otherwise required to be maintained in confidence pursuant to this Generation Interconnection Agreement, the Interconnection Party, shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Interconnection Party must, consistent with 18 C.F.R. § 388.122, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Interconnection Parties are prohibited from notifying the other Interconnection Parties prior to the release of the Confidential Information to FERC or its staff. An Interconnection Party shall notify the other Interconnection Parties to the Generation Interconnection Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Interconnection Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

### **17.11 Non-Disclosure:**

Subject to the exception in section 17.10 of this Appendix 2, no Interconnection Party shall disclose Confidential Information of another Interconnection Party to any person not employed or retained by the Interconnection Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Interconnection Party to be required in connection with a

dispute between or among the Interconnection Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Interconnection Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Generation Interconnection Agreement or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Interconnection Party's Confidential Information under this subparagraph, the disclosing Interconnection Party shall promptly notify the other Interconnection Parties in writing and shall assert confidentiality and cooperate with the other Interconnection Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

#### **17.12 Information in the Public Domain:**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

#### **17.13 Return or Destruction of Confidential Information:**

If an Interconnection Party provides any Confidential Information to another Interconnection Party in the course of an audit or inspection, the providing Interconnection Party may request the other party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Interconnection Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other Interconnection Party that it has complied with such request.

## **18 Subcontractors**

### **18.1 Use of Subcontractors:**

Nothing in this Appendix 2 shall prevent the Interconnection Parties from utilizing the services of subcontractors as they deem appropriate to perform their respective obligations hereunder, provided, however, that each Interconnection Party shall require its subcontractors to comply with all applicable terms and conditions of this Appendix 2 in providing such services.

### **18.2 Responsibility of Principal:**

The creation of any subcontract relationship shall not relieve the hiring Interconnection Party of any of its obligations under this Appendix 2. Each Interconnection Party shall be fully responsible to the other Interconnection Parties for the acts and/or omissions of any subcontractor it hires as if no subcontract had been made.

### **18.3 Indemnification by Subcontractors:**

To the fullest extent permitted by law, an Interconnection Party that uses a subcontractor to carry out any of the Interconnection Party's obligations under this Appendix 2 shall require each of its subcontractors to indemnify, hold harmless and defend each other Interconnection Party, its representatives and assigns from and against any and all claims and/or liability for damage to property, injury to or death of any person, including the employees of any Interconnection Party or of any Affiliate of any Interconnection Party, or any other liability incurred by the other Interconnection Party or any of its Affiliates, including all expenses, legal or otherwise, to the extent caused by any act or omission, negligent or otherwise, by such subcontractor and/or its officers, directors, employees, agents and assigns, that arises out of or is connected with the operation of the facilities of either Interconnected Entity described in this Appendix 2; provided, however, that no Interconnection Party or Affiliate thereof shall be entitled to indemnity under this section 18.3 in respect of any injury, loss, or damage to the extent that such loss, injury, or damage results from the negligence or willful misconduct of the Interconnection Party or Affiliate seeking indemnity.

### **18.4 Subcontractors Not Beneficiaries:**

No subcontractor is intended to be, or shall be deemed to be, a third-party beneficiary of a Generation Interconnection Agreement.

## **19 Information Access and Audit Rights**

### **19.1 Information Access:**

Consistent with Applicable Laws and Regulations, each Interconnection Party shall make available such information and/or documents reasonably requested by another Interconnection Party that are necessary to (i) verify the costs incurred by the other Interconnection Party for which the requesting Interconnection Party is responsible under this Appendix 2; and (ii) carry out obligations and responsibilities under this Appendix 2, provided that the Interconnection Parties shall not use such information for purposes other than those set forth in this section 19.1 and to enforce their rights under this Appendix 2.

### **19.2 Reporting of Non-Force Majeure Events:**

Each Interconnection Party shall notify the other Interconnection Parties when it becomes aware of its inability to comply with the provisions of this Appendix 2 for a reason other than an event of force majeure as defined in section 9.4 of this Appendix 2. The parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section shall not entitle the receiving Interconnection Party to allege a cause of action for anticipatory breach of the Generation Interconnection Agreement.

### **19.3 Audit Rights:**

Subject to the requirements of confidentiality under section 17 of this Appendix 2, each Interconnection Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent other Interconnection Party, to audit at its own expense the other Interconnection Party's accounts and records pertaining to such Interconnection Party's performance and/or satisfaction of obligations arising under this Appendix 2. Any audit authorized by this section shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Appendix 2. Any request for audit shall be presented to the Interconnection Party to be audited not later than 24 months after the event as to which the audit is sought. Each Interconnection Party shall preserve all records held by it for the duration of the audit period.

## **20 Disputes**

### **20.1 Submission:**

Any claim or dispute that any Interconnection Party may have against another arising out of the Generation Interconnection Agreement may be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.

### **20.2 Rights Under the Federal Power Act:**

Nothing in this section shall restrict the rights of any Interconnection Party to file a complaint with FERC under relevant provisions of the Federal Power Act.

### **20.3 Equitable Remedies:**

Nothing in this section shall prevent any Interconnection Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations.



## **21 Notices**

### **21.1 General:**

Any notice, demand or request required or permitted to be given by any Interconnection Party to another and any instrument required or permitted to be tendered or delivered by any Interconnection Party, in writing to another shall be provided electronically or may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Interconnection Party, or personally delivered to the Interconnection Party, at the electronic or other address specified in the Generation Interconnection Agreement.

### **21.2 Emergency Notices:**

Moreover, notwithstanding the foregoing, any notice hereunder concerning an Emergency Condition or other occurrence requiring prompt attention, or as necessary during day-to-day operations, may be made by telephone or in person, provided that such notice is confirmed in writing promptly thereafter. Notice in an Emergency Condition, or as necessary during day-to-day operations, shall be provided (i) if by the Transmission Owner, to the shift supervisor at, as applicable, a Generation Project Developer's Generating Facility or a Transmission Project Developer's control center; and (ii) if by the Project Developer, to the shift supervisor at the Transmission Owner's transmission control center.

### **21.3 Operational Contacts:**

Each Interconnection Party shall designate, and provide to each other Interconnection Party contact information concerning, a representative to be responsible for addressing and resolving operational issues as they arise during the term of the Generation Interconnection Agreement.

## **22 Miscellaneous**

### **22.1 Regulatory Filing:**

In the event that this Generation Interconnection Agreement contains any terms that deviate materially from the form included in the Tariff, Transmission Provider shall file the Generation Interconnection Agreement on behalf of itself and the Transmission Owner with FERC as a service schedule under the Tariff within 30 days after execution. Project Developer may request that any information so provided be subject to the confidentiality provisions of section 17 of this Appendix 2. An Project Developer shall have the right, with respect to any Generation Interconnection Agreement tendered to it, to request (a) dispute resolution under section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (b) that Transmission Provider file the agreement unexecuted with FERC. With the filing of any unexecuted Generation Interconnection Agreement, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between or among the Interconnection Parties.

### **22.2 Waiver:**

Any waiver at any time by an Interconnection Party of its rights with respect to a Breach or Default under this Generation Interconnection Agreement or with respect to any other matters arising in connection with this Appendix 2, shall not be deemed a waiver or continuing waiver with respect to any subsequent Breach or Default or other matter.

### **22.3 Amendments and Rights Under the Federal Power Act:**

This Generation Interconnection Agreement may be amended or supplemented only by a written instrument duly executed by all Interconnection Parties. An amendment to the Generation Interconnection Agreement shall become effective and a part of this Generation Interconnection Agreement upon satisfaction of all Applicable Laws and Regulations. Notwithstanding the foregoing, nothing contained in this Generation Interconnection Agreement shall be construed as affecting in any way any of the rights of any Interconnection Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Interconnection Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this Generation Interconnection Agreement and every appendix referred to therein shall be amended, as mutually agreed by the Interconnection Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

### **22.4 Binding Effect:**

This Generation Interconnection Agreement, including this Appendix 2, and the rights and obligations thereunder shall be binding upon, and shall inure to the benefit of, the successors and assigns of the Interconnection Parties.

## **22.5 Regulatory Requirements:**

Each Interconnection Party's performance of any obligation under this Generation Interconnection Agreement for which such party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Interconnection Party, or the Interconnection Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Interconnection Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **23 Representations and Warranties**

### **23.1 General:**

Each Interconnected Entity hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Interconnected Entity during the time the Generation Interconnection Agreement is effective:

#### **23.1.1 Good Standing:**

Such Interconnected Entity is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated and operates as stated in the Generation Interconnection Agreement.

#### **23.1.2 Authority:**

Such Interconnected Entity has the right, power and authority to enter into the Generation Interconnection Agreement, to become a party hereto and to perform its obligations hereunder. The Generation Interconnection Agreement is a legal, valid and binding obligation of such Interconnected Entity, enforceable against such Interconnected Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **23.1.3 No Conflict:**

The execution, delivery and performance of the Generation Interconnection Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of the Interconnected Entity, or with any judgment, license, permit, order, material agreement or instrument applicable to or binding upon the Interconnected Entity or any of its assets.

#### **23.1.4 Consent and Approval:**

Such Interconnected Entity has sought or obtained, or, in accordance with the Generation Interconnection Agreement will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of the Generation Interconnection Agreement and it will provide to any Governmental Authority notice of any actions under this Appendix 2 that are required by Applicable Laws and Regulations.

### **23.2 Transmission Outages:**

#### **23.2.1 Outages; Coordination:**

The Construction Parties acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing all Interconnection Facilities and Transmission Owner Upgrades. The Construction Parties further acknowledge and agree that any such outages shall be coordinated by and through the Transmission Provider.

### **23.3 Land Rights; Transfer of Title:**

In the event activities under Schedule L of this GIA are required, the following provisions will apply, in addition to the provisions set forth above:

#### **23.3.1 Grant of Easements and Other Land Rights:**

Project Developer at its sole cost and expense, shall grant such easements and other land rights to the Transmission Owner over the Site at such times and in such a manner as the Transmission Owner may reasonably require to perform its obligations under the GIA and/or to perform its operation and maintenance obligations under the Generation Interconnection Agreement.

#### **23.3.2 Construction of Facilities on Project Developer Property:**

To the extent that the Transmission Owner is required to construct and install any Transmission Owner Interconnection Facilities and Transmission Owner Upgrades on land owned by the Project Developer, the Project Developer, at its sole cost and expense, shall legally transfer to the Transmission Owner all easements and other land rights required pursuant to section 23.1 above prior to the commencement of such construction and installation.

#### **23.3.3 Third Parties:**

If any of the easements and other land rights described in section 23.1 above must be obtained from a third party, the Transmission Owner's obligation for completing its construction responsibilities in accordance with the Schedule of Work set forth in Schedule L hereto, to the extent of the facilities that it is responsible for constructing for which such easements and land rights are necessary, shall be subject to Project Developer's acquisition of such easements and other land rights at such times and in such manner as the Transmission Owner may reasonably require to perform its obligations under this Appendix 2, and/or to perform its operation and maintenance obligations under the Generation Interconnection Agreement, provided, however, that upon Project Developer's request, the Transmission Owner shall assist the Project Developer in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf. The terms of easements and land rights acquired by Project Developer shall not unreasonably impede the Transmission Owner's timely completion of construction of the affected facilities.

#### **23.3.4 Documentation:**

Project Developer shall prepare, execute and file such documentation as the Transmission Owner may reasonably require to memorialize any easements and other land rights granted pursuant to

this section 23.3. Documentation of such easements and other land rights, and any associated filings, shall be in a form acceptable to the Transmission Owner.

#### **23.3.5 Transfer of Title to Certain Facilities Constructed by Project Developer:**

Within 30 days after the Project Developer's receipt of notice of acceptance following Stage Two energization of the Interconnection Facilities and Transmission Owner Upgrades, the Project Developer shall deliver to the Transmission Owner, for the Transmission Owner's review and approval, all of the documents and filings necessary to transfer to the Transmission Owner title to any Transmission Owner Interconnection Facilities and Transmission Owner Upgrades constructed by the Project Developer, and to convey to the Transmission Owner any easements and other land rights to be granted by Project Developer in accordance with section 23.3.1 above that have not then already been conveyed. The Transmission Owner shall review and approve such documentation, such approval not to be unreasonably withheld, delayed, or conditioned. Within 30 days after its receipt of the Transmission Owner's written notice of approval of the documentation, the Project Developer, in coordination and consultation with the Transmission Owner, shall make any necessary filings at the FERC or other governmental agencies for regulatory approval of the transfer of title. Within 20 days after the issuance of the last order granting a necessary regulatory approval becomes final (i.e., is no longer subject to rehearing), the Project Developer shall execute all necessary documentation and shall make all necessary filings to record and perfect the Transmission Owner's title in such facilities and in the easements and other land rights to be conveyed to the Transmission Owner. Prior to such transfer to the Transmission Owner of title to the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer, the risk of loss or damages to, or in connection with, such facilities shall remain with the Project Developer. Transfer of title to facilities under this section shall not affect the Project Developer's receipt or use of the interconnection rights related to Network Upgrades, Distribution Upgrades, Stand Alone Network Upgrades, or Transmission Owner Interconnection Facilities which it otherwise may be eligible as provided in the GIP.

#### **23.3.6 Liens:**

The Project Developer shall take all reasonable steps to ensure that, at the time of transfer of title in the Transmission Owner Interconnection Facilities built by the Project Developer to the Transmission Owner, those facilities shall be free and clear of any and all liens and encumbrances, including mechanics' liens. To the extent that the Project Developer cannot reasonably clear a lien or encumbrance prior to the time for transferring title to the Transmission Owner, Project Developer shall nevertheless convey title subject to the lien or encumbrance and shall indemnify, defend and hold harmless the Transmission Owner against any and all claims, costs, damages, liabilities and expenses (including without limitation reasonable attorneys' fees) which may be brought or imposed against or incurred by Transmission Owner by reason of any such lien or encumbrance or its discharge.

#### **23.4 Warranties:**

##### **23.4.1 Project Developer Warranty:**

The Project Developer shall warrant that its work (or the work of any subcontractor that it retains) in constructing and installing the Transmission Owner Interconnection Facilities or Stand Alone Network Upgrades that it builds is free from defects in workmanship and design and shall conform to the requirements of this GIA for one year (the “Project Developer Warranty Period”) commencing upon the date title is transferred to Transmission Owner in accordance with section 23.3.5 of this Appendix 2. The Project Developer shall, at its sole expense and promptly after notification by the Transmission Owner, correct or replace defective work in accordance with Applicable Technical Requirements and Standards, during the Project Developer Warranty Period. The warranty period for such corrected or replaced work shall be the unused portion of the Project Developer Warranty Period remaining as of the date of notice of the defect. The Project Developer Warranty Period shall resume upon acceptance of such corrected or replaced work. All Costs incurred by Transmission Owner as a result of such defective work shall be reimbursed to the Transmission Owner by the Project Developer on demand; provided that the Transmission Owner submits the demand to the Project Developer within the Project Developer Warranty Period and provides reasonable documentation of the claimed costs. The Transmission Owner’s acceptance, inspection and testing, or a third party’s inspection or testing, of such facilities pursuant to Schedule L, section 11.9 of this GIA shall not be construed to limit in any way the warranty obligations of the Project Developer, and this provision does not modify and shall not limit the Project Developer’s indemnification obligations set forth in Appendix 2, section 14.0 of this GIA.

#### **23.4.2 Manufacturer Warranties:**

Prior to the transfer to the Transmission Owner of title to the Transmission Owner Interconnection Facilities built by the Project Developer, the Project Developer shall produce documentation satisfactory to the Transmission Owner evidencing the transfer to the Transmission Owner of all manufacturer warranties for equipment and/or materials purchased by the Project Developer for use and/or installation as part of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer.

## **24 Tax Liability**

### **24.1 Safe Harbor Provisions:**

This section 24.1 is applicable only to Project Developers. Provided that Project Developer agrees to conform to all requirements of the Internal Revenue Service (“IRS”) (e.g., the “safe harbor” section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016)) that would confer nontaxable status on some or all of the transfer of property, including money, by Project Developer to the Transmission Owner for payment of the Costs of construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, the Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in section 24.4.2 below, shall not include income taxes in the Costs of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that are payable by Project Developer under the Generation Interconnection Agreement. Project Developer shall document its agreement to conform to IRS requirements for such non-taxable status in the Generation Interconnection Agreement, the Interconnection Construction Service Agreement, and/or applicable agreement.

### **24.2 Tax Indemnity:**

Project Developer shall indemnify the Transmission Owner for any costs that Transmission Owner incurs in the event that the IRS and/or a state department of revenue (“State”) determines that the property, including money, transferred by Project Developer to the Transmission Owner with respect to the construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades is taxable income to the Transmission Owner. Project Developer shall pay to the Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Transmission Owner. In the event that the Transmission Owner chooses to contest such assessment, either at the request of Project Developer or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Transmission Owner shall refund to Project Developer the excess of its demand payment made to the Transmission Owner over the amount of the tax, interest and penalty for which the Transmission Owner is finally determined to be liable. Project Developer’s tax indemnification obligation under this section shall survive any termination of the Generation Interconnection Agreement or Interconnection Construction Service Agreement.

### **24.3 Taxes Other Than Income Taxes:**

Upon the timely request by Project Developer, and at Project Developer’s sole expense, the Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Transmission Owner for which Project Developer may be required to reimburse Transmission Provider under the terms of this Appendix 2 or the GIP. Project Developer shall pay to the Transmission Owner on a periodic basis, as invoiced by the Transmission Owner, the Transmission Owner’s documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Project Developer and the



Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Project Developer to the Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Project Developer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Transmission Owner.

## **24.4 Income Tax Gross-Up:**

### **24.4.1 Additional Security:**

In the event that Project Developer does not provide the safe harbor documentation required under section 24.1 prior to execution of the Generation Interconnection Agreement, within 15 days after such execution, Transmission Provider shall notify Project Developer in writing of the amount of additional Security that Project Developer must provide. The amount of Security that a Transmission Project Developer must provide initially pursuant to this Generation Interconnection Agreement shall include any amounts described as additional Security under this section 24.4 regarding income tax gross-up.

### **24.4.2 Amount:**

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of any Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the total Security provided to the amount that would be sufficient to permit the Transmission Owner to receive and retain, after the payment of all applicable income taxes ("Current Taxes") and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the "Present Value Depreciation Amount"), an amount equal to the estimated Costs of Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer is responsible under the Generation Interconnection Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the "Current Tax Rate"); and the Present Value Depreciation Amount shall be computed by discounting the Transmission Owner's anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

### **24.4.3 Time for Payment:**

Project Developer must provide the additional Security, in a form and with terms as required by the GIP within 15 days after its receipt of Transmission Provider's notice under this section.

## **24.5 Tax Status:**

Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Generation Interconnection Agreement or the GIP is intended to adversely affect any Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

SCHEDULE A

CUSTOMER FACILITY LOCATION/SITE PLAN

**SCHEDULE B**

**SINGLE-LINE DIAGRAM**

SCHEDULE C

LIST OF METERING EQUIPMENT

## SCHEDULE D

### APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

{Include the following language if not required:}

Not Required.

{Otherwise, include the following language:}

The following technical requirements and standards shall apply. To the extent that these Applicable Technical Requirements and Standards conflict with the terms and conditions of the Tariff or any other provision of this GIA, the Tariff and/or this GIA shall control.

*{Instructions: If the relevant TO Applicable Technical Requirements and Standards **are** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply. The [Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] is available on the PJM website.

*{Instructions. If the relevant TO Applicable Technical Requirements and Standards **are not** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply.

**SCHEDULE E**

**SCHEDULE OF CHARGES**

**SCHEDULE F**

**SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**



**SCHEDULE G**

**PROJECT DEVELOPER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR  
PROVISIONS FOR NON-TAXABLE STATUS**

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}

Not Required.

[OR]

{Include the following language if applicable to Project Developer:}

As provided in section 24.1 of Appendix 2 to this GIA and subject to the requirements thereof, Project Developer represents that it meets all qualifications and requirements as set forth in section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Project Developer agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Project Developer to Transmission Owner with respect to the payment of the Costs of construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades specified in this GIA.

Nothing in Project Developer's agreement pursuant to this Schedule G shall change Project Developer's indemnification obligations under section 24.2 of Appendix 2 to this GIA.

## SCHEDULE H

### INTERCONNECTION REQUIREMENTS FOR ALL WIND, SOLAR AND NON-SYNCHRONOUS GENERATION FACILITIES

{Include the appropriate language from the alternatives below}

{Include the following language if the Generating Facility is not a wind, solar or non-synchronous generation facility}

Not Required

[OR]

{Include the following language when the Generating Facility is a wind, solar or non-synchronous generation facility}

#### A. Voltage Ride Through Requirements

The Generating Facility shall be designed to remain in service (not trip) for voltages and times as specified for the Eastern Interconnection in Attachment 1 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low voltage conditions, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

#### B. Frequency Ride Through Requirements

The Generating Facility shall be designed to remain in service (not trip) for frequencies and times as specified in Attachment 2 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low frequency condition, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

#### C. Supervisory Control and Data Acquisition (“SCADA”) Capability

The wind, solar or non-synchronous generation facility shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind, solar or non-synchronous generation facility Project Developer shall determine what SCADA information is essential for the proposed wind, solar or non-synchronous generation facility, taking into account the size of the facility and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

#### D. Meteorological Data Reporting Requirement (Applicable to wind generation facilities only)

The wind generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Wind speed (meters/second)
- Wind direction (degrees from True North)
- Atmosphere pressure (hectopascals)
- Forced outage data (wind turbine and MW unavailability)

**E. Meteorological Data Reporting Requirement (Applicable to solar generation facilities only)**

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The solar generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Irradiance
- Forced outage data

The Transmission Provider and Project Developer may mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such additional mutually agreed upon requirements for meteorological and forced outage data are set forth below: [STATE “NOT APPLICABLE UNDER THIS GIA” OR SPECIFY THE AGREED UPON METEOROLOGICAL AND FORCED OUTAGE DATA REQUIREMENTS]

**SCHEDULE I**  
**INTERCONNECTION SPECIFICATIONS FOR AN**  
**ENERGY STORAGE RESOURCE**

{Include the appropriate language from the alternatives below.}

{Include the following language if the Generating Facility is not an Energy Storage Resource:}

Not Required

{Include the following language if the Generating Facility is an Energy Storage Resource:}

This Schedule I specifies information for Energy Storage Resource will be required to provide primary frequency response consistent with the conditions set forth in Appendix 2, sections 4.7.2, 4.7.2.1, 4.7.2.2, 4.7.2.3, and 4.7.2.4 of this GIA.

**1.0 Minimum State of Charge and Maximum State of Charge**

Primary frequency response operating range for Energy Storage Resources:

Minimum State of Charge: \_\_\_\_\_; and

Maximum State of Charge: \_\_\_\_\_.

**2.0 Static or Dynamic Operating Range**

{Specify whether the operating range is static or dynamic. If the operating range is dynamic, then this Schedule I must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.}

**SCHEDULE J**

**SCHEDULE OF TERMS AND CONDITIONS FOR  
SURPLUS INTERCONNECTION SERVICE**

SCHEDULE K

REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL  
ELECTRICAL GENERATING CAPABILITY

SCHEDULE L

INTERCONNECTION CONSTRUCTION TERMS AND CONDITIONS

{Instructions: to be used if construction of facilities is required in connection with this GIA.  
If Interconnection Construction Terms and Conditions are not required, state “Not  
Applicable” and delete reminder of Schedule L}

# INTERCONNECTION CONSTRUCTION TERMS AND CONDITIONS

## For the Generation Interconnection Agreement

By and Between

PJM Interconnection, L.L.C.

And

[Name of Project Developer]

And

[Name of Transmission Owner]

(Project Identifier # \_\_\_\_\_)

1.0 These Interconnection Construction Terms and Conditions (“IC Terms & Conditions”), including the Schedules and Appendices attached hereto or incorporated by reference herein, shall apply to the Generation Interconnection Agreement (“GIA”) by and between Transmission Provider, Project Developer, and Transmission Owner. All capitalized terms herein shall have the meanings set forth in Appendix 1 to this Generation GIA.

2.0 The standard terms and conditions for construction included in Appendix 2 of the GIA associated with this Interconnection Request are hereby specifically incorporated herein.

3.0 Generating Facility or Merchant Transmission Facility. These IC Terms & Conditions specifically relate to the following Generating Facility or Merchant Transmission Facility at the following location:

a. Name of Generating Facility or Merchant Transmission Facility:

\_\_\_\_\_

b. Location of Generating Facility or Merchant Transmission Facility:

\_\_\_\_\_

4.0 Commencement of Construction.

4.1 The Transmission Owner shall have no obligation to begin construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades prior to the Effective Date of this GIA. Construction shall commence as provided in the Schedule of Work set forth in section 8.0 of these IC Terms & Conditions.

5.0 Construction Responsibility for

a. Project Developer Interconnection Facilities. Project Developer is responsible for designing and constructing the Project Developer Interconnection Facilities described in Specifications section 3.0(a)(1) of this GIA.

b. Construction of Transmission Owner Interconnection Facilities.



1. The Transmission Owner Interconnection Facilities and Transmission Owner Upgrades for which Transmission Owner shall be responsible for constructing are described in Specifications section 3.0(b) of this GIA.

2. Election of Construction Option. Specify below whether the Project Developer and Transmission Owner have mutually agreed to construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that will be built by the Transmission Owner pursuant to the Standard Option or the Negotiated Contract Option.

Standard Option.

Negotiated Contract Option.

If the parties have mutually agreed to use the Negotiated Contract Option, the permitted, negotiated terms on which they have agreed and which are not already set forth as part of the Scope of Work and/or Schedule of Work set forth in sections 7.0 and 8.0 of these IC Terms & Conditions shall be as set forth in Appendix 1 to this Schedule L.

3. Exercise of Option to Build. Has Project Developer timely exercised the Option to Build?

Yes

No

If Yes is indicated, Project Developer shall build, in accordance with and subject to the conditions and limitations set forth in section 15.3 of this Schedule L, those portions of the Transmission Owner Interconnection Facilities and Stand Alone described in Specifications section 3.0(a)(2) of this GIA.

6.0 Facilitation by Transmission Provider: Transmission Provider shall keep itself apprised of the status of the Transmission Owner's and Project Developer's construction-related activities and, upon request of either of them, Transmission Provider shall meet with the Transmission Owner and Project Developer separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this Schedule L and Appendix 2 of the this GIA. Each of Transmission Owner and Project Developer shall cooperate in good faith with the other in Transmission Provider's efforts to facilitate resolution of disputes.

7.0 Scope of Work. The Scope of Work for all construction shall be as set forth in Specifications section 3.0 of this GIA, provided, however, that the scope of work is subject to change in accordance with Transmission Provider's scope change process for interconnection projects as set forth in the PJM Manuals. The scope change process is

intended to be used for changes to the Scope of Work as defined herein, and is not intended to be used to change any of the milestone set forth in the GIA. Any change to the Scope of Work must be agreed to by all Parties in writing by executing a scope change document.

- 8.0 Schedule of Work. The Schedule of Work for all construction is set forth below, provided, however, that such schedule is subject to change in accordance with section 15.3 of this Schedule L.

**Transmission Owner:**

[Provide start and completion date for construction of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades and listed in Schedule C, including any supervisory or other responsibilities associated with use of the Option to Build or state “Not Applicable”]

**Project Developer:**

[Provide start and completion date for construction of Project Developer Interconnection Facilities listed in Schedule C, including any facilities being constructed pursuant to the Option to Build, or state “Not Applicable”]

- 9.0 If Project Developer exercises the Option to Build, Project Developer shall pay Transmission Owner for Transmission Owner to execute the responsibilities enumerated to Transmission Owner under section 15.

10.0 Construction Obligations

10.1 Project Developer Obligations: Project Developer shall, at its sole cost and expense, design, procure, construct, own, and install the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities in accordance with this GIA, Applicable Standards, Applicable Laws and Regulations, Good Utility Practice, the Scope of Work, and the System Impact Study(ies) (to the extent that design of the Project Developer Interconnection Facilities is included therein), provided, however, that, in the event and to the extent that the Generating Facility or Merchant Transmission Facility is comprised of or includes Merchant Network Upgrades, subject to the terms of section 15.2.3 of this Schedule L, the Transmission Owner shall design, procure, construct and install such Merchant Network Upgrades.

10.2 Transmission Owner Interconnection Facilities and Transmission Owner Upgrades

10.2.1 Generally: All Transmission Owner Interconnection Facilities and Transmission Owner Upgrades necessary for the interconnection of the Generating Facility or Merchant Transmission Facility shall be designed, procured, installed and constructed in accordance with this GIA, Applicable

Standards, Applicable Laws and Regulations, Good Utility Practice, the System Impact Study(ies), and the Scope of Work.

10.2.2 Cost Responsibility: Responsibility for the Costs of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades shall be assigned in accordance with the GIP, as applicable, and shall be stated in this GIA.

10.2.3 Construction Responsibility: Except as otherwise permitted under, or as otherwise agreed upon by the Project Developer and the Transmission Owner pursuant to this GIA, the Transmission Owner shall be responsible for the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. In the event that there are multiple Transmission Owners, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they have reached agreement among themselves on how to proceed.

10.2.4 Ownership of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades: The Transmission Owner shall own all Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that it builds. In addition, the Project Developer will convey to the Transmission Owner, as provided in section 23.3.5 of Appendix 2 of this GIA, title to all Transmission Owner Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer pursuant to the terms of this Schedule L. Nothing in this section shall affect the interconnection rights otherwise available to a Transmission Project Developer under the GIP.

10.2A Scope of Applicable Technical Requirements and Standards: Applicable Technical Requirements and Standards shall apply to the design, procurement, construction and installation of the Interconnection Facilities, Transmission Owner Upgrades and Merchant A.C. Transmission Facilities only to the extent that the provisions thereof relate to the design, procurement, construction and/or installation of such facilities. Such provisions relating to the design, procurement, construction and/or installation of facilities shall be appended as Schedule D to this GIA. The Interconnection Parties shall mutually agree upon, or in the absence of such agreement, Transmission Provider shall determine, which provisions of the Applicable Technical Requirements and Standards should be identified in this GIA. In the event of any conflict between the provisions of the Applicable Technical Requirements and Standards that are appended as Schedule D to this GIA and any later-modified provisions that are stated in the pertinent PJM Manual, the provisions appended as Schedule D to this GIA shall control.

10.3 Construction by Project Developer

10.3.1 Construction Prior to Execution of GIA: If the Project Developer procures materials for, and/or commences construction of, the Project Developer Interconnection Facilities, any Transmission Owner Interconnection Facilities or Stand Alone Network Upgrades that it has elected to construct by exercising the Option to Build, or for any subsequent modification thereto, prior to the execution of this GIA or, if this GIA has been executed, before the Transmission Owner and Transmission Provider have accepted the Project Developer's initial design, or any subsequent modification to the design, of such Interconnection Facilities or Stand Alone Network Upgrades, such procurement and/or construction shall be at the Project Developer's sole risk, cost and expense.

10.3.2 Monitoring and Inspection: The Transmission Owner may monitor construction and installation of Interconnection Facilities and Transmission Owner Upgrades that the Project Developer is constructing. Upon reasonable notice, authorized personnel of the Transmission Owner may inspect any or all of such Interconnection Facilities and Transmission Owner Upgrades to assess their conformity with Applicable Standards.

10.3.3 Notice of Completion: The Project Developer shall notify the Transmission Provider and the Transmission Owner in writing when it has completed construction of (i) the Generating Facility or Merchant Transmission Facility; (ii) the Project Developer Interconnection Facilities; and (iii) any Transmission Owner Interconnection Facilities and Stand Alone for which it has exercised the Option to Build.

10.4 Construction-Related Access Rights: The Transmission Owner and the Project Developer herein grant each other at no charge such rights of access to areas that it owns or otherwise controls as may be necessary for performance of their respective obligations, and exercise of their respective rights, pursuant to this Schedule L, provided that either of them performing the construction will abide by the safety, security and work rules applicable to the area where construction activity is occurring.

10.5 Coordination Among Parties: The Transmission Provider, the Project Developer, and all Transmission Owners shall communicate and coordinate their activities as necessary to satisfy their obligations under this Schedule L.

## 11.0 Construction Requirements

### 11.1 Construction by Project Developer:

The Project Developer shall use Reasonable Efforts to design, procure, construct and install the Project Developer Interconnection Facilities and any Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that it elects to build by

exercise of the Option to Build (defined in section 11.2.3.1 below) in accordance with the Schedule of Work.

## 11.2 Construction by Transmission Owner

### 11.2.1 Standard Option:

The Transmission Owner shall use Reasonable Efforts to design, procure, construct and install the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that it is responsible for constructing in accordance with the Schedule of Work.

#### 11.2.1.1 Construction Sequencing:

In general, the sequence of the proposed dates of Initial Operation of Project Developers seeking interconnection to the Transmission System will determine the sequence of construction of Network Upgrades.

### 11.2.2 Negotiated Contract Option:

As an alternative to the Standard Option set forth in section 11.2.1 above, the Transmission Owner and the Project Developer may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. Under the Negotiated Contract Option, the Project Developer and the Transmission Owner may agree to terms different from those included in the Standard Option of section 11.2.1 above and the corresponding standard terms set forth in the applicable provisions of the GIP. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Project Developer and the Transmission Owner that are parties to this GIA; no other Project Developer's responsibility for Costs may be affected. No other terms of the Tariff or this Schedule L shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option are set forth in Schedule L, Appendix 1 to this GIA. The Negotiated Option can only be used in connection with a Network Upgrade subject to the Network Upgrade Cost Responsibility Agreement all Project Developers and the relevant Transmission Owner agree.

### 11.2.3 Option to Build

#### 11.2.3.1 Option:

Project Developer has the option (“Option to Build”) to assume responsibility for the design, procurement, and construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in the Schedule of Work in section 8.0 of this Schedule L. Transmission Provider and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Specifications section 3.0(a)(2) of this GIA. If the Transmission Provider and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Project Developer with a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination. Except for Stand Alone Network Upgrades, Project Developer shall have no right to construct Network Upgrades under this option. In order to exercise this Option to Build, Project Developer must provide Transmission Provider and the Transmission Owner with written notice of Project Developer’s election to exercise the option consistent with the deadline applicable to its New Service Request or Upgrade Request. Project Developer may not elect Option to Build after such date.

#### 11.2.3.2 General Conditions Applicable to Option:

In addition to the other terms and conditions applicable to the construction of facilities under this Schedule L, the Option to Build is subject to the following conditions:

(a) If the Project Developer assumes responsibility for the design, procurement and construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades:

(i) Project Developer shall engineer, procure equipment, and construct Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and Specifications provided in advance by Transmission Owner;

(ii) Project Developer’s engineering, procurement and construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Transmission Owner shall be subject in the engineering, procurement or construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades;

(iii) Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades;

(iv) Prior to commencement of construction, Project Developer shall provide to Transmission Owner a schedule for construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades and shall promptly respond to requests for information from Transmission Owner;

(v) At any time during construction, Transmission Owner shall have the right to gain unrestricted access to Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and Specifications provided by Interconnection Transmission Owner, Project Developer shall be obligated to remedy deficiencies in that portion of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades;

(vii) Project Developer shall indemnify Transmission Owner and Transmission Provider for claims arising from Project Developer's construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to section 16 of Appendix 2 of this GIA;

(viii) Project Developer shall transfer control of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner;

(ix) Unless Parties otherwise agree, Project Developer shall transfer ownership of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner;

(x) Transmission Owner shall approve and accept for operation and maintenance Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with section 11.2.3.2 of this Schedule L; and

(xi) Project Developer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are



reasonably required by Transmission Provider to assure that the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades are built to the standards and Specifications required by Transmission Provider.

(b) In addition to the General Conditions applicable to Option to Build set forth in section 11.2.3.2(a) above, the following conditions also apply:

(i) The Project Developer must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that it is building, provided, however, that when the Transmission Owner's assistance is required, the Transmission Owner shall assist the Project Developer in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(ii) The Project Developer must obtain all necessary land rights for the construction and installation of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that it is building, provided, however, that upon Project Developer's reasonable request, the Transmission Owner shall assist the Project Developer in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(iii) Notwithstanding anything stated herein, each Transmission Owner shall have the exclusive right and obligation to perform the line attachments (tie-in work), and to calibrate remote terminal units and relay settings, required for the interconnection to such Transmission Owner's existing facilities of any Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that the Project Developer builds; and

(iv) The Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer shall be successfully inspected, tested and energized pursuant to sections 11.7 and 11.8 of this Schedule L.

#### 11.2.3.3 Additional Conditions Regarding Network Facilities:

To the extent that the Project Developer utilizes the Option to Build for design, procurement, construction and/or installation of (a) any Transmission Owner Interconnection Facilities that are Stand Alone



Network Upgrades to Transmission System facilities that are in existence or under construction by or on behalf of the Transmission Owner on the date that the Project Developer solicits bids under section 11.2.3.7 below, or (b) Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that are to be located on land or in right-of-way owned or controlled by the Transmission Owner, and in addition to the other terms and conditions applicable to the design, procurement, construction and/or installation of facilities under this GIA, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the Project Developer shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Transmission Owner's List of Approved Contractors;

(ii) The Transmission Owner shall have full site control of, and reasonable access to, its property at all times for purposes of tagging or operation, maintenance, repair or construction of modifications to, its existing facilities and/or for performing all tie-ins of Interconnection Facilities and Stand Alone Network Upgrades built by or for the Project Developer; and for acceptance testing of any equipment that will be owned and/or operated by the Transmission Owner;

(iii) The Transmission Owner shall have the right to have a reasonable number of appropriate representatives present for all work done on its property/facilities or regarding the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades and the right to stop, or to order corrective measures with respect to, any such work that reasonably could be expected to have an adverse effect on reliability, safety or security of persons or of property of the Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Transmission Owner shall consult with the Project Developer and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The Project Developer and its contractors, employees and agents shall comply with the Transmission Owner's safety, security and work rules, environmental guidelines and training requirements applicable to the area(s) where construction activity is occurring and shall provide all reasonably required documentation to the Transmission Owner, provided that the Transmission Owner previously has provided its safety, security and work rules and training requirements applicable to work on its facilities to Transmission Provider and the Project Developer within 20 Business Days after a request therefor made by Project Developer;

(v) The Project Developer shall be responsible for controlling the performance of its contractors, employees and agents; and

(vi) All activities performed by or on behalf of the Project Developer pursuant to its exercise of the Option to Build shall be subject to compliance with Applicable Laws and Regulations, including those governing union staffing and bargaining unit obligations, and Applicable Standards.

#### 11.2.3.4 Administration of Conditions:

To the extent that the Transmission Owner exercises any discretion in the application of any of the conditions stated in sections 11.2.3.2 and 11.2.3.3 of this Schedule L, it shall apply each such condition in a manner that is reasonable and not unduly discriminatory and it shall not unreasonably withhold, condition, or delay any approval or authorization that the Project Developer may require for the purpose of complying with any of those conditions.

#### 11.2.3.5 Approved Contractors:

(a) Each Transmission Owner shall develop and shall provide to Transmission Provider a List of Approved Contractors. Each Transmission Owner shall include on its List of Approved Contractors no fewer than three contractors and no fewer than three manufacturers or vendors of major transmission-related equipment, unless a Transmission Owner demonstrates to Transmission Provider's reasonable satisfaction that it is feasible only to include a lesser number of construction contractors, or manufacturers or vendors, on its List of Approved Contractors. Transmission Provider shall publish each Transmission Owner's List of Approved Contractors in a PJM Manual and shall make such manual available on its internet website.

(b) Upon request of a Project Developer, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the Project Developer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate contractor is qualified to design, or to install and/or construct new facilities or upgrades or modifications to existing facilities on the Transmission Owner's system, or (2) any manufacturer or vendor of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) regarding which the Project Developer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate entity's major transmission-related

equipment is acceptable for installation and use on the Transmission Owner's system. No Transmission Owner shall unreasonably withhold, condition, or delay its acceptance of a contractor, manufacturer, or vendor proposed for addition to its List of Approved Contractors.

#### 11.2.3.6 Construction by Multiple Project Developers:

In the event that there are multiple Project Developers that wish to exercise an Option to Build with respect to Interconnection Facilities and Stand Alone Network Upgrades of the types described in section 11.2.3.3 of this Schedule L, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

#### 11.2.3.7 Option Procedures:

(a) Within 10 days after executing this GIA or directing that this GIA be filed with FERC unexecuted, Project Developer shall solicit bids from one or more Approved Contractors named on the Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design, construct and/or install, the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that the Project Developer seeks to build under the Option to Build on terms (i) that will meet the Project Developer's proposed schedule; (ii) that, if the Project Developer seeks to have an Approved Contractor construct or install Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades, will satisfy all of the conditions on construction specified in sections 11.2.3.2 and 11.2.3.3 of this Schedule L; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities).

(b) Any additional costs arising from the bidding process or from the final bid of the successful Approved Contractor shall be the sole responsibility of the Project Developer.

(c) Upon receipt of a qualifying bid acceptable to it, the Project Developer shall contract with the Approved Contractor that submitted the qualifying bid. Such contract shall meet the standards stated in paragraph (a) of this section.

(d) In the absence of a qualifying bid acceptable to the Project Developer in response to its solicitation, the Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades in accordance with the Standard Option described in section 11.2.1 of this Schedule L.

#### 11.2.3.8 Project Developer Drawings:

Project Developer shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to be constructed under the Option to Build. The Transmission Owner shall review and approve the initial drawings and engineering design of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to be constructed under the Option to Build. The Transmission Owner shall review the drawings to assess the consistency of Project Developer's design of the pertinent Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades with Applicable Standards and the System Impact Study(ies). Transmission Owner, with facilitation and oversight by Transmission Provider, shall provide comments on such drawings to Project Developer within 60 days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

#### 11.2.3.9 Effect of Review:

Transmission Owner's review of Project Developer's initial drawings of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that the Project Developer is building shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, Project Developer shall make such changes to the design of the pertinent Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that Project Developer is building meet Applicable Standards and conform with the System Impact Study(ies).

### 11.3 Revisions to Schedule of Work:

The Schedule of Work shall be revised as required in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Interconnection Parties, which agreement shall not be unreasonably withheld, conditioned or delayed. The scope change process is intended to be used for changes to the Scope of Work as defined herein, and is not intended to be used to change any of the milestone set forth in the GIA.

### 11.4 Right to Complete Transmission Owner Interconnection Facilities and Transmission Owner Upgrades:

In the event that, at any time prior to successful Stage Two energization of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades pursuant to section 11.8 of this Schedule L, the Project Developer terminates its obligations under this GIA pursuant to Appendix 2, section 16.2. of this GIA due to a Default by the Transmission Owner, the Project Developer may elect to complete the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. The Project Developer shall notify the Transmission Owner and Transmission Provider in writing of its election to complete the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades within 10 days after the date of Project Developer's notice of termination pursuant to Appendix 2, section 16.2. of this GIA. In the event that the Project Developer elects to complete the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, it shall do so in accordance with the terms and conditions of the Option to Build under section 11.2.3 of this Schedule L and shall be responsible for paying all costs of completing the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades incurred after the date of its notice of election to complete the facilities. Project Developer may take possession of, and may use in completing the Transmission Owner Interconnection Facilities, any materials and supplies and equipment (other than equipment and facilities that already have been installed or constructed) acquired by the Transmission Owner for construction, and included in the Costs, of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades, provided that Project Developer shall pay Transmission Provider, for the benefit of the Transmission Owner and upon presentation by Transmission Owner of reasonable and appropriate documentation thereof, any amounts expended by the Transmission Owner for such materials, supplies and equipment that Project Developer has not already paid. Title to all Transmission Owner Interconnection Facilities and Transmission Owner Upgrades constructed by Project Developer under this section 11 shall be transferred to the Transmission Owner in accordance with Appendix 2, section 23.3.5 of this GIA.

#### 11.5 Suspension of Work upon Default:

Upon the occurrence of a Default by Project Developer as defined in Appendix 2, section 16 of this GIA, the Transmission Provider or the Transmission Owner may by written notice to Project Developer suspend further work associated with the construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that the Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this GIA. In the event of a suspension by Transmission Provider or Transmission Owner, the Project Developer shall be responsible for the Costs incurred in connection with any suspension hereunder in accordance with Appendix 2, section 16 of this GIA.

#### 11.6 Construction Reports:

Each of Project Developer and Transmission Owner shall issue reports to each other on a monthly basis, and at such other times as reasonably requested, regarding the status of the

construction and installation of the Interconnection Facilities and Transmission Owner Upgrades. Each of Project Developer and Transmission Owner shall promptly identify, and shall notify each other of, any event that the party reasonably expects may delay completion, or may significantly increase the cost, of the Interconnection Facilities and Transmission Owner Upgrades. Should either Project Developer or Transmission Owner report such an event, Transmission Provider shall, within 15 days of such notification, convene a technical meeting with Project Developer and Transmission Owner to evaluate schedule alternatives.

## 11.7 Inspection and Testing of Completed Facilities

### 11.7.1 Coordination:

Project Developer and the Transmission Owner shall coordinate the timing and schedule of all inspection and testing of the Interconnection Facilities and Transmission Owner Upgrades.

### 11.7.2 Inspection and Testing:

Each of Project Developer and Transmission Owner shall cause inspection and testing of the Interconnection Facilities and Transmission Owner Upgrades that it constructs in accordance with the provisions of this section. Project Developer and Transmission Owner acknowledge and agree that inspection and testing of facilities may be undertaken as facilities are completed and need not await completion of all of the facilities that a party is building.

#### 11.7.2.1 Of Project Developer-Built Facilities:

Upon the completion of the construction and installation, but prior to energization, of any Interconnection Facilities and Transmission Owner Upgrades constructed by the Project Developer and related portions of the Generating Facility or Merchant Transmission Facility, the Project Developer shall have the same inspected and/or tested by an authorized electric inspection agency or qualified third party reasonably acceptable to the Transmission Owner to assess whether the facilities substantially comply with Applicable Standards. Said inspection and testing shall be held on a mutually agreed-upon date, and the Transmission Owner and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

#### 11.7.2.2 Of Transmission Owner-Built Facilities:

Upon the completion of the construction and installation, but prior to energization, of any Interconnection Facilities and Transmission Owner Upgrades constructed by the Transmission Owner, the Transmission Owner shall have the same inspected and/or tested by qualified personnel or a

qualified contractor to assess whether the facilities substantially comply with Applicable Standards. Subject to Applicable Laws and Regulations, said inspection and testing shall be held on a mutually agreed-upon date, and the Project Developer and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

#### 11.7.3 Review of Inspection and Testing by Transmission Owner:

In the event that the written report, or the observation of either of Project Developer and Transmission Owner or Transmission Provider, of the inspection and/or testing pursuant to section 11.7.2 of this Schedule L reasonably leads the Transmission Provider or Transmission Owner to believe that the inspection and/or testing of some or all of the Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer was inadequate or otherwise deficient, the Transmission Owner may, within 20 days after its receipt of the results of inspection or testing and upon reasonable notice to the Project Developer, perform its own inspection and/or testing of such Interconnection Facilities and Stand Alone Network Upgrades to determine whether the facilities are acceptable for energization, which determination shall not be unreasonably delayed, withheld or conditioned.

#### 11.7.4 Notification and Correction of Defects

11.7.4.1 If the Transmission Owner, based on inspection or testing pursuant to section 11.7.2 or 11.7.3 of this Schedule L, identifies any defects or failures to comply with Applicable Standards in the Interconnection Facilities and Stand Alone Network Upgrades constructed by the Project Developer, the Transmission Owner shall notify the Project Developer and Transmission Provider of any identified defects or failures within 20 days after the Transmission Owner's receipt of the results of such inspection or testing. The Project Developer shall take appropriate actions to correct any such defects or failure at its sole cost and expense, and shall obtain the Transmission Owner's acceptance of the corrections, which acceptance shall not be unreasonably delayed, withheld or conditioned. Such acceptance does not modify and shall not limit the Project Developer's indemnification obligations set forth in section 11.2.3.2(e) of this Schedule L.

11.7.4.2 In the event that inspection and/or testing of any Transmission Owner Interconnection Facilities and Transmission Owner Upgrades built by the Transmission Owner identifies any defects or failures to comply with Applicable Standards in such facilities, Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. In the event that such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission



Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.

#### 11.7.5 Notification of Results:

Within 10 days after satisfactory inspection and/or testing of Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer (including, if applicable, inspection and/or testing after correction of defects or failures), the Transmission Owner shall confirm in writing to the Project Developer and Transmission Provider that the successfully inspected and tested facilities are acceptable for energization.

### 11.8 Energization of Completed Facilities

(A) Unless otherwise provided in the Schedule of Work, energization of the Interconnection Facilities and Transmission Owner Upgrades related to interconnection of a Generation Project Developer and, when applicable as determined by Transmission Provider, of the Interconnection Facilities and Transmission Owner Upgrades related to interconnection of a Transmission Project Developer, shall occur in two stages. Stage One energization shall consist of energization of the Project Developer Interconnection Facilities and of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades and will occur prior to initial energization of the Generating Facility. Stage Two energization shall consist of (1) initial synchronization to the Transmission System of any completed generator(s) at the Generating Facility of a Generation Project Developer, or of applicable facilities, as determined by the Transmission Provider, associated with Merchant Transmission Facilities of a Transmission Project Developer, and (2) energization of the remainder of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. Stage Two energization shall be completed prior to Initial Operation of the Generating Facility or Merchant Transmission Facility.

(B) In the case of Interconnection Facilities and Transmission Owner Upgrades related to interconnection of a Transmission Project Developer for which the Transmission Provider determines that two-stage energization is inapplicable, energization shall occur in a single stage, consisting of energization of the Interconnection Facilities and Transmission Owner Upgrades and the Generating Facility or Merchant Transmission Facility. Such a single-stage energization shall be regarded as Stage Two energization for the purposes of the remaining provisions of this section 11.8.

11.8.1 Stage One energization of the Interconnection Facilities and Transmission Owner Upgrades may not occur prior to the satisfaction of the following additional conditions:

(a) The Project Developer shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Transmission Owner Interconnection Facilities that Project Developer has constructed; and



(b) The Project Developer shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Transmission Owner Interconnection Facilities and Stand Alone that Project Developer has constructed.

11.8.2 As soon as practicable after the satisfaction of the conditions for Stage One energization specified in sections 11.7 and 11.8.1 of this Schedule L, the Transmission Owner and the Project Developer shall coordinate and undertake the Stage One energization of facilities.

11.8.3 Stage Two energization of the Interconnection Facilities and Transmission Owner Upgrades may not occur prior to the satisfaction of the following additional conditions:

(a) The Project Developer shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that Project Developer has constructed and operational control of which it has not previously transferred pursuant to section 11.8.1 of this Schedule L;

(b) The Project Developer shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that Project Developer has constructed and which were not included in the Stage One energization, but are included in the Stage Two energization; and

(c) Telemetry systems shall be operational and shall be providing Transmission Provider and the Transmission Owner with telemetered data as specified pursuant to section 8.5.2 of Appendix 2 to this GIA.

11.8.4 As soon as practicable after the satisfaction of the conditions for Stage Two energization specified in sections 11.7 and 11.9.3 of this Schedule L, the Transmission Owner and the Project Developer shall coordinate and undertake the Stage Two energization of facilities.

11.8.5 To the extent defects in any Interconnection Facilities and Transmission Owner Upgrades are identified during the energization process, the energization will not be deemed successful. In that event, the Constructing Entity shall take action to correct such defects in any Interconnection Facilities and Transmission Owner Upgrades that it built as promptly as practical after the defects are identified. The affected Constructing Entity shall so notify the other Construction Parties when it has corrected any such defects, and the Constructing Entities shall recommence efforts, within 10 days thereafter, to energize the appropriate Interconnection Facilities and Transmission Owner Upgrades in accordance with section 11.9;

provided that the Transmission Owner may, in the reasonable exercise of its discretion and with the approval of Transmission Provider, require that further inspection and testing be performed in accordance with section 11.7 of this Schedule L.

11.9 Transmission Owner's Acceptance of Facilities Constructed by Project Developer:

Within five days after determining that Interconnection Facilities and Transmission Owner Upgrades have been successfully energized, the Transmission Owner shall issue a written notice to the Project Developer accepting the Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer that were successfully energized. Such acceptance shall not be construed as confirming, endorsing or providing a warranty by the Transmission Owner as to the design, installation, construction, fitness, safety, durability or reliability of any Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer, or their compliance with Applicable Standards.

11.10 Addendum of Non-Standard Terms and Conditions for Construction Service. In the event of any conflict between a provision of Schedule F of this GIA that FERC has accepted and any provision of the standard terms and conditions set forth in this Schedule L and Appendix 2 of this GIA that relates to the same subject matter, the pertinent provision of Schedule F of this GIA shall control.

SCHEDULE L, APPENDIX 1

NEGOTIATED CONTRACT OPTION TERMS

Tariff, Part IX, Subpart C

FORM OF  
WHOLESALE MARKET PARTICIPATION AGREEMENT

(Project Identifier # \_\_\_\_\_)

**WHOLESALE MARKET PARTICIPATION AGREEMENT**

**Among**

**PJM INTERCONNECTION, L.L.C.**

**And**

**And**

**WHOLESALE MARKET PARTICIPATION AGREEMENT**

**By and Among**  
**PJM Interconnection, L.L.C.**

**And**  
**[Name of Wholesale Market Participant]**

**And**  
**[Name of Transmission Owner]**  
**(Project Identifier # )**

This Wholesale Market Participation Agreement (“WMPA”), including the Specifications, Appendices, and Schedules attached hereto and incorporated herein, is entered into by and among PJM Interconnection, L.L.C., the Regional Transmission Organization for the PJM Region (“Transmission Provider” or “PJM”), ( “Project Developer” or “Wholesale Market Participant” [OPTIONAL: or “[short name]”]), and ( “Transmission Owner” {OPTIONAL: or “[short name]”}) (referred to individually as a “Party” and collectively as the “Parties”) in order to effectuate Wholesale Transactions by Wholesale Market Participant in PJM’s markets. [Use as/when applicable: This WMPA supersedes the {insert details to identify the agreement being superseded, the effective date of the agreement, the service agreement number designation, the prior position number or project identifier, and the FERC docket number, if applicable.}]

**WITNESSETH**

WHEREAS, Wholesale Market Participant is developing and will own and control a generation or storage resource that it intends to use to engage in Wholesale Transactions in PJM’s markets (the “Generating Facility”), and desires to maintain its proposed Generating Facility in the Cycle of projects that PJM studies for potential reliability impacts to the Transmission System;

WHEREAS, Wholesale Market Participant is seeking to physically interconnect its Generating Facility at a local distribution or sub-transmission facility that at this time is not subject to the PJM Open Access Transmission Tariff (“Tariff”) under Federal Energy Regulatory Commission (“FERC” or “Commission”) jurisdiction;

WHEREAS, Wholesale Market Participant and ([Transmission Owner] [or if the physical interconnection is at Municipality/Cooperative facilities, insert the name of the Municipality/Cooperative ] ) or its affiliate have entered into a separate non-FERC jurisdictional two-party interconnection agreement in order to address issues of physical interconnection, local upgrades, and local charges that may be presented by the interconnection of the Generating Facility to the local distribution or sub-transmission facility (the “Interconnection Agreement”); and

WHEREAS, the Interconnection Agreement is a Condition Precedent to this WMPA, and this WMPA is hereby made expressly contingent upon the satisfaction of the Condition Precedent

as described in section 3.0 below, and, in the event the Condition Precedent is not satisfied, then this WMPA automatically will be null and void *ab initio* and will have no further force or effect, and, moreover, the Interconnection Agreement must remain in full force and effect in order for Wholesale Market Participant to use the Generating Facility to engage in Wholesale Transactions in PJM's markets under this WMPA.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, along with other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged by Transmission Provider, Transmission Owner, and Wholesale Market Participant; the Parties agree to assume all of the rights and obligations consistent with the rights and obligations relating to Network Upgrades and metering requirements as set forth in the Tariff as of the effective date of this WMPA, required for Wholesale Market Participant to engage in Wholesale Transactions in PJM's markets using the Generating Facility; and the Parties mutually covenant and agree as follows:

### **Article 1 – DEFINITIONS and EFFECTIVE DATE**

**1.0 Defined Terms.** All capitalized terms used and not otherwise defined herein shall have the meanings set forth in Appendix 1 hereto.

**1.1 Effective Date.** This WMPA shall become effective on the date it is executed by all Parties, or, if this WMPA is filed with FERC unexecuted, on the date specified by FERC. This WMPA shall terminate on such date as mutually agreed upon by the Parties, unless earlier terminated consistent with the provisions of section 3.0 or Appendix 2, section 8 of this WMPA.

**1.2 Assumption of Tariff Obligations.** Wholesale Market Participant agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement, and the PJM Manuals.

**1.3 Incorporation of Other Documents.** All portions of the Tariff and the Operating Agreement pertinent to the subject matter of this WMPA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.

### **Article 2 - NOTICES and MISCELLANEOUS**

**2.0 Notices.** Any notice, demand, or request required or permitted to be given by any Party to another Party and any instrument required or permitted to be tendered or delivered by any Party in writing to another Party shall be provided electronically or may be so given, tendered, or delivered by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the electronic or other address specified below.

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403-2497  
interconnectionagreementnotices@pjm.com

Wholesale Market Participant:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Transmission Owner:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Any Party may change its address or designated representative for notice by giving notice to the other Parties in the manner provided for above.

**2.1 Construction with Other Parts of the Tariff.** This WMPA shall not be construed as an application for service under Tariff, Part II or Tariff, Part III.

**2.2 Warranty for System Impact Studies and/or Facilities Study(ies).** In analyzing and preparing the System Impact Studies and/or Facilities Study(ies), and in designing and specifying the Network Upgrades that are required for reliability reasons as described in Schedule D of this WMPA, Transmission Provider, Transmission Owner, and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely upon information provided by Wholesale Market Participant and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER, NOR SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR TRANSMISSION OWNER MAKE ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDIES AND/OR FACILITIES STUDY(IES), OR OF THE NETWORK UPGRADES. Wholesale Market Participant acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.



**2.3 Waiver.** No waiver by any Party of one or more defaults by another Party in performance of any of the provisions of this WMPA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.

**2.4 Amendment.** This WMPA or any part thereof may not be amended, modified, or waived other than by a written document signed by all Parties. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the Parties, without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.

## **2.5 Assignment**

### **2.5.1 Assignment by Wholesale Market Participant with Prior Consent**

Except as provided in section 2.5.2 of this WMPA, Wholesale Market Participant shall not assign its rights or delegate its duties under this WMPA without the prior written consent of the other Parties, which consent shall not be unreasonably withheld, conditioned, or delayed, and any such assignment or delegation made without such prior written consent shall be null and void.

### **2.5.2 Assignment by Wholesale Market Participant without Prior Consent**

#### **2.5.2.1 Assignment to Owners:**

If the Interconnection Agreement provides that it may be assigned, and the Interconnection Agreement was assigned, then Wholesale Market Participant may assign its rights or delegate its duties under this WMPA, without Transmission Provider's or Transmission Owner's prior consent, to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all of the Generating Facility, provided that prior to the effective date of any such assignment (1) the assignee shall demonstrate to Transmission Provider that, as of the effective date of the assignment, the assignee has the technical and operational competence to comply with the requirements of this WMPA, (2) the assignee assumes all rights, duties, and obligations of Wholesale Market Participant under this WMPA in a writing to Transmission Provider and Transmission Owner, and (3) the assignee shall demonstrate that assignee is the same legal entity that has been assigned the Interconnection Agreement. Any assignment described herein shall not relieve or discharge Wholesale Market Participant from any of its obligations hereunder absent the written consent of Transmission Provider and Transmission Owner, such consent not to be unreasonably withheld, conditioned, or delayed

#### **2.5.2.2 Assignment to Lenders:**

If the Interconnection Agreement provides that it may be assigned to any Project Finance Entity(ies), and the Interconnection Agreement was so assigned, then Wholesale Market Participant may assign this WMPA to such Project Finance Entity(ies) without Transmission Provider's or Transmission Owner's consent, provided that such assignment does not alter or diminish Wholesale Market Participant's duties and obligations under this WMPA. If Wholesale Market Participant provides Transmission Provider and Transmission Owner with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contact(s) for notice of Breach consistent with Appendix 2, section 7.3 hereto, then Transmission Provider and Transmission Owner shall provide notice and reasonable opportunity for such Project Finance Entity(ies) to cure any Breach under this WMPA in accordance with this WMPA. Transmission Provider or Transmission Owner shall, if requested by such Project Finance Entity(ies), provide such customary and reasonable documents, including consents to assignment, as may reasonably be requested with respect to the assignment and status of this WMPA, provided that such documents do not alter or diminish the rights of Transmission Provider or Transmission Owner under this WMPA, except with respect to providing notice of Breach to such Project Finance Entity(ies) consistent with Appendix 2, section 6.3 hereto. Upon presentation of Transmission Provider's or Transmission Owner's invoice therefor, Wholesale Market Participant shall pay Transmission Provider's or Transmission Owner's reasonable documented cost of providing such documents and certificates as requested by such Project Finance Entity(ies). Any assignment described herein shall not relieve or discharge Wholesale Market Participant from any of its obligations hereunder absent the written consent of Transmission Provider and Transmission Owner.

### **2.5.3 Assignment by Transmission Owner**

Transmission Owner shall be entitled, subject to applicable laws and regulations, to assign this WMPA to an Affiliate or successor that owns and operates all or a substantial portion of Transmission Owner's transmission facilities.

### **2.5.4 Successors and Assigns:**

This WMPA and all of its provisions are binding upon, and inure to the benefit of, the Parties and their respective successors and permitted assigns.

### **2.5.5 Rights to Facilities:**

Nothing in this WMPA provides any rights with regard to the use of the non-FERC jurisdictional distribution or sub-transmission facilities owned, operated, and maintained by Transmission Owner.

## **Article 3 – CONTINGENCIES and PROJECT-SPECIFIC MILESTONES**

**3.0 Contingencies.** This WMPA is hereby made expressly contingent on Wholesale Market Participant having entered into the Interconnection Agreement (the “Condition Precedent”). Notwithstanding anything to the contrary in this WMPA, in the event that the Condition Precedent is not satisfied, then this WMPA automatically will be null and void *ab initio* and will have no further force or effect. Further, the Interconnection Agreement must remain in full force and effect in order for Wholesale Market Participant to use the Generating Facility to engage in Wholesale Transactions in PJM’s markets under this WMPA. The effectiveness of this WMPA is expressly contingent on the effectiveness of the Interconnection Agreement, and this WMPA shall automatically terminate upon termination of the Interconnection Agreement.

**3.1 Project-Specific Milestones.** During the term of this WMPA, Wholesale Market Participant shall ensure that it meets each of the following milestones:

[Specify Project-Specific Milestones]

[As appropriate include the following standard Milestones]

**3.1.1 Substantial Site work completed.** On or before \_\_\_\_\_, Wholesale Market Participant must demonstrate completion of at least 20 percent of project site construction.

**3.1.2 Commercial Operation.** On or before \_\_\_\_\_, Wholesale Market Participant must demonstrate commercial operation of all generating units in order to achieve the full Maximum Facility Output set forth in section 1.0(c) of the Specifications to this WMPA. Failure to achieve this Maximum Facility Output may result in a permanent reduction in Maximum Facility Output of the Generating Facility, and, if necessary, a permanent reduction of the Capacity Interconnection Rights to the level achieved. Demonstrating commercial operation includes achieving Initial Operation and making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

**3.1.3 Documentation.** Within one month following full commercial operation of the Generating Facility, Wholesale Market Participant must provide certified documentation demonstrating that the “as-built” Generating Facility is consistent with the applicable PJM studies and agreements. Wholesale Market Participant must also provide PJM with “as-built” electrical modeling data or confirm that previously submitted data remain valid.

[Add Additional Project Specific Milestones as appropriate]

Wholesale Market Participant shall demonstrate the occurrence of each of the foregoing milestones to Transmission Provider’s reasonable satisfaction. Transmission Provider may reasonably extend any such milestone dates in the event of delays that Wholesale Market

Participant (i) did not cause and (ii) could not have remedied through the exercise of due diligence.

[Include the below optional Article 4 when Municipality/Cooperative facilities reside between the Generating Facility and Transmission Owner facilities.]

#### **Article 4 – POINT of COMMON COUPLING**

**4.0 Rights to Facilities.** Nothing in this WMPA provides any rights with regard to the use of the non-FERC jurisdictional distribution or sub-transmission facilities owned, operated, and maintained by [insert name of Municipality/Cooperative].

**4.1 Point of Common Coupling.** The electrical Point of Interconnection for the Generating Facility under this WMPA, for the purpose of engaging in Wholesale Transactions in PJM's markets, is located at a point where Transmission Owner's facilities are physically interconnected to facilities owned by [insert name of Municipality/Cooperative], to which Wholesale Market Participant's facilities are or will be physically interconnected, at a point of common coupling, pursuant to the Interconnection Agreement referenced in this WMPA. Therefore, the Parties acknowledge and agree that Wholesale Transactions using the Generating Facility under this WMPA depend upon the physical availability of, and Wholesale Market Participant's right to utilize, the [insert name of Municipality/Cooperative] facilities and the physical interconnection of the [insert name of Municipality/Cooperative] facilities with those of Wholesale Market Participant and Transmission Owner. Accordingly, the following shall apply:

4.1.1 Wholesale Market Participant shall obtain [insert name of Municipality/Cooperative]'s agreement to grant to Wholesale Market Participant the rights to utilize the [insert name of Municipality/Cooperative] facilities to transport energy produced by the Generating Facility to the Point of Interconnection as shown in Schedule B of this WMPA.

4.1.2 Concurrently with execution of this WMPA, Wholesale Market Participant shall provide Transmission Provider and Transmission Owner with copies of any and all agreements pursuant to which [insert name of Municipality/Cooperative] agrees to grant to Wholesale Market Participant the rights as described in section 4.1.1.

4.1.3 In the event that any of the [insert name of Municipality/Cooperative] facilities used to provide physical interconnection of the Generating Facility become unavailable for any reason to engage in Wholesale Transactions under the Point of Interconnection as shown in Schedule B of this WMPA, Wholesale Market Participant's rights as set forth in Specifications, section 2 of this WMPA will be suspended for the duration of such unavailability, and Transmission Provider and Transmission Owner shall incur no liability to Wholesale Market Participant in connection with such suspension.

4.1.4 In the event that [insert name of Municipality/Cooperative] ceases operations at its facility where the Generating Facility is located, or removes from service any of the electrical facilities on which the Generating Facility's physical interconnection

depends, it shall be Wholesale Market Participant's responsibility to acquire and install, or to obtain rights to utilize, any facilities necessary to enable Wholesale Market Participant to deliver energy produced by the Generating Facility to and across the Point of Interconnection as shown in Schedule B of this WMPA.

IN WITNESS WHEREOF, Transmission Provider, Wholesale Market Participant, and Transmission Owner have caused this WMPA to be executed by their respective authorized officials. By each individual signing below, each represents to the others that they are duly authorized to sign on behalf of their company and have the actual and/or apparent authority to bind the respective company to this WMPA.

(Project Identifier # \_\_\_\_\_)

Transmission Provider: **PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Wholesale Market Participant: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**SPECIFICATIONS FOR  
WHOLESALE MARKET PARTICIPATION AGREEMENT**

**By and Among  
PJM INTERCONNECTION, L.L.C.**

**And  
[Name of Wholesale Market Participant]**

**And  
[Name of Transmission Owner]  
(Project Identifier # \_\_\_\_\_)**

**1.0 Description of Generating Facility** owned and controlled by Wholesale Market Participant to engage in Wholesale Transactions in PJM's markets under this WMPA:

a. Name of Generating Facility:

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b. Location of Generating Facility:

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c. Size in megawatts of Generating Facility:

\_\_\_\_\_  
Maximum Facility Output of \_\_\_\_\_ MW

d. Description of the equipment configuration, including the interconnection facilities owned by Wholesale Market Participant that physically interconnect the Generating Facility to the local distribution or sub-transmission facility:

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**2.0 Rights**

**2.1 Capacity Interconnection Rights:** {Instructions: This section will not apply if the Generating Facility is exclusively an Energy Resource and thus is granted no CIRs; see alternate section 2.1 below.}

Consistent with the applicable terms of the Tariff, and subject to construction of any Network Upgrades required for reliability reasons as described in Schedule D of this WMPA, Wholesale Market Participant shall have Capacity Interconnection Rights at the Point of Interconnection specified in Schedule B of this WMPA in the amount of \_\_\_\_\_ MW; provided, however, that nothing in this WMPA provides any rights with regard to the use of local distribution or sub-transmission facilities. {Instructions: This number is the total of the CIRs granted under this WMPA, plus any prior CIRs if this is a superseding WMPA.}

[Instructions: Include the following language when the projected Initial Operation is in advance of the study year used for the System Impact Studies, and CIRs are only interim until the study year.]

Consistent with the applicable terms of the Tariff, and subject to construction of any Network Upgrades required for reliability reasons as described in Schedule D of this WMPA, Wholesale Market Participant shall have Capacity Interconnection Rights at the Point of Interconnection specified in Schedule B of this WMPA in the amount of \_\_\_\_\_ MW commencing \_\_\_\_\_ {e.g., June 1, 2023}. From the effective date of this WMPA until \_\_\_\_\_ {e.g., May 31, 2023} (the “interim time period”), Wholesale Market Participant may be awarded interim Capacity Interconnection Rights in an amount not to exceed \_\_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall depend upon the completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_\_ {e.g., May 31, 2023}.

**2.1a** To the extent that any portion of the Generating Facility is not a Capacity Resource with Capacity Interconnection Rights, such portion of the Generating Facility shall be an Energy Resource. Pursuant to this WMPA, Wholesale Market Participant may sell energy into PJM’s markets in an amount equal to the Generating Facility’s Maximum Facility Output indicated in section 1.0c of these Specifications. PJM reserves the right to limit injections in the event reliability would be affected by output greater than such quantity.

{Instructions: This version of section 2.1 will be used in lieu of section 2.1 above when a Generating Facility will be an Energy Resource and therefore will not be granted CIRs.}

**[2.1] Energy Resource:** The Generating Facility described in section 1.0 of these Specifications shall be an Energy Resource. Pursuant to this WMPA, Wholesale Market Participant may sell energy into PJM’s markets in an amount equal to the Generating Facility’s Maximum Facility Output indicated in section 1.0c of these Specifications. PJM reserves the right to limit injections in the event reliability would be affected by output greater than such quantity.



**3.0 Ownership and Location of Metering Equipment.** The metering equipment to be constructed, the capability of the metering equipment to be constructed, and the ownership thereof as required for Wholesale Market Participant to use the Generating Facility to engage in Wholesale Transactions in PJM's markets shall be identified in Schedule B to this WMPA, and provided consistent with the PJM Manuals.

**APPENDICES:**

- **APPENDIX 1 - DEFINITIONS**
- **APPENDIX 2 - STANDARD TERMS AND CONDITIONS**

**SCHEDULES:**

- **SCHEDULE A - SITE PLAN**
- **SCHEDULE B - SINGLE-LINE DIAGRAM**
- **SCHEDULE C - LIST OF METERING EQUIPMENT**
- **SCHEDULE D - LIST OF NETWORK UPGRADES**
- **SCHEDULE E - APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS**
- **SCHEDULE F - SCHEDULE OF NON-STANDARD TERMS AND CONDITIONS**

APPENDIX 1

DEFINITIONS

From the Generation Interconnection Procedures accepted for filing by FERC as of the  
effective date of this agreement

## APPENDIX 2

### STANDARD TERMS AND CONDITIONS

#### 1 Survival

The Wholesale Market Participation Agreement shall continue in effect after termination to the extent necessary to provide for final billings and payments, and to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while the Wholesale Market Participation Agreement was in effect.

#### 2 No Transmission Services

The execution of a Wholesale Market Participation Agreement does not constitute a request for transmission service, or entitle Project Developer to receive transmission service, under Tariff, Part II or Tariff, Part III. Nor does the execution of a Wholesale Market Participation Agreement obligate Transmission Owner or Transmission Provider to procure, supply, or deliver to Project Developer or the Generating Facility any energy, capacity, Ancillary Services, or Station Power (and any associated distribution services).

#### 3 Metering

##### 3.1 General:

Metering shall be provided in accordance with the PJM Manuals. All Metering Equipment shall be tested prior to any operation of the Generating Facility. Power flows to and from the Generating Facility shall be compensated to the Point of Interconnection, or, upon the mutual agreement of Transmission Owner and Project Developer, to another location.

##### 3.2 Standards:

All Metering Equipment installed pursuant to this Appendix 2 to be used for billing and payments shall be revenue quality Metering Equipment and shall satisfy applicable ANSI standards and Transmission Provider's metering standards and requirements. Nothing in this Appendix 2 precludes the use of Metering Equipment for any retail services of Transmission Owner provided, however, that in such circumstances Applicable Laws and Regulations shall control.

##### 3.3 Testing of Metering Equipment:

The Interconnected Entity that owns the Metering Equipment shall operate, maintain, inspect, and test all Metering Equipment upon installation and at least once every two (2) years thereafter. Upon reasonable request by the other Interconnected Entity, the owner of the Metering Equipment shall inspect or test the Metering Equipment more frequently than every two years, but in no event more frequently than three times in any 24-month period. The owner of the Metering Equipment shall give reasonable notice to the other Parties of the time when any inspection or test of the

owner's Metering Equipment shall take place, and the other Parties may have representatives present at the test or inspection. If Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired, or replaced in order to provide accurate metering. Where Transmission Owner owns the Metering Equipment, the expense of such adjustment, repair, or replacement shall be borne by Project Developer, except that Project Developer shall not be responsible for such expenses where the inaccuracy or defect is caused by Transmission Owner. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than 1 percent from the measurement made by the standard meter used in the test, the owner of the Metering Equipment shall inform Transmission Provider, and Transmission Provider shall inform the other Interconnected Entity, of the need to correct all measurements made by the inaccurate meter for the period during which the inaccurate measurements were made, if the period can be determined. If the period of inaccurate measurement cannot be determined, the correction shall be for the period immediately preceding the test of the Metering Equipment that is equal to one-half of the time from the date of the last previous test of the Metering Equipment, provided that the period subject to correction shall not exceed nine months.

### **3.4 Metering Data:**

At Project Developer's expense, the metered data shall be telemetered (a) to a location designated by Transmission Provider; (b) to a location designated by Transmission Owner, unless Transmission Owner agrees otherwise; and (c) to a location designated by Project Developer. Data from the Metering Equipment at the Point of Interconnection shall be used, under normal operating conditions, as the official measurement of the amount of energy delivered from the Generating Facility to the Point of Interconnection, provided that Transmission Provider's rules applicable to Station Power as set forth at Tariff, Attachment K-Appendix, section 1.7.10(d) shall control with respect to a Project Developer's consumption of Station Power.

### **3.5 Communications:**

#### **3.5.1 Project Developer Obligations:**

Project Developer shall install and maintain satisfactory operating communications with Transmission Provider's system dispatcher or its other designated representative, and with Transmission Owner. Project Developer shall provide standard voice line, dedicated voice line, and electronic communications at its Generating Facility control room. Project Developer also shall provide and maintain backup communication links with both Transmission Provider and Transmission Owner for use during abnormal conditions as specified by Transmission Provider and Transmission Owner, respectively. Project Developer further shall provide the dedicated data circuit(s) necessary to provide Project Developer data to Transmission Provider and Transmission Owner as necessary to conform with Applicable Technical Requirements and Standards.

#### **3.5.2 Remote Terminal Unit:**

Unless otherwise deemed unnecessary by Transmission Provider and Transmission Owner, prior to any operation of the Generating Facility, a remote terminal unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Project Developer, or by

Transmission Owner at Project Developer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Provider and Transmission Owner through use of a dedicated point-to-point data circuit(s). Instantaneous bi-directional real power and, with respect to the Generating Facility, reactive power flow information must be telemetered directly to the location(s) specified by Transmission Provider and Transmission Owner.

### **3.5.3. Phasor Measurement Units (PMUs):**

A Project Developer that submitted a New Service Request on or after October 1, 2012 with a proposed new Generating Facility that has a Maximum Facility Output equal to or greater than 100 MW shall install and maintain, at its expense, phasor measurement units (PMUs). PMUs shall be installed on the Generating Facility low side of the generator step-up transformer, unless it is a non-synchronous generation facility, in which case the PMUs shall be installed on the Generating Facility side of the Point of Interconnection. The PMUs must be capable of performing phasor measurements at a minimum of 30 samples per second which are synchronized via a high-accuracy satellite clock. To the extent Project Developer installs similar quality equipment, such as relays or digital fault recorders, that can collect data at least at the same rate as PMUs and which data is synchronized via a high-accuracy satellite clock, such equipment would satisfy this requirement. As provided for in the PJM Manuals, a Project Developer shall be required to install and maintain, at its expense, PMU equipment which includes the communication circuit capable of carrying the PMU data to a local data concentrator, and then transporting the information continuously to the Transmission Provider; as well as store the PMU data locally for 30 days. Project Developer shall provide to Transmission Provider all necessary and requested information through the Transmission Provider synchrophasor system, including the following: (a) gross MW and MVAR measured at the Generating Facility side of the generator step-up transformer (or, for a non-synchronous generation facility, to be measured at the Generating Facility side of the Point of Interconnection); (b) generator terminal voltage; (c) generator terminal frequency; and (d) generator field voltage and current, where available. The Transmission Provider will install and provide for the ongoing support and maintenance of the network communications linking the data concentrator to the Transmission Provider. Additional details regarding the requirements and guidelines of PMU data and telecommunication of such data are contained in the PJM Manuals.

## **4 Force Majeure**

### **4.1 Notice:**

A Party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify the other Parties in writing or by telephone within a reasonable time after the occurrence of the cause relied upon.

### **4.2 Duration of Force Majeure:**

A Party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force

Majeure to the other Parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The Party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance. The Party affected has a continuing notice obligation to the other Parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The Party affected shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such Party shall resume performance and give prompt written notice thereof to the other Parties.

#### **4.3 Obligation to Make Payments:**

A Party's obligation to make payments for services shall not be suspended by Force Majeure.

#### **4.4 Definition of Force Majeure:**

For the purposes of this section, Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a Party's control that, in any of the foregoing cases, by exercise of due diligence, such Party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected Party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected Party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected Party.

### **5 Indemnity**

#### **5.1 Indemnity:**

Each Party shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents, and employees, and Affiliates, from and against any and all loss, liability, damage, cost, or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying Party's breach of any of the representations or warranties made in, or failure of the indemnifying Party or any of its subcontractors to perform

any of its obligations under, this Wholesale Market Participation Agreement (including Appendix 2), or (ii) the negligence or willful misconduct of the indemnifying Party or its contractors; provided, however, that no Party shall have any indemnification obligations under this section 5.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Party seeking indemnity.

## **5.2 Indemnity Procedures:**

Promptly after receipt by a Person entitled to indemnity (“Indemnified Person”) of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in section 5.1 may apply, the Indemnified Person shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party’s indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party. The Indemnified Person shall cooperate with the indemnifying Party with respect to the matter for which indemnification is claimed. The indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Party, and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit, or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit, or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit, or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the Indemnified Person; and (ii) shall not settle or consent to the entry of any judgment in any action, suit, or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned, or delayed.

## **5.3 Indemnified Person:**

If an Indemnified Person is entitled to indemnification under this section 6 as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under section 5.2 of this Appendix 2, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Party contest, settle, or consent to the entry of any judgment with respect to, or pay in full, such claim.

## **5.4 Amount Owing:**



If an indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this section 5, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

## **5.5 Limitation on Damages:**

Except as otherwise provided in this section 5, the liability of a Party under this Appendix 2 shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees, and agents, or any of them, be liable to another Party, whether in tort, contract, or other basis in law or equity for any special, indirect, punitive, exemplary, or consequential damages, including lost profits. The limitations on damages specified in this section 5.5 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint, or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this Appendix 2. The provisions of this section 5.5 shall survive the termination or expiration of the Wholesale Market Participation Agreement.

## **5.6 Limitation of Liability in Event of Breach:**

A breaching Party ("Breaching Party") shall have no liability hereunder to the other Parties, and the other Parties hereby release the Breaching Party, for all claims or damages that either of them incurs that are associated with any interruption in the availability of the Generating Facility, Interconnection Facilities and Transmission Owner Upgrades, Transmission System, or Interconnection Service, or damages to a Party's facilities, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this Wholesale Market Participation Agreement (including Appendix 2).

## **5.7 Limited Liability in Emergency Conditions:**

Except as otherwise provided in the Tariff or Operating Agreement, no Party shall be liable to any other Party for any action that it takes in responding to an Emergency Condition, so long as such action is made in good faith, is consistent with Good Utility Practice, and is not contrary to the directives of Transmission Provider or Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Project Developer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or Transmission Owner related to an Emergency Condition.

## **6 Breach, Cure, and Default**

### **6.1 Breach:**

A Breach of this Wholesale Market Participation Agreement shall include:

(a) The failure to pay any amount when due;

(b) The failure to comply with any material term or condition of this Appendix 2 or of the other portions of the Wholesale Market Participation Agreement or any attachments or Schedule hereto, including but not limited to any material breach of a representation, warranty, or covenant (other than in subsections (a), (c), and (d) of this section) made in this Appendix 2;

(c) Assignment of the Wholesale Market Participation Agreement in a manner inconsistent with its terms;

(d) Failure of a Party to provide information or data required to be determined under this Appendix 2 to another Party for such other Party to satisfy its obligations under this Appendix 2.

## **6.2 Continued Operation:**

In the event of a Breach or Default by either Interconnected Entity, and subject to termination of the Wholesale Market Participation Agreement under section 8 of this Appendix 2, the Interconnected Entities shall continue to operate and maintain, as applicable, such DC power systems, protection and Metering Equipment, telemetering equipment, SCADA equipment, transformers, Secondary Systems, communications equipment, building facilities, software, documentation, structural components, and other facilities and appurtenances that are reasonably necessary for Transmission Provider and Transmission Owner to operate and maintain the Transmission System, and for Project Developer to operate and maintain the Generating Facility, in a safe and reliable manner.

## **6.3 Notice of Breach:**

A Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider, and to other persons that the Breaching Party identifies in writing to the other Parties in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider or Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that Project Developer has provided the notifying Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 12 of this Appendix 2.

## **6.4 Cure and Default:**

A Breaching Party that does not take steps to cure the Breach pursuant to this section 6.4 is automatically in Default of this Appendix 2 and of the Wholesale Market Participation Agreement, and this Wholesale Market Participation Agreement shall be deemed terminated. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

### **6.4.1 Cure of Breach:**

**6.4.1.1** Except for the event of Breach set forth in section 6.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Parties to this WMPA. Such agreement shall not be unreasonably withheld.

**6.4.1.2** In an event of Breach set forth in section 6.1(a), the Breaching Interconnection shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

## **6.5 Right to Compel Performance:**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 11.1 of this Appendix 2, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy, and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **7 Termination**

### **7.1 Termination of the Wholesale Market Participation Agreement:**

This Wholesale Market Participation Agreement may be terminated by the following means:

#### **7.1.1 By Mutual Consent:**

The Wholesale Market Participation Agreement may be terminated as of the date on which the Parties mutually agree.

#### **7.1.2 By Project Developer:**

Subject to its payment of Cancellation Costs, Project Developer may unilaterally terminate the Wholesale Market Participation Agreement pursuant to Applicable Laws and Regulations upon providing Transmission Provider and the Transmission Owner sixty days prior written notice thereof.

#### **7.1.3 Upon Default of Project Developer:**

Transmission Provider may terminate the Wholesale Market Participation Agreement upon the Default of Project Developer of its obligations under the Wholesale Market Participation Agreement by providing Project Developer and Transmission Owner prior written notice of termination.

#### **7.1.4 Cancellation Cost Responsibility upon Termination:**

In the event of cancellation pursuant to section 7.1 of this Appendix 2, Project Developer shall be liable to pay to Transmission Owner or Transmission Provider all Cancellation Costs in connection with the Wholesale Market Participation Agreement. Cancellation costs may include costs for Network Upgrades assigned to Project Developer, in accordance with the Tariff and as reflected in this Wholesale Market Participation Agreement, that remain the responsibility of Project Developer under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Project Developers in the Cycle. In the event Transmission Owner incurs Cancellation Costs, it shall provide Transmission Provider, with a copy to Project Developer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. Project Developer shall pay Transmission Provider each invoice for Cancellation Costs within 30 days after, as applicable, Transmission Owner's or Transmission Provider's presentation to Project Developer of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing Party seeks to collect. Upon receipt of each of Project Developer's payments of such invoices of Transmission Owner, Transmission Provider shall reimburse Transmission Owner for Cancellation Costs incurred by the latter.

#### **7.2 FERC Approval:**

Notwithstanding any other provision of this Appendix 2, no termination hereunder shall become effective until the Interconnected Entities and/or Transmission Provider have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with the FERC of a notice of termination of the Wholesale Market Participation Agreement, and acceptance of such notice for filing by the FERC.

#### **7.3 Survival of Rights:**

Termination of this Wholesale Market Participation Agreement shall not relieve any Party of any of its liabilities and obligations arising under this Wholesale Market Participation Agreement (including Appendix 2) prior to the date on which termination becomes effective, and each Party may take whatever judicial or administrative actions it deems desirable or necessary to enforce its rights hereunder. Applicable provisions of this Appendix 2 will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the Wholesale Market Participation Agreement was in effect.

### **8 Confidentiality**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. If requested by any Party, the disclosing Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Party may disclose such writing to an appropriate Governmental Authority. Any Party shall be responsible for the costs associated with affording confidential treatment to its information.

#### **8.1 Term:**

During the term of the Wholesale Market Participation Agreement, and for a period of three years after the expiration or termination of the Wholesale Market Participation Agreement, except as otherwise provided in this section 8, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other Party.

#### **8.2 Scope:**

Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of this Appendix 2; or (vi) is required, in accordance with section 8.7 of this Appendix 2, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Wholesale Market Participation Agreement. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

#### **8.3 Release of Confidential Information:**

No Party shall disclose Confidential Information to any other person, except to its Affiliates (limited by FERC's Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or considering providing financing to or equity participation in Project Developer or to potential purchasers or assignees of Project Developer, on a need-to-know basis in connection with the Wholesale Market Participation Agreement, unless such person has first been advised of the confidentiality provisions of this section 8 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this section 8.

#### **8.4 Rights:**

Each Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Party. A Party's disclosure to another Party of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **8.5 No Warranties:**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to any other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **8.6 Standard of Care:**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication, or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under the Wholesale Market Participation Agreement or to comply with Applicable Laws and Regulations.

#### **8.7 Order of Disclosure:**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order or waive compliance with the terms of this Appendix 2 or the Wholesale Market Participation Agreement. Notwithstanding the absence of a protective order or agreement, or waiver, the Party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **8.8 Termination of Wholesale Market Participation Agreement:**

Upon termination of the Wholesale Market Participation Agreement for any reason, each Party shall, within 10 calendar days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or to return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party.

#### **8.9 Remedies:**

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this section 8. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this section 8, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section 8, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental or consequential, or punitive damages of any nature or kind resulting from or arising in connection with this section 8.

#### **8.10 Disclosure to FERC or its Staff:**

Notwithstanding anything in this section 8 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Wholesale Market Participation Agreement, the Party shall provide the requested information to FERC or its staff within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.122, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. A Party shall notify the other Parties to the Wholesale Market Participation Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### **8.11 Non-Disclosure:**

Subject to the exception in section 8.10 of this Appendix 2, no Party shall disclose Confidential Information of another Party to any person not employed or retained by the Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Wholesale Market Participation Agreement or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Party's Confidential Information under this subparagraph, the disclosing Party shall promptly notify the other Parties in writing and shall assert confidentiality and cooperate with the other Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order, or other reasonable measures.

#### **8.12 Information in the Public Domain:**



This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### **8.13 Return or Destruction of Confidential Information:**

If a Party provides any Confidential Information to another Party in the course of an audit or inspection, the providing Party may request the other Party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other Party that it has complied with such request.

## **9 Information Access and Audit Rights**

### **9.1 Information Access:**

Consistent with Applicable Laws and Regulations, each Party shall make available such information and/or documents reasonably requested by another Party that are necessary to (i) verify the costs incurred by the other Party for which the requesting Party is responsible under this Appendix 2; and (ii) carry out obligations and responsibilities under this Appendix 2, provided that the Parties shall not use such information for purposes other than those set forth in this section 9.1 and to enforce their rights under this Appendix 2.

### **9.2 Reporting of Non-Force Majeure Events:**

Each Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Appendix 2 for a reason other than an event of Force Majeure as defined in section 5.4 of this Appendix 2. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation, or information provided under this section shall not entitle the receiving Party to allege a cause of action for anticipatory breach of the Wholesale Market Participation Agreement.

### **9.3 Audit Rights:**

Subject to the requirements of confidentiality under section 8 of this Appendix 2, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent other Party, to audit at its own expense the other Party's accounts and records pertaining to such Party's performance and/or satisfaction of obligations arising under this Appendix 2. Any audit authorized by this section shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Appendix 2. Any request for audit shall be presented to the Party to be audited not later than 24 months after the event as to which the audit is sought. Each Party shall preserve all records held by it for the duration of the audit period. Audit rights under this Appendix



2 do not extend to accounts and records pertaining to the non-FERC jurisdictional Interconnection Agreement.

## **10 Disputes**

### **10.1 Submission:**

Any claim or dispute that any Party may have against another arising out of the Wholesale Market Participation Agreement may be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.

### **10.2 Rights Under the Federal Power Act:**

Nothing in this section shall restrict the rights of any Party to file a complaint with FERC under relevant provisions of the Federal Power Act.

### **10.3 Equitable Remedies:**

Nothing in this section shall prevent any Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations.

## **11 Notices**

### **11.1 General:**

Any notice, demand, or request required or permitted to be given by any Party to another, and any instrument required or permitted to be tendered or delivered by any Party in writing to another, shall be provided electronically or may be so given, tendered, or delivered by recognized national courier or by depositing the same with the United States Postal Service with postage prepaid for delivery by certified or registered mail addressed to the Party, or personally delivered to the Party, at the electronic or other address specified in the Wholesale Market Participation Agreement.

### **11.2 Emergency Notices:**

Moreover, notwithstanding the foregoing, any notice hereunder concerning an Emergency Condition or other occurrence requiring prompt attention, or as necessary during day-to-day operations, may be made by telephone or in person, provided that such notice is confirmed in writing promptly thereafter. Notice in an Emergency Condition, or as necessary during day-to-day operations, shall be provided (i) if by Transmission Owner, to the shift supervisor at, as applicable, a Project Developer's Generating Facility; and (ii) if by Project Developer, to the shift supervisor at Transmission Owner's transmission control center.

### **11.3 Operational Contacts:**

Each Party shall designate, and provide to each other Party, contact information concerning, a representative to be responsible for addressing and resolving operational issues as they arise during the term of the Wholesale Market Participation Agreement.

## **12 Miscellaneous**

### **12.1 Regulatory Filing:**

In the event that this Wholesale Market Participation Agreement contains any terms that deviate materially from the form included in the Tariff, Transmission Provider shall file the Wholesale Market Participation Agreement on behalf of itself and Transmission Owner with FERC as a service schedule under the Tariff within 30 days after execution. Project Developer may request that any information so provided be subject to the confidentiality provisions of section 8 of this Appendix 2. Project Developer shall have the right, with respect to a Wholesale Market Participation Agreement tendered to it, to request in writing (a) dispute resolution under Tariff, Part I, section 12, or consistent with Operating Agreement, Schedule 5; or (b) that Transmission Provider file the agreement unexecuted with FERC. With the filing of any unexecuted Wholesale Market Participation Agreement, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between or among the Parties.

### **12.2 Waiver:**

Any waiver at any time by a Party of its rights with respect to a Breach or Default under this Wholesale Market Participation Agreement, or with respect to any other matters arising in connection with this Appendix 2, shall not be deemed a waiver or continuing waiver with respect to any subsequent Breach or Default or other matter.

### **12.3 Amendments and Rights Under the Federal Power Act:**

This Wholesale Market Participation Agreement may be amended or supplemented only by a written instrument duly executed by all Parties. An amendment to the Wholesale Market Participation Agreement shall become effective and a part of this Wholesale Market Participation Agreement upon satisfaction of all Applicable Laws and Regulations. Notwithstanding the foregoing, nothing contained in this Wholesale Market Participation Agreement shall be construed as affecting in any way any of the rights of any Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this Wholesale Market Participation Agreement and every appendix referred to therein shall be amended, as mutually agreed by the Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

### **12.4 Binding Effect:**

This Wholesale Market Participation Agreement, including this Appendix 2, and the rights and obligations thereunder shall be binding upon, and shall inure to the benefit of, the successors and assigns of the Parties.

## **12.5 Regulatory Requirements:**

Each Party's performance of any obligation under this Wholesale Market Participation Agreement for which such Party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **13 Representations and Warranties**

### **13.1 General:**

Each Interconnected Entity hereby represents, warrants, and covenants as follows with these representations, warranties, and covenants effective as to the Interconnected Entity during the time the Wholesale Market Participation Agreement is effective:

#### **13.1.1 Good Standing:**

Such Interconnected Entity is duly organized or formed, as applicable, validly existing, and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated and operates as stated in the Wholesale Market Participation Agreement.

#### **13.1.2 Authority:**

Such Interconnected Entity has the right, power, and authority to enter into the Wholesale Market Participation Agreement, to become a party hereto, and to perform its obligations hereunder. The Wholesale Market Participation Agreement is a legal, valid, and binding obligation of such Interconnected Entity, enforceable against such Interconnected Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization, or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **13.1.3 No Conflict:**

The execution, delivery, and performance of the Wholesale Market Participation Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of the Interconnected Entity, or with any judgment, license, permit, order, material agreement, or instrument applicable to or binding upon the Interconnected Entity or any of its assets.

#### **13.1.4 Consent and Approval:**

Such Interconnected Entity has sought or obtained, or, in accordance with the Wholesale Market Participation Agreement will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery, and performance of the Wholesale Market Participation Agreement and it will provide to any Governmental Authority notice of any actions under this Appendix 2 that are required by Applicable Laws and Regulations.

SCHEDULE A

SITE PLAN

## SCHEDULE B

### SINGLE-LINE DIAGRAM

{If Municipality/Cooperative: Make sure the point of common coupling is designated in the Single-Line Diagram *in addition to* the Point of Interconnection.}

## SCHEDULE C

### LIST OF METERING EQUIPMENT

{Include the following language if not required:}

Not Required.

{If Municipality/Cooperative: Make sure to account for the fact that metering may be installed at the point of common coupling. For example:

Wholesale Market Participant shall be responsible for the installation of metering and telemetry at the point of common coupling (as shown in Schedule B) between the Generating Facility and the [insert name of Municipality/Cooperative] system as required by PJM Manuals M-01 and M14D. [Insert name of Municipality/Cooperative] and Wholesale Market Participant will together determine meter ownership.

Wholesale Market Participant shall make its metering data at the point of common coupling available to [insert name of Municipality/Cooperative], or its affiliate, via telemetry for use by [insert name of Municipality/Cooperative] and Transmission Owner for balancing, settlement, and audit purposes. Wholesale Market Participant may purchase and install its own backup metering.}

**SCHEDULE D**

**LIST OF NETWORK UPGRADES**

{Include the following language if not required:}

Not Required.

{Otherwise, list the Network Upgrades identified through the System Impact Studies, with Stand Alone Network Upgrades, if any, listed separately, and include the sentence below.}

[List]

Construction of these Network Upgrades listed in Schedule D of this WMPA is subject to the terms and conditions of a separate facilities construction agreement between Wholesale Market Participant and Transmission Owner.



## SCHEDULE E

### APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

{Include the following language if not required:}

Not Required.

{Otherwise, include the following language:}

Except as otherwise provided in the Interconnection Agreement, as applicable, the following technical requirements and standards shall apply. To the extent that these Applicable Technical Requirements and Standards conflict with the terms and conditions of the Tariff or any other provision of this WMPA, the Tariff and/or this WMPA shall control.

{Instructions: If the relevant TO Applicable Technical Requirements and Standards **are** posted on the PJM website, use the following language:}

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply. The [Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] is available on the PJM website.

{Instructions. If the relevant TO Applicable Technical Requirements and Standards **are not** posted on the PJM website, use the following language, subject to modifications as appropriate:}

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply.

**SCHEDULE F**

**SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**

{Include the following language if not required:}

Not Required.

Tariff, Part IX, Subpart D

FORM OF  
ENGINEERING AND PROCUREMENT AGREEMENT

Service Agreement No. [ ]

(Project Identifier # )

**ENGINEERING AND PROCUREMENT**  
**AGREEMENT**

**By and Among**

**PJM INTERCONNECTION, L.L.C.**

**And**

**And**

**ENGINEERING AND PROCUREMENT**

**AGREEMENT**

**By and Among**

**PJM Interconnection, L.L.C.**

**And**

**And**

**(Project Identifier # )**

- 1.0 This Engineering and Procurement Agreement (“E&P Agreement”), including the Specifications attached hereto and incorporated herein, is entered into by and among PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”), [ ] (“Project Developer” [OPTIONAL: or [“short name”]]), and [ ] (“Transmission Owner” [OPTIONAL: or [“short name”]]). Transmission Provider, Project Developer and Transmission Owner are individually, a “Party” and together, the “Parties” and collectively are “Parties”. [Use as/when applicable: This E&P Agreement supersedes the {insert details to identify the agreement being superseded, such as whether it is an E&P Agreement or Generator Interconnection Agreement, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}] For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}.
- 2.0 The location and a description of the Generating Facility or Merchant Transmission Facility that Project Developer proposes to interconnect to the Transmission Provider’s Transmission System is attached hereto. In the event that Project Developer will not own the facilities, Project Developer represents and warrants that it is authorized by the owners of such facilities to enter into this E&P Agreement and to represent such control.
- 3.0 In order to advance the completion of its interconnection under the PJM Open Access Transmission Tariff (“Tariff”), Project Developer has requested an E&P Agreement and Transmission Provider has determined that Project Developer is eligible under the Tariff to obtain this E&P Agreement. This E&P Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades.
- 4.0 (a) In accord with the GIP, Project Developer, on or before the effective date of this E&P Agreement, shall provide Transmission Provider (for the benefit of the Transmission Owner) with a letter of credit from an agreed provider or other form of security reasonably acceptable to Transmission Provider in the amount of \$ , which amount equals the estimated costs, determined in accordance with the GIP, of the engineering and procurement activities described in section 2.0 of the Attached

Specifications. Should Project Developer fail to provide such security in the amount or form required, this E&P Agreement shall be terminated. Project Developer acknowledges (1) that it will be responsible for the actual costs of the facilities described in the Specifications, whether greater or lesser than the amount of the payment security provided under this section, and (2) that the payment security under this section does not include any additional amounts that it will owe in the event that it executes a final Generator Interconnection Agreement, as described in section 7.0(a) below.

(b) Project Developer acknowledges (1) that the purpose of this E&P Agreement is to expedite, at Project Developer's request, the engineering and procurement of certain long-lead items, as described in the Specifications, necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request; and (2) that Transmission Provider's Interconnection Studies related to such facilities have not been completed, but that the [identify completed System Impact or other study(ies)], dated [ ], that included Project Developer's project sufficiently demonstrated, in Project Developer's sole opinion, the necessity of facilities additions to the Transmission System to accommodate Project Developer's project to warrant, in Project Developer's sole judgment, its request that the Transmission Owner provide engineering and procurement for the equipment indicated in the Specifications for use in interconnecting Project Developer's project with the Transmission System.

5.0 This E&P Agreement shall be effective on the date it is executed by all Interconnection Parties and shall terminate upon the execution and delivery by Project Developer and Transmission Provider of the final Generator Interconnection Agreement described in section 7.0(a) below, or on such other date as mutually agreed upon by the parties, unless earlier terminated in accordance with the Tariff.

6.0 In addition to the milestones stated in the GIP, during the term of this E&P Agreement, Project Developer shall ensure that its generation project meets each of the following development milestones:

[SPECIFY MILESTONES]

OR

[NOT APPLICABLE FOR THIS E&P AGREEMENT]

OR

[MILESTONE REQUIREMENTS WILL BE SPECIFIED IN THE FURTHER GENERATOR INTERCONNECTION AGREEMENT DESCRIBED IN SECTION 7.0(a)]

7.0 (a) Transmission Provider and the Transmission Owner agree to provide for the engineering and procurement of the facilities identified, and to the extent described, in section 2.0 of the Specifications in accordance with the GIP, as amended from time to time, and this E&P Agreement. The parties agree that (1) this E&P Agreement shall not

provide for or authorize Interconnection Service or rights associated therewith for the Project Developer, and (2) Interconnection Service will commence only after Project Developer has entered into a final Generator Interconnection Agreement with Transmission Provider and the Transmission Owner (or, alternatively, the Project Developer, Transmission Owner or Transmission Provider has exercised its right to initiate dispute resolution or to have the final Generator Interconnection Agreement filed with the FERC unexecuted) after completion of the System Impact Studies related to Project Developer's Interconnection Request and otherwise in accordance with the Tariff. The final Generator Interconnection Agreement may further provide for construction of, and payment for, transmission facilities additional to those identified in the attached Specifications. Should Project Developer fail to enter into such final Generator Interconnection Agreement (or, alternatively, to initiate dispute resolution or request in writing that the agreement be filed with the FERC unexecuted) within the time prescribed by the Tariff, Transmission Provider shall have the right, upon providing written notice to Project Developer, to terminate this E&P Agreement.

(b) In the event that Project Developer decides not to interconnect its proposed facilities, as described in section 1.0 of the Specifications to the Transmission System, it shall immediately give Transmission Provider written notice of its determination. Project Developer shall be responsible for the Costs incurred pursuant to this E&P Agreement by Transmission Provider and/or by the Transmission Owner (1) on or before the date of such notice, and (2) after the date of such notice, if the costs could not reasonably be avoided despite, or were incurred by reason of, Project Developer's determination not to interconnect. Project Developer's liability under the preceding sentence shall include all Cancellation Costs in connection with the engineering and procurement of the facilities described in section 2.0 of the Specifications. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Project Developer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. Within 60 days after the date of Project Developer's notice, Transmission Provider shall provide an accounting of, and the appropriate party shall make any payment to the other that is necessary to resolve, any difference between (i) Project Developer's cost responsibility under this E&P Agreement and the Tariff for Costs, including Cancellation Costs, of the facilities described in section 2.0 of the Specifications and (ii) Project Developer's previous payments under this E&P Agreement. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Transmission Owner has returned to it the portion of Project Developer's previous payments that Transmission Provider must pay under that sentence. This E&P Agreement shall be deemed to be terminated upon completion of all payments required under this paragraph (b).

(c) Disposition of the facilities related to this E&P Agreement after receipt of Project Developer's notice of its determination not to interconnect shall be decided in accordance with the GIP.

8.0 Project Developer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures

concerning the dispatch of generation set forth in the Operating Agreement and the PJM Manuals.

- 9.0 In analyzing and preparing the System Impact Study, and in designing and constructing the Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades described in the Specifications attached to this E&P Agreement, Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely on information provided by Project Developer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR TRANSMISSION OWNER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE FACILITIES STUDY OR THE SYSTEM IMPACT STUDY IF NO FACILITIES STUDY IS REQUIRED OR OF THE TRANSMISSION OWNER INTERCONNECTION FACILITIES, DISTRIBUTION UPGRADES AND/OR NETWORK UPGRADES. Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 10.0 Within 120 days after the Transmission Owner completes the engineering and procurement of the facilities described in section 2.0 of the Specifications, Transmission Provider shall provide Project Developer with an accounting of, and the appropriate party shall make any payment to the other that is necessary to resolve, any difference between (a) Project Developer's responsibility under this E&P Agreement and the Tariff for the actual cost of such equipment, and (b) Project Developer's previous aggregate payments to Transmission Provider and the Transmission Owner hereunder. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Transmission Owner has returned to it the portion of Project Developer's previous payments that Transmission Provider must pay under that sentence.
- 11.0 No third party beneficiary rights are created under this E&P Agreement, provided, however, that payment obligations imposed on Project Developer hereunder are agreed and acknowledged to be for the benefit of the Transmission Owner actually performing the services associated with the interconnection of the Generating Facilities and any associated upgrades of other facilities.
- 12.0 No waiver by either party of one or more defaults by the other in performance of any of the provisions of this E&P Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.



- 13.0 This E&P Agreement or any part thereof, may not be amended, modified, assigned, or waived other than by a writing signed by all parties hereto. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.
- 14.0 This E&P Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 15.0 This E&P Agreement shall not be construed as an application for service under Part II or Part III of the Tariff.
- 16.0 Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

**Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

**Project Developer**

[CONTACT NAME/ADDRESS]

**Transmission Owner**

[CONTACT NAME/ADDRESS]

- 17.0 All portions of the Tariff and the Operating Agreement pertinent to the subject of this E&P Agreement are incorporated herein and made a part hereof.
- 18.0 This E&P Agreement is entered into pursuant to the GIP.
- 19.0 Neither party shall be liable for consequential, incidental, special, punitive, exemplary or indirect damages, lost profits or other business interruption damages, by statute, in tort or contract, under any indemnity provision or otherwise with respect to any claim, controversy or dispute arising under this E&P Agreement.
- 20.0 Addendum of Project Developer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status. To the extent required, in accordance with section

20.1, Schedule A to this E&P Agreement shall set forth the Project Developer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

## 20.1 Tax Liability

### 20.1.1 Safe Harbor Provisions:

This section 20.1.1 is applicable only to Generation Project Developers. Provided that Project Developer agrees to conform to all requirements of the Internal Revenue Service ("IRS") (e.g., the "safe harbor" provisions of IRS Notices 2001-82 and 88-129) that would confer nontaxable status on some or all of the transfer of property, including money, by Project Developer to the Transmission Owner for payment of the Costs of construction of the Transmission Owner Interconnection Facilities, the Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in section 20.1.2 below, shall not include income taxes in the Costs of Transmission Owner Interconnection Facilities that are payable by Project Developer under the E&P Agreement, the Generator Interconnection Agreement or the Interconnection Construction Service Agreement. Project Developer shall document its agreement to conform to IRS requirements for such non-taxable status in the E&P Agreement, Generator Interconnection Agreement, and/or the Interconnection Construction Service Agreement.

### 20.1.2 Tax Indemnity:

Project Developer shall indemnify the Transmission Owner for any costs that Transmission Owner incurs in the event that the IRS and/or a state department of revenue (State) determines that the property, including money, transferred by Project Developer to the Transmission Owner with respect to the construction of the Transmission Owner Interconnection Facilities is taxable income to the Transmission Owner. Project Developer shall pay to the Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Transmission Owner. In the event that the Transmission Owner chooses to contest such assessment, either at the request of Project Developer or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Transmission Owner shall refund to Project Developer the excess of its demand payment made to the Transmission Owner over the amount of the tax, interest and penalty for which the Transmission Owner is finally determined to be liable. Project Developer's tax indemnification obligation under this section shall survive any termination of the E&P Agreement, the GIA or the Interconnection Construction Service Agreement.

### 20.1.3 Taxes Other Than Income Taxes:

Upon the timely request by Project Developer, and at Project Developer's sole expense, the Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Transmission Owner for which Project Developer may be required to reimburse Transmission Provider under the terms of this

E&P Agreement or the GIP. Project Developer shall pay to the Transmission Owner on a periodic basis, as invoiced by the Transmission Owner, the Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Project Developer and the Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Project Developer to the Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Project Developer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Transmission Owner.

#### 20.1.4 Income Tax Gross-Up

##### 20.1.4.1 Additional Security:

In the event that Project Developer does not provide the safe harbor documentation required under section 20.1.1 prior to execution of this E&P, within 15 days after such execution, Transmission Provider shall notify Project Developer in writing of the amount of additional Security that Project Developer must provide. The amount of Security that a Transmission Project Developer must provide initially pursuant to this E&P Agreement shall include any amounts described as additional Security under this section 20.1.4 regarding income tax gross-up.

##### 20.1.4.2 Amount:

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the total Security provided to the amount that would be sufficient to permit the Transmission Owner to receive and retain, after the payment of all applicable income taxes ("Current Taxes") and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the "Present Value Depreciation Amount"), an amount equal to the estimated Costs of Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer is responsible under the Generator Interconnection Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Transmission Owner's anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

##### 20.1.4.3 Time for Payment:

Project Developer must provide the additional Security, in a form and with terms as required by the GIP, within 15 days after its receipt of Transmission Provider's notice under this

section. The requirement for additional Security under this section shall be treated as a milestone included in the Generator Interconnection Agreement pursuant to the GIP.

#### 20.1.5 Tax Status:

Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this E&P Agreement or the Tariff is intended to adversely affect any Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

### 21 Breach, Cure and Default

#### 21.1 Breach:

A Breach of this E&P Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this E&P Agreement, including but not limited to any material breach of a representation, warranty or covenant;
- (c) Assignment of the E&P Agreement in a manner inconsistent with its terms; or
- (d) Failure of a Party to provide information or data required to be determined under to another Party for such other Party to satisfy its obligations under this E&P Agreement.

#### 21.2 Notice of Breach:

A Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider or the Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the notifying Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies).

#### 21.3 Cure and Default:

A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 21.3 is automatically in Default of this E&P Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

#### 21.4.1 Cure of Breach:

21.4.1.1 Except for the event of Breach set forth in section 21.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Parties. Such agreement shall not be unreasonably withheld.

21.4.1.2 In an event of Breach set forth in section 21.1(a), the Breaching Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

#### 21.5 Right to Compel Performance:

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. No remedy conferred by any provision of this E&P Agreement is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies

22.0 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All Transmission Providers, Transmission Owners, market participants, and Project Developers interconnected with electric systems are to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

23.0 This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction.

IN WITNESS WHEREOF, Transmission Provider, Project Developer and Transmission Owner have caused this E&P Agreement to be executed by their respective authorized officials.

(Project Identifier # \_\_\_\_\_)

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**SPECIFICATIONS FOR**  
**ENGINEERING AND PROCUREMENT**  
**AGREEMENT**  
**BY AND AMONG**  
**PJM INTERCONNECTION, L.L.C.**  
**AND**  
**AND**  
**(Project Identifier # )**

1.0 Description of Generating Facility or Merchant Transmission Facility to be interconnected with the Transmission System in the PJM Region:

a. Name of Generating Facility or Merchant Transmission Facility:

---

---

b. Location of Generating Facility or Merchant Transmission Facility:

---

---

2.0.A Facilities to be designed or procured by the Transmission Owner under this E&P Agreement: [List or state None]

2.0.B Facilities to be designed or procured by the Project Developer under this E&P Agreement: [List or state None]

3.0 Project Developer shall be subject to the charges detailed below:

3.1 Transmission Owner Interconnection Facilities Charge:

3.2 Distribution Upgrades Charge:

3.3 Network Upgrades Charge:

3.4 Cost Breakdown:

<u>\$</u>	<u>Direct Labor</u>
<u>\$</u>	<u>Direct Material</u>
<u>\$</u>	<u>Indirect Labor</u>
<u>\$</u>	<u>Indirect Material</u>

\$                      Total



SCHEDULES: {Note: Schedules A through B are required, others are optional; add if applicable and desirable for clarity.}

SCHEDULE A – INTERCONNECTION CUSTOMER’S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS

SCHEDULE B – ADDITIONAL PROVISIONS FOR BILLINGS AND PAYMENTS

SCHEDULE \_\_\_\_ – CUSTOMER FACILITY LOCATION/SITE PLAN

SCHEDULE \_\_\_\_ – SINGLE-LINE DIAGRAM

**SCHEDULE A**

**INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH  
IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS**

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}

Not Required.

[OR]

{Include the following language if applicable to Project Developer:}

As provided in section 20.1 of this E&P Agreement and subject to the requirements thereof, Project Developer represents that it meets all qualifications and requirements as set forth in section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Project Developer agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Project Developer to Transmission Owner with respect to the payment of the Costs of engineering and procurement the Transmission Owner Interconnection Facilities specified in this E&P Agreement.

Nothing in Project Developer's agreement pursuant to this Schedule A shall change Project Developer's indemnification obligations under section 20.1 of this E&P Agreement.

## SCHEDULE B

### ADDITIONAL PROVISIONS FOR BILLINGS AND PAYMENTS

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Project Developer is responsible.

Transmission Provider shall invoice Project Developer on behalf of the Transmission Owner, for the Transmission Owner's expected Costs during the next three months. Upon receipt of each of Project Developer's payments of such invoices, Transmission Provider shall reimburse the Transmission Owner. Project Developer shall pay each invoice received from Transmission Provider within 20 days after receipt thereof. Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. section 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment. If Project Developer fails to pay any invoice when and as due, Transmission Provider or Transmission Owner can provide notice of such failure to Project Developer and the other party, and Project Developer shall pay the amounts due within five days from the receipt of such notice. Subject to obtaining any necessary authorizations from FERC, if Project Developer fails to make payment within five days from the receipt of such notice, Transmission Provider and Transmission Owner shall each have the right to suspend performance hereunder. If Project Developer fails to make payment within 15 days from the receipt of such notice, Transmission Provider and Transmission Owner shall each have the right to terminate this Agreement, or exercise such other rights and remedies, as each may have in equity or at law.

Tariff, Part IX, Subpart E

FORM OF  
UPGRADE CONSTRUCTION SERVICE AGREEMENT

Service Agreement No. [ ]

(Project Identifier # )

**UPGRADE CONSTRUCTION SERVICE AGREEMENT**

**By and Among**

**PJM Interconnection, L.L.C.**

**And**

**[Upgrade Customer]**

**And**

**[Name of Transmission Owner]**

**UPGRADE CONSTRUCTION SERVICE AGREEMENT**

**By and Among**  
**PJM Interconnection, L.L.C.**  
**And**  
**[Upgrade Customer]**  
**And**  
**[Name of Transmission Owner]**

(Project Identifier # )

This Upgrade Construction Service Agreement, including the Appendices attached hereto and incorporated herein (collectively, “Upgrade CSA”) is made and entered into as of the Effective Date (as defined in the attached Appendix III) by and among PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”), ( “Upgrade Customer” [OPTIONAL: or “[short name]”]) and ( “Transmission Owner” [OPTIONAL: or “[short name]”]). Transmission Provider, Upgrade Customer and Transmission Owner are referred to herein individually as “Party” and collectively as “the Parties.”

**WITNESSETH**

WHEREAS, Upgrade Customer has requested (1) Incremental Auction Revenue Rights pursuant to section 7.8 of Schedule 1 of the Operating Agreement of PJM Interconnection L.L.C. (“Operating Agreement”) and Generation Interconnection Procedures (“GIP”) set forth in PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part {[instruction: {use Part VII if this is a transition period Agreement subject to Tariff, Part VII} {use Part VIII if this a new rules Agreement subject to Part VIII}}; or (2) installation of one or more Merchant Network Upgrades pursuant to the GIP;

WHEREAS, pursuant to Upgrade Customer’s Upgrade Request proposing Merchant Network Upgrades only and in accordance with the PJM Tariff, Transmission Provider has conducted the required studies to determine whether such requests can be accommodated, and if so, under what terms and conditions, including the identification of any Customer-Funded Upgrades that must be constructed in order to provide the service or rights requested by Upgrade Customer;

WHEREAS, Transmission Provider’s studies have identified the Customer-Funded Upgrades described in Appendix I of this Upgrade CSA as necessary to provide Upgrade Customer the service or rights it has requested; and

WHEREAS, Upgrade Customer: (i) desires that Transmission Owner construct the required Customer-Funded Upgrades; and (ii) agrees to assume cost responsibility for the design, engineering, procurement and construction of such Customer-Funded Upgrades in accordance with the PJM Tariff.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, together with other good and valuable consideration, the receipt and sufficiency is hereby mutually acknowledged by each Party, the Parties mutually covenant and agree as follows:

## **Article 1 – Definitions and Other Documents**

### **1.0 Defined Terms.**

All capitalized terms used in this Upgrade CSA shall have the meanings ascribed to them in the GIP or in definitions either in the body of this Upgrade CSA or its attached appendices. In the event of any conflict between defined terms set forth in the PJM Tariff or defined terms in this Upgrade CSA, such conflict will be resolved in favor of the terms as defined in this Upgrade CSA. Any provision of the PJM Tariff relating to this Upgrade CSA that uses any such defined term shall be construed using the definition given to such defined term in this Upgrade CSA.

### **1.1 Incorporation of Other Documents.**

Subject to the provisions of section 1.0 above, all portions of the PJM Tariff and the Operating Agreement as of the date of this Upgrade CSA, and as pertinent to the subject of this Upgrade CSA, are hereby incorporated herein and made a part hereof.

## **Article 2 – Responsibility for Customer-Funded Upgrades**

### **2.0 Upgrade Customer Financial Responsibilities.**

Upgrade Customer shall pay all Costs for the design, engineering, procurement and construction of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. An estimate of such Costs is provided in Appendix I to this Upgrade CSA.

### **2.1 Obligation to Provide Security.**

Upgrade Customer shall provide Security to collateralize Upgrade Customer's obligation to pay the Costs incurred by Transmission Owner to construct the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, less any Costs already paid by Upgrade Customer, in accordance with the GIP. Upgrade Customer shall deliver such Security to Transmission Provider prior to the Effective Date of this Upgrade CSA, as described in Appendix III. Unless otherwise specified by the Transmission Provider, such Security shall take the form of a letter of credit, in the amount of \$\_\_\_\_\_ naming the Transmission Provider and Transmission Owner as beneficiaries.

### **2.2 Failure to Provide Security.**

If the Upgrade Customer fails to provide Security in the amount, in the time or in the form required by section 2.1, then this Upgrade CSA shall terminate immediately and the Upgrade Customer's Upgrade Request shall be deemed terminated and withdrawn.

### **2.3 Costs.**

In accordance with the GIP, the Upgrade Customer shall pay for the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA based upon the Costs of the Customer-Funded Upgrades described in Appendix I.

## **2.4 Charges.**

In accordance with sections 9, 24, and 25 of Appendix III to this Upgrade CSA, the Upgrade Customer shall pay to the Transmission Provider the charges applicable after Initial Operation of the Merchant Network Upgrades, as set forth in SCHEDULE B to this Upgrade CSA. Promptly after receipt of such payments, the Transmission Provider shall forward such payments to the appropriate Transmission Owner.

## **2.5 Transmission Owner Responsibilities.**

If the Upgrade Customer satisfies all requirements of this Article 2 and applicable requirements set forth in the PJM Tariff, Transmission Owner shall use Reasonable Efforts to construct or cause to be constructed the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, on its transmission system. Transmission Owner shall own the Customer-Funded Upgrades it has, or has arranged to have, constructed and shall have ongoing responsibility to maintain such Customer-Funded Upgrades consistent with the Operating Agreement and the Transmission Owner's Agreement.

## **Article 3 – Rights to Transmission Service**

### **3.0 No Transmission Service.**

This Upgrade CSA does not entitle the Upgrade Customer to take Transmission Service under the PJM Tariff.

## **Article 4 – Early Termination**

### **4.0 Termination by Upgrade Customer.**

Subject to the terms of section 14 of Appendix III, Upgrade Customer may terminate this Upgrade CSA at any time by providing written notice of termination to Transmission Provider and Transmission Owner. Upgrade Customer's notice of termination shall become effective sixty calendar days after either the Transmission Provider or Transmission Owner receives such notice.



## Article 5 – Rights

### 5.0 Rights.

Transmission Provider shall make available to Upgrade Customer the rights attributable to the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. The rights, allocation and assignment procedures, duration and all other terms and procedures set forth in the GIP and applicable PJM Manuals referenced therein regarding an Upgrade Customer assuming responsibility for Customer-Funded Upgrades to accommodate an Upgrade Request shall apply under this Agreement for the benefit of Upgrade Customer.

### 5.1 Amount of Rights Granted.

Upgrade Customer shall receive the following rights, subject to section 5.2 below and the applicable terms of the PJM Tariff:

Incremental Auction Revenue Rights. Pursuant to the GIP, Upgrade Customer shall have Incremental Auction Revenue Rights in the following quantities between the indicated source(s) and sink(s):

Incremental Capacity Transfer Rights. Pursuant to the GIP, Upgrade Customer shall have Incremental Capacity Transfer Rights in the following quantities into the indicated Locational Deliverability Area:

### 5.2 Availability of Rights Granted.

Upgrade Customer's rights as described in section 5.1 shall become effective upon the completion of (i) the Customer-Funded Upgrades identified in this Upgrade CSA, and, if applicable, (ii) the transmission upgrade projects noted as contingencies in Appendix I of this Upgrade CSA.

## Article 6 – Miscellaneous

### 6.0 Notices.

Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

#### Transmission Provider:

PJM Interconnection, L.L.C.

2750 Monroe Blvd.

Audubon, PA 19403

interconnectionagreementnotices@pjm.com

**Upgrade Customer:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Transmission Owner:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6.1 Waiver.**

No waiver by any Party of one or more Defaults by another in performance of any of the provisions of this Upgrade CSA shall operate or be construed as a waiver of any other or further Default or Defaults, whether of a like or different character.

**6.2 Amendment.**

This Upgrade CSA or any part thereof, may not be amended, modified or waived other than by a writing signed by all Parties

Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.

**6.3 No Partnership.**

Notwithstanding any provision of this Upgrade CSA, the Parties do not intend to create hereby any joint venture, partnership, association taxable as a corporation, or other entity for the conduct of any business for profit.

**6.4 Counterparts.**

This Upgrade CSA may be executed in multiple counterparts to be construed as one effective as of the Effective Date.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Upgrade CSA to be executed by their respective authorized officials.

(Project Identifier # \_\_\_\_\_)

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
\_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Upgrade Customer: [Name of Upgrade Customer]**

By: \_\_\_\_\_  
\_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: [Name of Transmission Owner]

By: \_\_\_\_\_  
\_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

## APPENDIX I

### SCOPE AND SCHEDULE OF WORK FOR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY TRANSMISSION OWNER

#### A. Scope of Work

Transmission Owner hereby agrees to provide the following or Customer-Funded Upgrades pursuant to the terms of this Upgrade CSA:

[Identify Customer-Funded Upgrades to be constructed]

#### B. Schedule of Work

[Add schedule for construction work to be completed]

#### C. Costs

Upgrade Customer shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with section 9.0 of Appendix III to this Upgrade CSA.

Merchant Network Upgrades Charge: \$

[Add additional sections to list: any Contingencies, Applicable Technical Requirements, and Estimate of Tax Gross-ups, as required pursuant to Appendix III]

#### D. Construction of Customer Funded Upgrades

1. The Merchant Network Upgrades regarding which Transmission Owner shall be the Constructing Entity are described on the attached Appendix I, section A to this Upgrade CSA.

2. Election of Construction Option. Specify below whether the Constructing Entities have mutually agreed to construction of the Merchant Network Upgrades that will be built by the Transmission Owner pursuant to the Standard Option or the Negotiated Contract Option. (See sections 6.1 and 6.1.1 of Appendix III to this Upgrade CSA.)

Standard Option.

Negotiated Contract Option.

If the parties have mutually agreed to use the Negotiated Contract Option, the permitted, negotiated terms on which they have agreed and which are not already set forth as part of the Scope of Work and/or Schedule of Work attached to this Upgrade CSA, respectively, shall be as set forth in Schedule A attached to this Upgrade CSA.

APPENDIX II

DEFINITIONS

From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement.

APPENDIX III

GENERAL TERMS AND CONDITIONS

## **1.0 Effective Date and Term**

### **1.1 Effective Date.**

Subject to regulatory acceptance, this Upgrade CSA shall become effective on the date the agreement has been executed by all Parties, or if the agreement is filed with FERC unexecuted, upon the date specified by FERC. The Transmission Owner shall have no obligation to begin construction or preparation for construction of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with FERC; (ii) such agreement, if unexecuted and nonconforming, has been filed with and accepted by FERC; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

### **1.2 Term.**

This Upgrade CSA shall continue in full force and effect from the Effective Date until the termination hereof.

### **1.3 Survival.**

This Upgrade CSA shall continue in effect after termination to the extent necessary to provide for final billings and payments, including billings and payments pursuant to this Upgrade CSA, and to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Upgrade CSA was in effect.

## **2.0 Facilitation by Transmission Provider**

Transmission Provider shall keep itself apprised of the status of the Transmission Owner's construction-related activities and, upon request of Upgrade Customer or Transmission Owner, Transmission Provider shall meet with the Upgrade Customer and Transmission Owner separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this Upgrade CSA. Transmission Owner shall cooperate in good faith with the other Parties in Transmission Provider's efforts to facilitate resolution of disputes.



### **3.0 Construction Obligations**

#### **3.1 Customer-Funded Upgrades.**

All Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA shall be designed, engineered, procured, installed and constructed in accordance with this section 3.0, Applicable Standards, Applicable Laws and Regulations, Good Utility Practice, the Facilities Study and the Scope of Work under this Upgrade CSA.

#### **3.2 Scope of Applicable Technical Requirements and Standards.**

Applicable technical requirements and standards shall apply to the design, engineering, procurement, construction and installation of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA only to the extent that the provisions thereof relate to the design, engineering, procurement, construction and/or installation of such or Customer-Funded Upgrades. Such provisions relating to the design, engineering, procurement, construction and/or installation of such Customer-Funded Upgrades shall be contained in Appendix I appended to this Upgrade CSA. The Parties shall mutually agree upon, or in the absence of such agreement, Transmission Provider shall determine, which provisions of the applicable technical requirements and standards should be appended to this Upgrade CSA. In the event of any conflict between the provisions of the applicable technical requirements and standards that are appended to this Upgrade CSA and any later-modified provisions that are stated in the pertinent PJM Manuals, the provisions appended to this Upgrade CSA shall control.

## **4.0 Tax Liability**

### **4.1 Upgrade Customer Payments Taxable.**

The Parties shall treat all payments or property transfers made by Upgrade Customer to Transmission Owner for the installation of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, as taxable contributions in aid of construction under section 118(b) of the Internal Revenue Code and any applicable State income tax laws, except in the event, and to the extent, there exists a Favorable Tax Determination, as defined in section 4.4, indicating otherwise.

### **4.2 Income Tax Gross-Up.**

All payments and property transfers by Upgrade Customer and Transmission Owner in connection with the installation of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, shall be made on a fully grossed-up basis. This means that Upgrade Customer will pay Transmission Owner an amount equal to (1) the current taxes imposed on Transmission Owner ("Current Taxes") on the excess of (a) the amount of any payments and the fair market value of any property transferred to Transmission Owner by Upgrade Customer under this Upgrade CSA in connection with the installation of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, (without regard to any payments under this Article) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit Transmission Owner to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1). For this purpose, (i) Current Taxes shall be computed based on Transmission Owner's composite federal, State, and local tax rates at the time the payments or property transfers are received and Transmission Owner will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Transmission Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Transmission Owner's current weighted average cost of capital. Thus, the formula for calculating Upgrade Customer's liability to Transmission Owner pursuant to this Article can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . The estimated tax gross-up payments with respect to the facilities, identified in Appendix I to this Upgrade CSA, are stated in Appendix I.

### **4.3 Private Letter Ruling.**

At Upgrade Customer's request, made no later than one year after the termination of this Upgrade CSA pursuant to section 14 hereof, and expense, Transmission Owner may file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Upgrade Customer to Transmission Owner under this Upgrade CSA are subject to federal income taxation. Upgrade Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Upgrade Customer's knowledge. The Parties shall cooperate in good faith with respect to the submission of such request. Transmission Owner shall keep Upgrade

Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Upgrade Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Transmission Owner shall allow Upgrade Customer to attend all meetings with IRS officials about the request and shall permit Upgrade Customer to prepare the initial drafts of any follow-up letters in connection with the request.

#### **4.4 Refund.**

In the event that (a) a private letter ruling is issued to Transmission Owner which holds that any amount paid or the value of any property transferred by Upgrade Customer to Transmission Owner under the terms of this Upgrade CSA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Transmission Owner in good faith that any amount paid or the value of any property transferred by Upgrade Customer to Transmission Owner under the terms of this Upgrade CSA is not taxable to Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Upgrade Customer to Transmission Owner are not subject to federal income tax, or (d) if Transmission Owner receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Upgrade Customer to Transmission Owner pursuant to this Upgrade CSA (each of (a), (b), (c), or (d), a “Favorable Tax Determination”), Transmission Owner shall promptly refund to Upgrade Customer the following: (i) any payment made by Upgrade Customer under this section 4 for taxes that are attributable to the amount determined to be non-taxable, together with interest thereon; (ii) interest on any amounts paid by Upgrade Customer to Transmission Owner for such taxes which Transmission Owner did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC’s regulations at 18 C.F.R. § 35.19a(a)(2)(ii) from the date payment was made by Upgrade Customer to the date Transmission Owner refunds such payment to Upgrade Customer; and (iii) with respect to any such taxes paid by Transmission Owner, any refund or credit Transmission Owner receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to Transmission Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Transmission Owner will remit such amount promptly to Upgrade Customer only after and to the extent that Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA.

#### **4.5 Contests.**

If, following a Favorable Tax Determination, Upgrade Customer receives a refund pursuant to section 4.4, and, notwithstanding the Favorable Tax Determination, any Governmental Authority determines that Transmission Owner’s receipt of payments or property constitutes income that is subject to taxation, Transmission Owner shall notify Upgrade Customer, in writing, within 30 Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Upgrade Customer and at Upgrade Customer’s sole expense, Transmission Owner may appeal, protest, seek abatement of, or otherwise oppose such

determination. Upon Upgrade Customer's written request and sole expense, Transmission Owner may file a claim for refund with respect to any taxes paid under this Article, whether or not it has received such a determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Transmission Owner shall keep Upgrade Customer informed, shall consider in good faith suggestions from Upgrade Customer about the conduct of the contest, and shall reasonably permit Upgrade Customer or a Upgrade Customer representative to attend contest proceedings. Upgrade Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Transmission Owner may agree to a settlement either with Upgrade Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Owner, but reasonably acceptable to Upgrade Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Upgrade Customer's obligation shall be based on the amount of the settlement agreed to by Upgrade Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding sentence.

#### **4.6 Taxes Other Than Income Taxes.**

Upon the timely request by Upgrade Customer, and at Upgrade Customer's sole expense, Transmission Owner may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or State income tax) asserted or assessed against Transmission Owner for which Upgrade Customer may be required to reimburse Transmission Owner under the terms of this Upgrade CSA. Upgrade Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Upgrade Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Upgrade Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction.

#### **4.7 Tax Status.**

Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this Upgrade CSA is intended to adversely affect the Transmission Owner's tax-exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **5.0 Safety**

### **5.1 General.**

Transmission Owner shall perform all work hereunder in accordance with Good Utility Practice, Applicable Standards and Applicable Laws and Regulations pertaining to the safety of persons or property.

### **5.2 Environmental Releases.**

Transmission Owner shall notify Transmission Provider and Upgrade Customer, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the facility or the facilities, any of which may reasonably be expected to affect Transmission Provider or Upgrade Customer. Transmission Owner shall: (i) provide the notice as soon as possible; (ii) make a good faith effort to provide the notice within 24 hours after it becomes aware of the occurrence; and (iii) promptly furnish to Transmission Provider and Upgrade Customer copies of any publicly available reports filed with any governmental agencies addressing such events.

## **6.0 Schedule of Work**

### **6.1 Standard Option.**

The Transmission Owner shall use Reasonable Efforts to design, engineer, procure, construct and install Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, in accordance with the Schedule and Scope of Work.

### **6.2 Negotiated Contract Option.**

As an alternative to the Standard Option set forth in section 6.1 of this Appendix III, the Transmission Owner and the Upgrade Customer may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Customer-Funded Upgrades. Under the Negotiated Contract Option, the Upgrade Customer and the Transmission Owner may agree to terms different from those included in the Standard Option of section 6.1 above and the corresponding standard terms set forth in the applicable provisions of the GIP and this Appendix III. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Upgrade Customer and the Transmission Owner that are parties to this Upgrade CSA; no other Upgrade Customer's responsibility for Costs may be affected. No other terms of the Tariff or this Appendix III shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option shall be stated in full in an appendix to this Upgrade CSA.

### **6.3 Revisions to Schedule and Scope of Work.**

The Schedule and Scope of Work shall be revised as required in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Transmission Provider and Transmission Owner, which agreement shall not be unreasonably withheld, conditioned or delayed. The scope change process is intended to be used for changes to the Scope of Work as defined herein, and is not intended to be used to change any of the milestone set forth in the GIA. Any change to the Scope of Work must be agreed to by all Parties in writing by executing a scope change document.

## **7.0 Suspension of Work upon Default**

Upon the occurrence of a Default by Upgrade Customer, the Transmission Provider or the Transmission Owner may, by written notice to Upgrade Customer, suspend further work associated with the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this section 7.0. In the event of a suspension by Transmission Provider or Transmission Owner, the Upgrade Customer shall be responsible for the Costs incurred in connection with any suspension hereunder.

## **7.1 Notification and Correction of Defects.**

7.1.1 In the event that inspection and/or testing of any Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, built by Transmission Owner identifies any defects or failures to comply with Applicable Standards in such Customer-Funded Upgrades, then Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. If such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.

## **8.0 Transmission Outages**

### **8.1 Outages; Coordination.**

The Transmission Provider and Transmission Owner acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. The Transmission Provider and Transmission Owner further acknowledge and agree that any such outages shall be coordinated by and through Transmission Provider.



## **9.0 Security, Billing and Payments**

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Upgrade Customer is responsible.

### **9.1 Adjustments to Security.**

The Security provided by Upgrade Customer at or before the Effective Date of this Upgrade CSA shall be: (a) reduced as portions of the work on Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, are completed; and/or (b) increased or decreased as required to reflect adjustments to Upgrade Customer's cost responsibility, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals.

### **9.2 Invoice.**

Transmission Owner shall provide Transmission Provider a quarterly statement of its scheduled expenditures during the next three months for, as applicable the design, engineering and construction of, and/or for other charges related to, construction of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. Transmission Provider shall bill Upgrade Customer, on behalf of Transmission Owner, for Transmission Owner's expected costs during the subsequent three months. Upgrade Customer shall pay each bill within 20 days after receipt thereof. Upon receipt of each of Upgrade Customer's payments of such bills, Transmission Provider shall reimburse the Transmission Owner. Upgrade Customer may request that the Transmission Provider provide quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that section 9.3 of this Appendix III shall govern the timing of the final cost reconciliation upon completion of the work.

### **9.3 Final Invoice.**

Within 120 days after Transmission Owner completes construction and installation of the Customer-Funded Upgrades under this Upgrade CSA, Transmission Provider shall provide Upgrade Customer with an accounting of, and the appropriate Party shall make any payment to the other that is necessary to resolve, any difference between: (a) Upgrade Customer's responsibility under the PJM Tariff for the Costs of the or Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA; and (b) Upgrade Customer's previous aggregate payments to Transmission Provider for the Costs of the facilities identified in Appendix I to this Upgrade CSA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to the Upgrade Customer or the Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Party owing the payment.

### **9.4 Disputes.**

In the event of a billing dispute among the Transmission Provider, Transmission Owner, and Upgrade Customer, Transmission Provider and the Transmission Owner shall continue to perform their respective obligations pursuant to this Upgrade CSA so long as: (a) the Upgrade Customer continues to make all payments not in dispute, and the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute; or (b) the Upgrade Customer pays to Transmission Provider, or into an independent escrow account established by the Upgrade Customer, the portion of the invoice in dispute, pending resolution of such dispute. If the Upgrade Customer fails to meet any of these requirements, then Transmission Provider shall so inform the other Parties and Transmission Provider or the Transmission Owner may provide notice to Upgrade Customer of a Breach pursuant to section 13 of this Appendix III. Within 30 days after the resolution of the dispute, the party that owes money to the other party shall pay the amount due with interest calculated in accord with section 9.6 (interest).

#### **9.5 Interest.**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

#### **9.6 No Waiver.**

Payment of an invoice shall not relieve Upgrade Customer from any other responsibilities or obligations it has under this Upgrade CSA, nor shall such payment constitute a waiver of any claims arising hereunder.

## **10.0 Assignment**

### **10.1 Assignment with Prior Consent.**

Subject to section 10.2 of this Appendix III, no Party shall assign its rights or delegate its duties, or any part of such rights or duties, under this Upgrade CSA without the written consent of the other Parties, which consent shall not be unreasonably withheld, conditioned or delayed. Any such assignment or delegation made without such written consent shall be null and void. In addition, the Transmission Owner shall be entitled, subject to Applicable Laws and Regulations, to assign this Upgrade CSA to any Affiliate or successor of the Transmission Owner that owns and operates all or a substantial portion of such Transmission Owner's transmission facilities.

### **10.2 Assignment Without Prior Consent.**

#### **10.2.1 Assignment by Upgrade Customer.**

Upgrade Customer may assign this Upgrade CSA without the Transmission Owner's or Transmission Provider's prior consent to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Upgrade Customer's assets provided that, prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical competence and financial ability to comply with the requirements of this Upgrade CSA and assumes in a writing provided to the Transmission Owner and Transmission Provider all rights, duties, and obligations of Upgrade Customer arising under this Upgrade CSA. However, any assignment described herein shall not relieve or discharge the Upgrade Customer from any of its obligations hereunder absent the written consent of the Transmission Owner, such consent not to be unreasonably withheld, conditioned, or delayed.

#### **10.2.2 Assignment by Transmission Owner.**

Transmission Owner shall be entitled, subject to applicable laws and regulations, to assign this Upgrade CSA to an Affiliate or successor that owns and operates all or a substantial portion of Transmission Owner's transmission facilities.

#### **10.2.3 Assignment to Lenders.**

Upgrade Customer may, without the consent of the Transmission Provider or the Transmission Owner, assign this Upgrade CSA to any Project Finance Entity(ies), provided that such assignment shall not alter or diminish Upgrade Customer's duties and obligations under this Upgrade CSA. If Upgrade Customer provides the Transmission Owner with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to Article 6 of this Upgrade CSA, the Transmission Provider or Transmission Owner shall provide notice and reasonable opportunity for such entity(ies) to cure any Breach under this Upgrade CSA in accordance with this Upgrade CSA. Transmission Provider or Transmission Owner shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment

and status of this Upgrade CSA, provided that such documents do not alter or diminish the rights of the Transmission Provider or Transmission Owner under this Upgrade CSA, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider's and/or the Transmission Owner's invoice therefore, Upgrade Customer shall pay the Transmission Provider and/or the Transmission Owner's reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Upgrade Customer from any of its obligations hereunder absent the written consent of the Transmission Owner and Transmission Provider.

### **10.3 Successors and Assigns.**

This Upgrade CSA and all of its provisions are binding upon, and inure to the benefit of, the Transmission Provider and Transmission Owner and their respective successors and permitted assigns.

## 11.0 Insurance

### 11.1 Required Coverages.

Constructing Entity shall maintain, at its own expense, insurance as described in paragraphs A through E below. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, will be located. Failure to maintain required insurance shall be a Breach of this Upgrade CSA.

A. Workers Compensation Insurance with statutory limits, as required by the State and/or jurisdiction in which the work is to be performed, and employer’s liability insurance with limits of not less than one million dollars (\$1,000,000).

B. Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) each accident products and completed operations aggregate.

C. Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of no less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

D. Excess and/or Umbrella Liability Insurance with a limit of liability of twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer’s liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

E. Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Constructing Entity’s duties, responsibilities and performance outlined in this Upgrade CSA, with limits of liability as follows:

\$10,000,000 each occurrence

\$10,000,000 aggregate

An entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design and engineering work associated with the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, necessary for the transmission service to procure professional liability insurance in the

amounts and upon the terms prescribed by this section, and providing evidence of such insurance to the other entity. Such insurance shall be procured from companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, are located. Nothing in this section relieves the entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the entity’s insurance obligations under this section become invalid for any reason, including but not limited to: (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the PJM Tariff; entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an entity will not design, engineer or construct or cause to design, engineer or construct any new Customer-Funded Upgrades, Transmission Provider, in its discretion, may waive the requirement that an entity maintain the Professional Liability Insurance pursuant to this section.

### **11.2 Additional Insureds.**

The Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability policies procured by each Constructing Entity (“Insuring Constructing Entity”) shall include each other party (the “Insured Party”), its officers, agents and employees as additional insureds, providing all standard coverages and covering liability of the Insured Party arising out of bodily injury and/or property damage (including loss of use) in any way connected with the operations, performance, or lack of performance under this Upgrade CSA.

### **11.3 Other Required Terms.**

The above-mentioned insurance policies (except workers’ compensation) shall provide the following:

(a) Each policy shall contain provisions that specify that it is primary and non-contributory for any liability arising out of that party’s negligence, and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer’s liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Insuring Constructing Entity shall be responsible for its respective deductibles or retentions.

(b) If any coverage is written on a Claims First Made Basis, continuous coverage shall be maintained or an extended discovery period will be exercised for a period of not less than two years after termination of this Upgrade CSA.

(c) Provide for a waiver of all rights of subrogation which the Insuring Constructing Entity’s insurance carrier might exercise against the Insured Party.

### **11.4 No Limitation of Liability.**

The requirements contained herein as to the types and limits of all insurance to be maintained by the Constructing Entities are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this Upgrade CSA.

### **11.5 Self-Insurance.**

Notwithstanding the foregoing, each Constructing Entity may self-insure to meet the minimum insurance requirements of this section to the extent it maintains a self-insurance program; provided that such Constructing Entity's senior secured debt is rated at investment grade or better by Standard & Poor's and its self-insurance program meets the minimum insurance requirements of this section 11. For any period of time that a Constructing Entity's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, it shall comply with the insurance requirements applicable to it under this section 11. In the event that a Constructing Entity is permitted to self-insure pursuant to this section, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in section 11.6 of this Appendix III.

### **11.6 Notices; Certificates of Insurance.**

Prior to the commencement of work pursuant to this Upgrade CSA, the Constructing Entities agree to furnish certificate(s) of insurance evidencing the insurance coverage obtained in accordance with section 11 of this Appendix III. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation in favor of the other Interconnected Entities. All policies of insurance shall provide for 30 days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide 30 days prior written notice of cancellation or material adverse change, each Constructing Entity shall provide the other Constructing Entities with 30 days prior written notice of cancellation or material adverse change to any of the insurance required in this Upgrade CSA.

### **11.7 Subcontractor Insurance.**

In accord with Good Utility Practice, each Constructing Entity shall require each of its subcontractors to maintain and provide evidence of insurance coverage of types, and in amounts, commensurate with the risks associated with the services provided by the subcontractor. Bonding of contractors or subcontractors shall be at the hiring Constructing Entity's discretion, but regardless of bonding, the Transmission Owner shall be responsible for the performance or non-performance of any contractor or subcontractor it hires.

### **11.8 Reporting Incidents.**

The Parties shall report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Upgrade CSA.

## **12.0 Indemnity**

### **12.1 Indemnity.**

Each Constructing Entity shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property of persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with or resulting from: (i) the indemnifying Constructing Entity's breach of any of the representations or warranties made in, or failure of the indemnifying Constructing Entity or any of its subcontractors to perform any of its obligations under, this Upgrade CSA; or (ii) the negligence or willful misconduct of the indemnifying Constructing Entity or its contractors; provided, however, that the neither Constructing Entity shall not have any indemnification obligations under this section in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Party seeking indemnity.

### **12.2 Indemnity Procedures.**

Promptly after receipt by a person entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this section 12 may apply, the Indemnified Person shall notify the indemnifying Constructing Entity of such fact. Any failure of or delay in such notification shall not affect a Constructing Entity's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Constructing Entity. The Indemnified Person shall cooperate with the indemnifying Constructing Entity with respect to the matter for which indemnification is claimed. The indemnifying Constructing Entity shall have the right to assume the defense thereof with counsel designated by such indemnifying Constructing Entity and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Constructing Entity and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Constructing Entity, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Constructing Entity shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying Constructing Entity. Notwithstanding the foregoing, the indemnifying Constructing Entity shall not: (i) be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified



Person and the indemnifying Constructing Entity, in such event the indemnifying Constructing Entity shall pay the reasonable expenses of the Indemnified Person; and (ii) settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

### **12.3 Indemnified Person.**

If an Indemnified Person is entitled to indemnification under this section 12 as a result of a claim by a third party, and the indemnifying Constructing Entity fails, after notice and reasonable opportunity to proceed under this section 12, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Constructing Entity contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

### **12.4 Amount Owing.**

If the indemnifying Constructing Entity is obligated to indemnify and hold any Indemnified Person harmless under this section 12, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

### **12.5 Limitation on Damages.**

Except as otherwise provided in this section 12, the liability of a Party shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 12.5 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this Upgrade CSA. The provisions of this section 12 shall survive the termination or expiration of this Upgrade CSA.

### **12.6 Limitation of Liability in Event of Breach.**

A Breaching Party shall have no liability hereunder to any other Party, and each other Party hereby releases the Breaching Party, for all claims or damages it incurs that are associated with any interruption in the availability of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, the Transmission System, or Transmission Service, or associated with damage to the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this Upgrade CSA.

### **12.7 Limited Liability in Emergency Conditions.**

Except as otherwise provided in the PJM Tariff or the Operating Agreement, no Party shall be liable to any other Party for any action that it takes in responding to an Emergency Condition, so

long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Upgrade Customer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.

### **13.0 Breach, Cure and Default**

#### **13.1 Breach.**

A Breach of this Upgrade CSA shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Upgrade CSA including but not limited to any material breach of a representation, warranty or covenant made in this Upgrade CSA;
- (c) Assignment of this Upgrade CSA in a manner inconsistent with the terms of this Upgrade CSA; or
- (d) Failure of any Party to provide information or data required to be provided to another Party under this Upgrade CSA for such other Party to satisfy its obligations under this Upgrade CSA.

#### **13.2 Notice of Breach.**

In the event of a Breach, a Party not in Breach of this Upgrade CSA shall give written notice of such Breach to the Breaching Party, the other Party and to any other persons that the Breaching Party identifies in writing prior to the Breach. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Upgrade Customer, Transmission Provider or the Transmission Owner agree to provide notice of such Breach, in the same manner as its or their notice to Upgrade Customer, to any Project Finance Entity, provided that the Upgrade Customer has provided Transmission Provider and the Transmission Owner with notice of an assignment to such Project Finance Entity(ies) and has identified such Project Finance Entities as contacts for notice.

#### **13.3 Cure and Default.**

A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section is automatically in Default of this Upgrade CSA, and its Upgrade Request and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

##### **13.3.1 Cure of Breach.**

###### **13.3.1.1**

Except for the event of Breach set forth in section 13.1(a) above, the Breaching Interconnection Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed

and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.

### 13.3.1.2

In an event of Breach set forth in section 13.1(a), the Breaching Interconnection Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Upgrade Customer, and the Upgrade Customer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Upgrade Customer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

## 13.4 Right to Compel Performance.

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Interconnection Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 9.5, no remedy conferred by any provision of this Upgrade CSA is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## 13.5 Remedies Cumulative.

No remedy conferred by any provision of this Upgrade CSA is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **14.0 Termination**

### **14.1 Termination.**

#### **14.1.1 Upon Completion of Construction.**

##### **14.1.1.1 Conforming Upgrade CSAs.**

If this Upgrade CSA is conforming and, therefore, is only reported to FERC on PJM's Electric Quarterly Report, it shall terminate upon the date Transmission Provider receives written notice, in a form acceptable to the Transmission Provider from the Transmission Owner that the following conditions have occurred: (i) completion of construction of all Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA; (ii) final payment of all Costs due and owing under this Upgrade CSA; and (iii) termination of all rights provided under this Upgrade CSA.

##### **14.1.1.2 Non-Conforming Upgrade CSAs.**

If this Upgrade CSA is non-conforming and, therefore, has been filed with and accepted by FERC, it shall terminate upon (a) Transmission Provider receiving written notice, in a form acceptable to Transmission Provider, from Transmission Owner that the following conditions have occurred: (i) completion of construction of Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA;; (ii) final payment of all Costs due and owing under this Upgrade CSA; (iii) termination of all rights provided under this Upgrade CSA; and (b) the effective date of Transmission Provider's cancellation of the Upgrade CSA in accordance with Commission rules and regulations. Transmission Provider shall serve the Transmission Owner and Upgrade Customer with a copy of the notice of cancellation of any Upgrade CSA in accordance with Commission rules and regulations.

### **14.2 Cancellation by Upgrade Customer.**

#### **14.2.1 Applicability.**

The following provisions shall apply in the event that Upgrade Customer terminates this Upgrade CSA:

#### **14.2.2 Cancellation Cost Responsibility.**

Upon the cancellation of this Upgrade CSA by the Upgrade Customer, the Upgrade Customer shall be liable to pay to the Transmission Owner or Transmission Provider all Cancellation Costs in connection with the Upgrade CSA. Cancellation costs may include costs for Network Upgrades assigned to Upgrade Customer, in accordance with the Tariff and as reflected in this Upgrade CSA, that remain the responsibility of Upgrade Customer under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Upgrade Customers in the Cycle. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Upgrade Customer, with a written

demand for payment and with reasonable documentation of such Cancellation Costs. The Upgrade Customer shall pay the Transmission Provider each bill for Cancellation Costs within 30 days after, as applicable, the Transmission Owner's or Transmission Provider's presentation to the Upgrade Customer of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing party seeks to collect. Upon receipt of each of Upgrade Customer's payments of such bills of the Transmission Owner, Transmission Provider shall reimburse the Transmission Owner for Cancellation Costs incurred by the latter.

#### **14.2.3 Disposition of Customer-Funded Upgrades upon Cancellation.**

Upon cancellation of this Upgrade CSA by the Upgrade Customer, Transmission Provider, after consulting with the Transmission Owner, may, at the sole cost and expense of the Upgrade Customer, authorize the Transmission Owner to: (a) cancel supplier and contractor orders and agreements entered into by the Transmission Owner to design, engineer, construct, install, operate, maintain and own Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, provided, however, that Upgrade Customer shall have the right to choose to take delivery of any equipment ordered by the Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; (b) remove any Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, built by the Transmission Owner; (c) partially or entirely complete the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, as necessary to preserve the integrity or reliability of the Transmission System, provided that Upgrade Customer shall be entitled to receive any rights associated with such Customer-Funded Upgrades as determined in accordance with the PJM Tariff; or (d) undo any of the changes to the Transmission System that were made pursuant to this Upgrade CSA. To the extent that the Upgrade Customer has fully paid for equipment that is unused upon cancellation or which is removed pursuant to this section, the Upgrade Customer shall have the right to take back title to such equipment; alternatively, in the event that the Upgrade Customer does not wish to take back title, the Transmission Owner may elect to pay the Upgrade Customer a mutually agreed amount to acquire and own such equipment.

#### **14.2.4 Termination upon Default.**

In the event that Upgrade Customer exercises its right to terminate under this section notwithstanding any other provision of this Upgrade CSA, the Upgrade Customer shall be liable for payment of the Transmission Owner's Costs incurred up to the date of Upgrade Customer's notice of termination pursuant to this section and the costs of completion of some or all of the Customer-Funded Upgrades, or specific unfinished portions thereof, and/or removal of any or all of such Customer-Funded Upgrades that have been installed, to the extent that Transmission Provider determines such completion or removal to be required for the Transmission Provider and/or the Transmission Owner to perform their respective obligations under the PJM Tariff, provided, however, that Upgrade Customer's payment of such costs shall be without prejudice to any remedies that otherwise may be available to it under this Upgrade CSA for the Default of the Transmission Owner.

### **14.3 Survival of Rights.**

The obligations of the Parties hereunder with respect to payments, Cancellation Costs, warranties, liability and indemnification shall survive termination to the extent necessary to provide for the determination and enforcement of said obligations arising from acts or events that occurred while this Upgrade CSA was in effect. In addition, applicable provisions of this Upgrade CSA will continue in effect after expiration, cancellation or termination to the extent necessary to provide for final billings, payments, and billing adjustments.

#### **14.4 Filing at FERC.**

The Transmission Provider shall make a filing with FERC pursuant to section 205 of the Federal Power Act effectuating the termination of this Upgrade CSA as required.

## **15.0 Force Majeure**

### **15.1 Notice.**

A Party that is unable to carry out an obligation imposed on it by this Upgrade CSA due to Force Majeure shall notify the other Parties in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **15.2 Duration of Force Majeure.**

A Party shall not be responsible for any non-performance or considered in Breach or Default under this Upgrade CSA, for any non-performance, any interruption or failure of service, deficiency in the quality or quantity of service, or any other failure to perform any obligation hereunder to the extent that such failure or deficiency is due to Force Majeure. A Party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such Party shall resume performance and give prompt notice thereof to the other Party.

### **15.3 Obligation to Make Payments.**

Any Party's obligation to make payments for services shall not be suspended by Force Majeure.



## **16.0 Confidentiality**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the other Party receiving the information that the information is confidential. If requested by any Party, the disclosing Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Party may disclose such writing to an appropriate Governmental Authority. Any Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **16.1 Term.**

During the term of this Upgrade CSA, and for a period of three years after the termination of this Upgrade CSA, except as otherwise provided in section 16 of this Upgrade CSA, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any Party.

### **16.2 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of this Upgrade CSA; or (vi) is required, in accordance with section 16.7 of this Appendix III, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Upgrade CSA. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

### **16.3 Release of Confidential Information.**

No Party shall disclose Confidential Information of another Party to any other person, except to its Affiliates (in accordance with FERC's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be or considering providing financing to or equity participation in Upgrade Customer on a need-to-know basis in connection with this Upgrade CSA, unless such person has first been advised of the confidentiality provisions of this section and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party that provides Confidential Information of another Party to any person shall remain responsible for any release of Confidential Information in contravention of this section.

#### **16.4 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Party. A Party's disclosure to another Party of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **16.5 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to any other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **16.6 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this Upgrade CSA or to comply with Applicable Laws and Regulations.

#### **16.7 Order of Disclosure.**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order, or waive compliance with the terms of this Upgrade CSA. Notwithstanding the absence of a protective order, or agreement, or waiver, the Party subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **16.8 Termination of Upgrade Construction Service Agreement.**

Upon termination of this Upgrade CSA for any reason, each Party shall, within 10 calendar days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting Party) or to return to the requesting Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party.

#### **16.9 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this section 16. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this section, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, consequential, or punitive damages of any nature or kind resulting from or arising in connection with a Breach of any obligation under this section 16.

#### **16.10 Disclosure to FERC or its Staff.**

Notwithstanding anything in this section to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Upgrade CSA, the Party, shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Upgrade CSA prior to the release of the Confidential Information to FERC or its staff. A Party shall notify the other Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### **16.11 Non-Disclosure.**

Subject to the exception noted above in section 16.10 of this Appendix III, no Party shall disclose Confidential Information of Party to any person not employed or retained by the disclosing Party, except to the extent disclosure is: (i) required by law; (ii) reasonably deemed by the disclosing Party to be required in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Upgrade CSA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Party's Confidential Information under this subparagraph, the disclosing Party shall promptly notify the other Parties in writing and shall assert confidentiality and cooperate with the other Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

#### **16.12 Information in the Public Domain.**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### **16.13 Return or Destruction of Confidential Information.**

If any Party provides any Confidential Information to another Party in the course of an audit or inspection, the providing Party may request the other Party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days after receiving the request and shall certify in writing to the requesting Party that it has complied with such request.

## **17.0 Information Access and Audit Rights**

### **17.1 Information Access.**

Subject to Applicable Laws and Regulations, each Party shall make available to the other Parties information necessary: (i) to verify the Costs incurred by the other Party for which the requesting Party is responsible under this Upgrade CSA and the PJM Tariff; and (ii) to carry out obligations and responsibilities under this Upgrade CSA and the PJM Tariff. The Parties shall not use such information for purposes other than those set forth in this section 17 and to enforce their rights under this Upgrade CSA and the PJM Tariff.

### **17.2 Reporting of Non-Force Majeure Events.**

Each Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Upgrade CSA for a reason other than an event of force majeure as defined in section 1.21 of Appendix 2 of this Attachment GG. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section 17 shall not entitle the receiving Party to allege a cause of action for anticipatory breach of this Upgrade CSA and the PJM Tariff.

### **17.3 Audit Rights.**

Subject to the requirements of confidentiality of this Upgrade CSA and the PJM Tariff, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent Party, to audit at its own expense the other Party's accounts and records pertaining to such Party's performance and/or satisfaction of obligations arising under this Upgrade CSA and the PJM Tariff. Any audit authorized by this section 17 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Upgrade CSA. Any request for audit shall be presented to the other Party not later than 24 months after the event as to which the audit is sought. Each Party shall preserve all records held by it for the duration of the audit period.

### **17.4 Waiver.**

Any waiver at any time by any Party of its rights with respect to a Breach or Default under this Upgrade CSA, or with respect to any other matters arising in connection with this Upgrade CSA, shall not be deemed a waiver or continuing waiver with respect to any other Breach or Default or other matter.

### **17.5 Amendments and Rights Under the Federal Power Act.**

Except as set forth in this section 17, this Upgrade CSA may be amended, modified, or supplemented only by written agreement of the Parties. Notwithstanding the foregoing, nothing contained in this Upgrade CSA shall be construed as affecting in any way any of the rights of any

Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this Upgrade CSA shall be amended, as mutually agreed by the Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

#### **17.6 Regulatory Requirements.**

Each Party's performance of any obligation under this Upgrade CSA for which such Party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **18.0 Representations and Warranties**

### **18.1 General.**

Each Constructing Entity hereby represents, warrants and covenants as follows, with these representations, warranties, and covenants effective as to the Constructing Entity during the full time this Upgrade CSA is effective:

#### **18.1.1 Good Standing.**

Such Constructing Entity is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated.

#### **18.1.2 Authority.**

Such Constructing Entity has the right, power and authority to enter into this Upgrade CSA, to become a Party thereto and to perform its obligations thereunder. This Upgrade CSA is a legal, valid and binding obligation of such Constructing Entity, enforceable against such Constructing Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **18.1.3 No Conflict.**

The execution, delivery and performance of this Upgrade CSA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Constructing Entity, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Constructing Entity or any of its assets.

## **19.0 Inspection and Testing of Completed Facilities**

### **19.1 Coordination.**

Upgrade Customer and the Transmission Owner shall coordinate the timing and schedule of all inspection and testing of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA.

### **19.2 Inspection and Testing.**

Each Constructing Entity shall cause inspection and testing of any Customer-Funded Upgrades that it constructs in accordance with the provisions of this section. The Parties acknowledge and agree that inspection and testing of facilities may be undertaken as facilities are completed and need not await completion of all of the facilities that a Constructing Entity is building.

Upon the completion of the construction and installation, but prior to energization, of any Customer-Funded Upgrades constructed by the Transmission Owner, the Transmission Owner shall have the same inspected and/or tested by qualified personnel or a qualified contractor to assess whether the facilities substantially comply with Applicable Standards. Subject to Applicable Laws and Regulations, said inspection and testing shall be held on a mutually agreed-upon date, and the Upgrade Customer and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

### **19.3 Notification and Correction of Defects.**

In the event that inspection and/or testing of any Customer-Funded Upgrades built by the Transmission Owner identifies any defects or failures to comply with Applicable Standards in such facilities, Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. In the event that such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.



## **20.0 Operation and Maintenance of Merchant Network Upgrades**

Unless otherwise provided in this Upgrade CSA, the Transmission Owner that owns Merchant Network Upgrades constructed on behalf of and at the expense of the Upgrade Customer shall operate and maintain such Merchant Network Upgrades at the expense of the Upgrade Customer. The charge for operation and maintenance of such Merchant Network Upgrade charges is set forth in SCHEDULE B of this Upgrade CSA.

## **21.0 Charges**

### **21.1 Specified Charges.**

If and to the extent required by the Transmission Owner, after the Initial Operation of the Merchant Network Upgrade, Upgrade Customer shall pay one or more of the types of recurring charges described in this section to compensate the Transmission Owner for costs incurred in performing certain of its obligations under this Appendix III. All such charges shall be stated in SCHEDULE B of the Upgrade CSA. Permissible charges under this section may include:

(a) Administration Charge - Any such charge may recover only the costs and expenses incurred by the Transmission Owner in connection with administrative obligations such as the preparation of bills. An Administration Charge shall not be permitted to the extent that the Transmission Owner's other charges to the Upgrade Customer under the same Upgrade CSA include an allocation of the Transmission Owner's administrative and general expenses and/or other corporate overhead costs.

(b) Merchant Network Upgrade Operations and Maintenance Charge - Any such charge may recover only the Transmission Owner's costs and expenses associated with operation and maintenance charges related to the Upgrade Customer's Merchant Network Upgrade owned by the Transmission Owner.

(c) Other Charges - Any other charges applicable to the Upgrade Customer, as mutually agreed upon by the Upgrade Customer and the Transmission Owner and as accepted by the FERC as part of an Upgrade CSA.

### **21.2 FERC Filings.**

To the extent required by law or regulation, each Party shall seek FERC acceptance or approval of its respective charges or the methodology for the calculation of such charges.

**SCHEDULE A**

**NEGOTIATED CONTRACT OPTIONS**

List or state "None."

**SCHEDULE B**

**OPERATION AND MAINTENANCE CHARGES FOR  
MERCHANT NETWORK UPGRADES**

List or state "None."

**SCHEDULE C**

**NETWORK UPGRADES TO BE BUILT BY TRANSMISSION OWNER**

**[Specify Facilities to Be Constructed or state "None"]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Developer Party has sole cost responsibility
- ii. Facilities for which a Network Upgrade Cost Responsibility Service Agreement is required.

Tariff, Part IX, Subpart F

FORM OF  
COST RESPONSIBILITY AGREEMENT

Service Agreement No. [ ]

(Project Identifier # )

**COST RESPONSIBILITY AGREEMENT**

**By and Between**

**PJM INTERCONNECTION, L.L.C.**

**And**

---

**COST RESPONSIBILITY AGREEMENT**

**By and Between**  
**PJM INTERCONNECTION, L.L.C.**  
**And**

---

(Project Identifier # )

**RECITALS**

This Cost Responsibility Agreement (“Agreement”), dated as of [Insert Date], is made and entered into by and between [Insert Project Developer Name] (“Project Developer”) and PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”). Project Developer and Transmission Provider each may be referred to herein as a “Party” or, collectively, “Parties.” Capitalized terms used in this Agreement, unless otherwise indicated, shall have the meanings ascribed to them in the PJM Open Access Transmission Tariff (“Tariff”). For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}. [Possible Language: This Agreement supersedes the (name of agreement) between PJM Interconnection, L.L.C. and (former agreement Project Developer name), dated (insert date of former agreement). This paragraph and the following WHEREAS clauses can be edited as appropriate if there is no former agreement, and this CRA is being into in connection with a merger/re-organization or other agreement or transaction].

WHEREAS, Project Developer owns or operates an existing generating facility within the PJM Region and is currently a party to [an existing Power Purchase Agreement[s] (the [“PPA[s]”]).

WHEREAS, Project Developer has notified the Transmission Provider its [PPA[s]] expire on [Insert Expiration Date[s]].

WHEREAS, the Project Developer proposes to enter into a form of Generation Interconnection Agreement (“GIA”) with PJM and the Transmission Owner coincident with the expiration of the [PPA[s]] in order to establish an interconnection with the PJM Transmission System for the purposes of making wholesale sales in the PJM Region (the “Project Developer Request”).

WHEREAS, consistent with Order No. 2003<sup>1</sup>, Project Developer need not submit an

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<sup>1</sup> Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, 104 FERC ¶ 61,103, at PP 814, 815 (2003), order on reh’g, Order No. 2003-A, 106 FERC ¶ 61,220, order on reh’g, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), order on reh’g, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), aff’d sub nom, Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC, 475 F.3d 1277 (D.C. Cir. 2007), cert denied, 552 U.S. 1230 (2008).



Interconnection Request pursuant to the GIP, provided it represents that it is a Qualifying Facility and the output and operating characteristics of its existing generation facility (“Generating Facility”) will continue to be substantially the same as the output and operating characteristics of the Generating Facility as set forth in the existing Project Developer [PPA[s]].

WHEREAS, the Transmission Provider must perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

### **COST RESPONSIBILITY**

1. Project Developer elects, and PJM agrees to perform certain modeling, studies or analysis to verify and ensure that the interconnection of Generating Facility meets the necessary system interconnection requirements as specified in the Tariff and associated PJM Manuals, as appropriate.
2. The scope of the modeling, studies or analysis shall be subject to the assumptions as set forth in Attachment A to this Agreement.
3. If required, studies shall identify Interconnection Facilities, Network Upgrades and Distribution Upgrades including the estimated cost thereof that may be required to provide interconnection service under the Tariff based upon the information specified by the Project Developer in Attachment A.
4. Project Developer shall submit an upfront deposit in the amount of \$10,000 for the performance of the modeling, studies or analysis at the time Project Developer submits this executed Agreement to the Transmission Provider. If in-depth studies are required (e.g., System Impact Study), the Transmission Provider’s good faith estimate for the time to complete such studies is {instructions: provide estimated time to complete studies} months.
5. Project Developer agrees that it shall reimburse the Transmission Provider for the actual costs incurred or expended by the Transmission Provider and Transmission Owner in connection with the modeling, studies or analysis (above and beyond the deposits submitted pursuant to paragraph 4 above) within 20 days of receiving an invoice for such costs. Actual costs may exceed the study deposit.
6. Within 120 days after the Transmission Provider completes the modeling, studies or analysis, Transmission Provider shall provide a final invoice (“Final Invoice”) which will include an accounting of the actual costs incurred in performing the modeling, studies or analysis. Within 20 days of receiving the Final Invoice, the Project Developer shall make any payment due to the Transmission Provider and/or the Transmission Owner that is necessary to resolve any differences between (a) the Project Developer’s cost responsibility under this Agreement and the Tariff for the actual cost of the modeling, studies or analysis;

and (b) Project Developer's aggregate payments (including deposits submitted pursuant to paragraph 4 above) remitted pursuant to this Agreement prior to the issuance of the Final Invoice.

7. In the event that the Transmission Provider anticipates that the actual costs of the modeling, studies or analysis will exceed the deposits submitted in accordance with paragraph 4 above, the Transmission Provider shall provide the Project Developer with an estimate of the modeling, studies or analysis costs. Upon receipt of the estimate of such modeling, studies or analysis costs, the Project Developer may withdraw its Project Developer Request and terminate this Agreement by providing written notice of such withdrawal and termination to the Transmission Provider within 20 Business Days of receiving such estimate. If Project Developer fails to pay such amounts, then Transmission Provider shall deem this Agreement to be terminated and withdrawn. If the Project Developer withdraws its Project Developer Request and terminates this Agreement prior to the completion of the modeling, studies or analysis work, Project Developer agrees to pay actual costs of the modeling, studies or analysis performed up until the time of such request to withdraw and terminate.

### **CONFIDENTIALITY**

8. Project Developer agrees to provide all information requested by the Transmission Provider necessary to complete the required modeling, studies or analysis. Subject to paragraph 9 of this Agreement and to the extent required by the GIP, information provided pursuant to this paragraph 8 shall be and remain confidential.
9. Upon completion of all requisite modeling, studies or analysis, the Transmission Provider shall keep confidential all information provided to it by the Project Developer. Upon completion of the modeling, studies or analysis, the results shall be listed on the Transmission Provider's OASIS to the extent required and, to the extent required by Commission regulations, will be made publicly available upon request, except that the identity of the Project Developer shall be remain confidential and will not be posted on OASIS.
10. Project Developer acknowledges that, consistent with the Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the modeling, studies or analysis process and that the Transmission Provider may disseminate information to the Transmission Owner.

### **DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

11. In modeling, studying or analyzing Project Developer's Request, the Transmission Provider, the Interconnected Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the Project Developer and possibly by third-parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTOR EMPLOYED

BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS, OF THE MODELING, STUDIES OR ANALYSIS. The Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement, nor any modeling, studies or analysis prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any interconnection service to or on behalf of the Project Developer at this point in time or in the future.

12. Project Developer agrees that in no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission Provider's obligations under this Agreement or otherwise.

Without limitation of the foregoing, Project Developer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any modeling, studies or analysis arising out of the Project Developer Request shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

### ASSIGNMENT

13. No Party herein shall assign its rights or delegate its duties, or any part of such rights or duties, under this Agreement without the written consent of the other Party, which consent shall not be unreasonably withheld, conditioned, or delayed. Any such assignment or delegation made without such written consent shall be null and void. A Party may make an assignment in connection with the sale, merger, or transfer of a substantial portion or all of its properties which it owns, so long as the assignee in such a sale, merger, or transfer assumes in writing all rights, duties and obligations arising under this Agreement.

### MISCELLANEOUS

14. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage

prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

**Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

**Project Developer**

[Insert Project Developer Notice Info]

Either Party may change the notice information in this Agreement by giving five Business Days written notice prior to the effective date of the change.

15. Subject to any necessary regulatory acceptance, this Agreement shall become effective on the date that it is executed by all Parties, or, if this Agreement is filed with Federal Energy Regulatory Commission ("FERC") unexecuted, upon the date specified by the FERC.

16. Breach:

a. A breach of this Agreement shall include:

i. The failure to pay any amount when due;

ii. The failure to comply with any material term or condition of this Agreement or the Tariff, including but not limited to any material breach of a representation, warranty or covenant made in this Agreement;

iii. Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;

iv. Failure of Project Developer to provide information or data required to be provided pursuant to this Agreement in order for Transmission Provider to perform the modeling, studies or analysis associated with this Agreement.

b. Notice of Breach:

A Party not in breach shall give written notice of an event of breach to the breaching Party. Such notice shall set forth, in reasonable detail, the nature of the breach, and where known and applicable, the steps necessary to cure such breach. A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 16 automatically in Default of this Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

c. Cure of Breach or Termination Pursuant to Breach:

- i. Except for the event of Breach set forth in section 16.a.i above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends from the receipt of such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.
- ii. In an event of Breach set forth in section 16.a.i, the Breaching Interconnection Party shall may cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn

17. In addition to section 16 above, this Agreement may be terminated by the following means:

- a. By Mutual Consent: This Agreement may be terminated as of the date on which the Parties mutually agree to terminate this Agreement.
- b. By Project Developer: The Project Developer may unilaterally terminate this Agreement in accordance with the terms set forth in section 7 of this Agreement or pursuant to Applicable Laws and Regulations upon providing Transmission Provider 30 days prior written notice thereof, provided that Project Developer is not in breach under this Agreement.
- c. By Transmission Provider: Transmission Provider may unilaterally terminate this Agreement in accordance with the Applicable Laws and Regulations upon providing Project Developer 30 days prior written notice thereof.

18. No waiver by either Party of one or more breaches by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further breach, whether of a like or different character.

19. This Agreement or any part thereof may not be amended, modified or waived other than by a writing signed by all Parties hereto.

Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page,

as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.

20. This Agreement shall be binding upon the Parties hereto, their heirs, executors, administrators, successors and assigns.
21. This Agreement shall not be construed as an application for service under Part II or Part III of the Tariff.
22. The provisions of the GIP of the Tariff are incorporated herein and made a part hereof.
23. Governing Law, Regulatory Authority and Rules: This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders or regulations of a Governmental Authority.
24. No Third-party Beneficiaries: This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.
25. Multiple Counterparts: This Agreement may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument.
26. No Partnership: The Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership, obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
27. Severability: If any provision of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
28. Reservation of Rights: The Transmission Provider shall have the right to make a unilateral filing with FERC to implement or modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or

any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Project Developer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials. By each individual signing below, each represents to the other that they are duly authorized to sign on behalf of that company and have the actual and/or apparent authority to bind the respective company to this Agreement.

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Project Developer: [Insert Project Developer Name]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_



**ATTACHMENT A**

**INFORMATION TO BE SUPPLIED BY PROJECT DEVELOPER**

**Name of Interconnection Project Developer (as it will appear in the GIA):**

**Name of the Generating Facility:**

**Location of the Generating Facility:**

**Company name:**

**Address:**

**City, State, Zip Code:**

**Legal Notices:**

**Company name:**

**Address:**

**City, State, Zip Code:**

**Attn:**

**Phone:**

**Email:**

**Tax ID for the Generating Facility:**

Maximum Facility Output:

Capacity Interconnection Rights

Description of the equipment configuration (as it is to appear in the GIA):

Requested effective date of the GIA (if other than upon execution by all parties, e.g., to coincide with the termination of a PPA):

Provide Generating Facility Location/Site Plan (generally, an aerial photo with cross streets labeled and the Generating Facility pinpointed in red):

Provide one-line diagram of the Generating Facility and clearly indicate Point of Interconnection and the Point of Change of Ownership:

Provide a list of metering equipment and indicate ownership of same:

Addendum 1

[Insert Project Developer Name] Site Overview

Addendum 2

[Insert Project Developer Name] One Line Diagram

Tariff, Part IX, Subpart G

FORM OF  
NECESSARY STUDIES AGREEMENT

Service Agreement No. [ ]

(Project Identifier # )

**NECESSARY STUDIES AGREEMENT**

**By And Among**

**PJM INTERCONNECTION, L.L.C.**

**And**

\_\_\_\_\_

Necessary Studies Agreement  
By and Among  
PJM Interconnection, L.L.C.  
and

---

(Project Identifier # )

RECITALS

1. This Necessary Studies Agreement (“Agreement”) entered into by and between (Project Developer”) and PJM Interconnection, L.L.C. (“PJM” or “Transmission Provider”) (individually, a “Party” and together, the “Parties”) is effective as of the date this Agreement is fully executed by the Parties (“Effective Date”). Capitalized terms used in this Agreement, unless otherwise indicated, shall have the meanings ascribed to them in the PJM Open Access Transmission Tariff (“Tariff”), or Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”). For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, use Part VIII if this is a new rules period agreement}.
2. Consistent with section A.2 of the GIP, and pursuant to that certain [Generation Interconnection Agreement] related to PJM {Project Identifier #} , designated as [Original, First Revised, etc.] Service Agreement No. , with an effective date of [Date] [and filed with the Federal Energy Regulatory Commission (“FERC”) in Docket No. ] [which was a conforming agreement reported to the Federal Energy Regulatory Commission (“FERC”) in PJM’s Electric Quarterly Reports] (the “Service Agreement”), Project Developer has notified Transmission Provider that it plans to undertake modifications to its Generating Facility or Merchant Transmission Facility located at that, upon completion, reasonably may have a material impact on the Transmission System (“Planned Modifications”).

{or}

Subject to sections 4 through 14 of this Agreement, Project Developer shall provide sufficient information regarding the Planned Modifications, including but not limited to relevant data, drawings, models, plans, and specifications, to enable Transmission Provider to evaluate the impact, if any, on the Transmission System of the Planned Modifications. The Planned Modifications consist of . Attachment 1 to this Agreement contains a detailed description of the Planned Modifications.

3. Project Developer represents and warrants that the information provided in section 2 of this Agreement is accurate and complete as of the Effective Date.
4. The obligation(s) of Transmission Provider are conditioned on receipt from Project Developer of all required information regarding the Planned Modifications within 30 days of the Effective Date. Project Developer is obligated to update the data following any requests from PJM. If Project Developer does not provide all required information regarding the Planned Modifications within 30 days of the Effective Date, this Agreement shall be null and void and any and all obligations on the part of Transmission Provider shall cease.

### **PURPOSE OF THE NECESSARY STUDIES UNDER THIS AGREEMENT**

5. Consistent with Tariff, Part IX, Subpart B, Appendix 2, section 3, and the Service Agreement, Transmission Provider agrees to conduct the necessary studies to determine whether the Planned Modifications will have a permanent material impact on the Transmission System and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the Planned Modifications ("Necessary Studies"). The Necessary Studies are expected to include, but are not limited to, a \_\_\_\_\_ . Upon completion of the Necessary Studies, Transmission Provider shall provide Project Developer with preliminary determinations of: (i) the type and scope of the permanent material impact, if any, the Planned Modifications will have on the Transmission System; (ii) the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications; and (iii) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications. In the event that Transmission Provider is unable to complete the Necessary Studies within 270 days of the date the Transmission Provider approves the dynamic model and data submitted by the Project Developer and Transmission Provider's receipt of the information required under section 3 of this Agreement, Transmission Provider shall notify Project Developer and explain the reasons for the delay.

### **CONFIDENTIALITY**

6. Subject to section 7 below, information provided pursuant to this Agreement that is Confidential Information as defined by the Tariff, and to the extent consistent with PJM's confidentiality obligations in Operating Agreement, section 18.17, shall be and remain confidential. To the extent Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of the Necessary Studies, the consultants and/or Transmission Owner(s) shall keep all information provided by Project Developer confidential and shall use such information solely for the purpose of the study for which it was provided and for no other purpose.



7. Project Developer acknowledges that, consistent with the GIP, Transmission Provider may contract with consultants, including Transmission Owner(s), to provide services or expertise in the study process and that Transmission Provider may disseminate information to Transmission Owner(s).
8. During the longer of the terms of this Agreement or the Service Agreement, and for a period of three years after the expiration or termination thereof, and except as otherwise provided herein, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by the other Party.
9. Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the requirements of this Agreement, the Tariff, or the Operating Agreement; or (vi) is required, in accordance with this Agreement, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.
10. Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the other Party. A Party's disclosure to the other Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
11. By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.
12. Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication, or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under this Agreement or the Tariff.
13. If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for

production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order or waive compliance with the terms of the [GIP] or any applicable agreement entered into pursuant to the [GIP]. Notwithstanding the absence of a protective order or agreement, or waiver, the Party that is subjected to the request or order may disclose such Confidential Information that, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

14. Notwithstanding anything in this Agreement to the contrary, and pursuant to 18 C.F.R. § 1b.20, if the FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement or the Service Agreement, the Party receiving such request shall provide the requested information to FERC or its staff, within the time provided for in the request for information.

In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. The providing Party is prohibited from notifying the other Party prior to the release of the Confidential Information to FERC or its staff. The providing Party shall notify the other Party when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

### **COST RESPONSIBILITY**

15. Project Developer shall provide to Transmission Provider, as of the Effective Date, an initial deposit of \$25,000 for the performance of the Necessary Studies. Transmission Provider's good faith estimate for the time of completion of the Necessary Studies is within 270 days of the date the Transmission Provider approves the dynamic model and data submitted by the Project Developer, and Transmission Provider's receipt of the information under section 3 of this agreement.

- a. If Project Developer fails to submit an initial deposit of \$25,000 for the performance of the Necessary Studies, this Agreement shall be deemed to be terminated and withdrawn effective as of the end of the next Business Day after the date by which the initial deposit was due to be paid to Transmission Provider.
- b. If any additional study costs beyond the initial deposit of \$25,000 are anticipated, then, prior to conducting any of the Necessary Studies, Transmission Provider shall provide an estimate of the additional study costs. The estimated additional study costs are non-binding, and additional actual study costs may exceed the estimated additional study cost increases provided by Transmission Provider.

Regardless of whether Transmission Provider provides Project Developer with estimated additional studies, Project Developer is responsible for and must pay all actual study costs.

- i. If Transmission Provider sends notification to Project Developer of estimated additional study costs, then Project Developer must either:
  - (a) Withdraw the request for the Necessary Studies; or
  - (b) Pay all estimated additional study costs within 10 days of such estimate being sent to Project Developer by Transmission Provider.
- ii. If Project Developer fails to complete either 16(b)(i)(a) or 16(b)(i)(b), above, this Agreement shall be deemed to be terminated and withdrawn effective as of the end of the next Business Day after the date by which the additional study costs were due to be paid to Transmission Provider.
- c. Within 120 days after Transmission Provider completes and delivers the Necessary Studies, Transmission Provider shall provide a final invoice that will include an accounting of the actual costs incurred in performing the Necessary Studies ("Final Invoice"). Within 20 days of receiving the Final Invoice, Project Developer shall make any payment due to Transmission Provider. If Project Developer withdraws its Necessary Studies request and terminates this Agreement prior to the completion of the Necessary Studies or analysis work, Project Developer agrees to pay Transmission Provider actual costs of the modeling, studies, or analysis performed up until the time of such request to withdraw and terminate.

#### **DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

16. In analyzing and preparing the Necessary Studies, Transmission Provider, Transmission Owner(s), and any other subcontractors employed by Transmission Provider shall have to rely on information provided by Project Developer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE NECESSARY STUDIES. Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the Necessary Studies performed hereunder are intended, nor shall either be interpreted, to constitute agreement by

Transmission Provider or Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of Project Developer either at this point in time or in the future.

17. In no event will Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Agreement or otherwise, even if Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for any delay in delivery of, or of the non-performance or delay in performance of, Transmission Provider's obligations under this Agreement. Without limitation of the foregoing, Project Developer further agrees that Transmission Owner(s) and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Necessary Studies shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

### **MISCELLANEOUS**

18. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

#### **Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403-2497  
interconnectionagreementnotices@pjm.com

#### **Project Developer**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_  
Phone \_\_\_\_\_  
Email \_\_\_\_\_

19. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.

20. This Agreement, or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties.

Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.

## 21 Breach, Cure and Default

### 21.1 Breach:

A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material breach of a representation, warranty or covenant;
- (c) Assignment of the Agreement in a manner inconsistent with its terms; or
- (d) Failure of a Party to provide information or data required to be determined under to another Party for such other Party to satisfy its obligations under this Agreement.

### 21.2 Notice of Breach:

A Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider agrees to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the notifying Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies).

### 21.3 Cure and Default:

A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 21.3 is automatically in Default of this Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

#### 21.4.1 Cure of Breach:

21.4.1.1 Except for the event of Breach set forth in section 21.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Parties. Such agreement shall not be unreasonably withheld.

21.4.1.2 In an event of Breach set forth in section 21.1(a), the Breaching Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

#### 21.5 Right to Compel Performance:

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. No remedy conferred by any provision of this Agreement is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies

22. This Agreement shall be binding upon the Parties, their heirs, executors, administrators, successors, and assigns.

23. Neither this Agreement nor the Necessary Studies performed hereunder shall be construed as an application for any service under the Tariff.

24. All portions of the Tariff and Operating Agreement pertinent to the subject matter of this Agreement and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.

25. Unless otherwise defined in this Agreement, all capitalized terms herein shall have the meanings as set forth in the definitions of such terms as stated in the PJM Tariff.

26. In addition to section 21 above, this Agreement may be terminated by the following means:

a. By Mutual Consent: This Agreement may be terminated as of the date on which the Parties mutually agree to terminate this Agreement.

- b. By Project Developer: Project Developer may unilaterally terminate this Agreement in accordance with the terms set forth in section 16(b)(i)(a) of this Agreement or pursuant to Applicable Laws and Regulations upon providing Transmission Provider 30 days prior written notice thereof, provided that Project Developer is not in breach under this Agreement.
  - c. By Transmission Provider: Transmission Provider may unilaterally terminate this Agreement in accordance with Applicable Laws and Regulations upon providing Project Developer 30 days prior written notice thereof.
27. This Agreement or any part thereof may not be amended, modified, or waived other than by a writing signed by all Parties hereto.
28. The provisions of the GIP are incorporated herein and made a part hereof.
29. Governing Law, Regulatory Authority, and Rules: This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials. By each individual signing below each represents to the other that they are duly authorized to sign on behalf of that company and have actual and/or apparent authority to bind the respective company to this Agreement.

**Transmission Provider:**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Project Developer:**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_



## ATTACHMENT 1

Describe work to be done.

Tariff, Part IX, Subpart H

FORM OF  
NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT

Service Agreement No. [ ]

(Network Upgrade # )

**NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT**

**By and Among**

**PJM INTERCONNECTION, L.L.C.**

**And**

**And**

**And**

**NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT**

**By and Among**  
**PJM Interconnection, L.L.C.**

**And**  
**[Name of Project Developer]**

**And**  
**[Name of Project Developer]**

(Network Upgrade # )

1.0 Parties. This Network Upgrade Cost Responsibility Agreement (“NUCRA”) including the Schedules and Appendices attached hereto and incorporated herein, is entered into by and between PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”) and the following Project Developers:

Project Developer (includes Eligible Customer and Affected System Customer):

[full name], Project Identifier # [OPTIONAL: (also referred to as “[short name”))]

Name and location of Generating Facility or Merchant Transmission Facility

Project Developer:

[full name] and Project Identifier # [OPTIONAL: (also referred to as “[short name”))]

Name and location of Generating Facility or Merchant Transmission Facility

{instructions – for the above, also provide Service Agreement No. or other identifying information if known}

All capitalized terms herein shall have the meanings set forth in the appended definitions of such terms as stated in the GIP. [Use as/when applicable: This NUCRA supersedes the {insert details to identify the agreement being superseded, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}] For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}.

2.0 Authority. This NUCRA is entered into pursuant to [{use Part VII if this is a transition period CSA subject to Tariff, Part VII} {use Part VIII if this is a new rules NUCRA subject to Part VIII}] of the Tariff. The standard terms and conditions set forth in Appendix 2 to this NUCRA are hereby specifically incorporated as provisions of this NUCRA.

3.0 Effective Date and Term.

3.1 Effective Date. This NUCRA shall become effective on the later of (i) the date the agreement has been executed by all parties to this NUCRA, or (ii) the date that all Project Developers have delivered Security to the Transmission Provider, provided, however, that if the NUCRA is filed with the FERC unexecuted, the Effective Date shall be the date specified by the FERC.

3.2 Term. This NUCRA shall continue in full force and effect from the Effective Date until the termination thereof pursuant to section 7 of Appendix 2 to this NUCRA.

4.0 Common Use Upgrades Construction and Scope. Common Use Upgrades subject to this NUCRA shall be described in the attached Schedule A. Construction of the Common Use Upgrades and changes to the scope of work shall be as set forth in the applicable agreements or projects as identified in section 1.0 above.

5.0 Schedule of Work. The Schedule of Work for construction of the Common Use Upgrades shall be as set forth in the applicable agreements or projects as identified in section 1.0 above.

6.0 Common Use Upgrade Cost Responsibility. The cost responsibility of each Project Developer for each Common Use Upgrade described in the attached Schedule A shall be described in the attached Schedule B. Cost responsibility shall be described as a percentage of the total estimated cost of each Common Use Upgrade.

7.0 Security. Security associated with this NUCRA shall be the Security provided by each Project Developer as set forth in the Project Developer's GIA, section 5, or the Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party.

8.0 Notices. Any notice or request made to or by any party regarding this NUCRA shall be made in accordance with the standard terms and conditions for construction set forth in Appendix 2 to this NUCRA to the representatives of the other parties, as indicated below:

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

Project Developer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Developer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 9.0 Waiver. No waiver by any party of one or more defaults by another in performance of any of the provisions of this NUCRA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 10.0 Amendment. Except as set forth in Appendix 2, sections 4 and 13.3 of this NUCRA, this NUCRA or any part thereof, may not be amended, modified, assigned, or waived other than by a writing signed by all parties. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and initialed by the parties, without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.
- 11.0 Incorporation of Other Documents. All portions of the agreements identified in section 1.0 above, and the Tariff and the Operating Agreement pertinent to the subject of this NUCRA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof. To the extent there is a conflict between the NUCRA and other documents, the terms of this NUCRA shall control.
- 12.0 Addendum of Non-Standard Terms and Conditions. Subject to FERC acceptance, the parties agree that the terms and conditions set forth in the attached Schedule C are hereby incorporated by reference into, and made a part of, this NUCRA. In the event of any conflict between a provision of the attached Schedule C that FERC has accepted and any provision of the standard terms and conditions set forth in Appendix 2 to this NUCRA that relates to the same subject matter, the pertinent provision of the attached Schedule C shall control.
- 13.0 This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal laws and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction.

IN WITNESS WHEREOF, the parties have caused this Network Upgrade Cost Responsibility Agreement to be executed by their respective authorized officials.

(Network Identifier # \_\_\_\_\_)

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

The signature below of the authorized officer of the Transmission Owner is for the limited purpose of acknowledging that an authorized officer of said Transmission Owner has read this Agreement as of this \_\_\_\_ day of 20\_\_.

Transmission Owner: [Name of Transmission Owner]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**APPENDICES:**

- **APPENDIX 1 – DEFINITIONS**
- **APPENDIX 2 – STANDARD TERMS AND CONDITIONS**

**SCHEDULES:**

- **SCHEDULE A – COMMON USE UPGRADES**
- **SCHEDULE B – COST RESPONSIBILITY**
- **SCHEDULE C – SCHEDULE OF NON-STANDARD TERMS AND CONDITIONS**



APPENDIX 1

DEFINITIONS

From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement.

**APPENDIX 2**

**STANDARD TERMS AND CONDITIONS**

## **Preamble**

The cost responsibility of any Common Use Upgrades required to interconnect a Generating Facility or Merchant Transmission Facility with the Transmission System shall be in accordance with the following Standard Construction Terms and Conditions.

### **1 Facilitation by Transmission Provider**

Transmission Provider shall keep itself apprised of the status of the construction-related activities of the parties to this NUCRA and, upon request of any of them, Transmission Provider shall meet with the parties separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this NUCRA. Each party shall cooperate in good faith with the other parties in Transmission Provider's efforts to facilitate resolution of disputes.

### **2 Common Use Upgrade Cost Responsibility**

Responsibility for the Costs of Common Use Upgrades shall be assigned in accordance with the GIP. The cost responsibility of each Project Developer shall be shown in Schedule B.

### **3 Security, Billing and Payments**

#### **3.1 Security:**

Security associated with this NUCRA shall be the Security provided by each Project Developer as set forth in section 7 of this NUCRA above.

#### **3.2 Adjustments to Security:**

The Security provided by each Project Developer at or before execution of the applicable GIA, Construction Service Agreement or other relevant NUCRAs the Project Developer is a party to shall be increased or decreased in accordance with the provisions of the applicable GIA, Construction Service Agreement or other relevant NUCRAs the Project Developer is a party to, and consistent with the Project Developer's cost responsibility set forth in Schedule B of this NUCRA.

#### **3.3 Invoice:**

In addition to the invoice provisions set forth in the applicable GIA Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party, for purposes of this NUCRA, Transmission Provider shall bill the Project Developers in accordance with the cost responsibility set forth in Schedule B of this NUCRA.

### **3.4 Final Invoice:**

In addition to the final invoice provisions set forth in the applicable GIA Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party, for purposes of this NUCRA, the accounting and payments shall be in accordance with the cost responsibility set forth in Schedule B of this NUCRA.

### **3.5 Disputes:**

In the event of a billing dispute between any of the parties to this NUCRA, Transmission Provider shall continue to perform its obligations pursuant to this NUCRA so long as (a) Project Developer continues to make all payments not in dispute, and (b) the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute, or (c) Project Developer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Project Developer fails to meet any of these requirements, then Transmission Provider shall so inform the other parties to this NUCRA and Transmission Provider may provide notice to Project Developer of a Breach pursuant to section 6 of this Appendix 2.

### **3.6 No Waiver:**

Payment of an invoice shall not relieve Project Developer from any other responsibilities or obligations it has under this NUCRA, nor shall such payment constitute a waiver of any claims arising hereunder.

### **3.7 Interest:**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

## **4 Assignment**

### **4.1 Assignment with Prior Consent:**

Except as provided in section 4.2 to this Appendix 2, no party to this NUCRA shall assign its rights or delegate its duties, or any part of such rights or duties, under this NUCRA without the written consent of the other parties, which consent shall not be unreasonably withheld, conditioned, or delayed. Any such assignment or delegation made without such written consent shall be null and void. A party may make an assignment in connection with the sale, merger, or transfer of a substantial portion or all of the Common Use Upgrades which it owns or will own upon completion of construction and the transfer of title required by the applicable GIA or Construction Service Agreement, so long as the assignee in such a sale, merger, or transfer assumes in writing all rights, duties and obligations arising under this NUCRA.

## **4.2 Assignment Without Prior Consent:**

### **4.2.1 Assignment to Owners:**

Project Developer may assign the NUCRA without the prior consent of any other party to the NUCRA to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Common Use Upgrades, provided that prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical and operational competence to comply with the requirements of this NUCRA and assumes in a writing provided to the Transmission Provider all rights, duties, and obligations of Project Developer arising under this NUCRA. However, any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Provider, such consent not to be unreasonably withheld, conditioned or delayed. Project Developer shall provide Transmission Provider with notice of any such assignment in accordance with the PJM Manuals.

### **4.2.2 Assignment to Lenders:**

Project Developer may, without the consent of any other party to this NUCRA, assign the NUCRA to any Project Finance Entity(ies), provided that such assignment shall not alter or diminish Project Developer's duties and obligations under this NUCRA. If Project Developer provides the parties to this NUCRA with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 12 of this Appendix 2, the Transmission Provider shall provide notice and reasonable opportunity for such entity(ies) to cure any Breach under this Appendix 2 in accordance with this Appendix 2. Transmission Provider shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment and status of the NUCRA, provided that such documents do not alter or diminish the rights of the Transmission Provider under this Appendix 2, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider's invoice therefor, Project Developer shall pay the Transmission Provider reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Provider.

## **4.3 Successors and Assigns:**

This NUCRA and all of its provisions are binding upon, and inure to the benefit of, the parties to this NUCRA and their respective successors and permitted assigns.

## **5 Indemnity**

### **5.1 Indemnity:**

Each Project Developer to this NUCRA shall indemnify and hold harmless the other parties to this NUCRA, and the other parties' officers, shareholders, stakeholders, members, managers,

representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying party's breach of any of the representations or warranties made in, or failure of the indemnifying party or any of its subcontractors to perform any of its obligations under, this NUCRA (including Appendix 2), or (ii) the negligence or willful misconduct of the indemnifying party or its contractors; provided, however, that no party shall have any indemnification obligations under this section 5.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the party seeking indemnity.

## **5.2 Indemnity Procedures:**

Promptly after receipt by a party entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in section 5.1 may apply, the Indemnified Person shall notify the indemnifying party(ies) of such fact. Any failure of or delay in such notification shall not affect the indemnifying party's(ies') indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party(ies). The Indemnified Person shall cooperate with the indemnifying party(ies) with respect to the matter for which indemnification is claimed. The indemnifying party(ies) shall have the right to assume the defense thereof with counsel designated by such indemnifying party(ies) and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying party(ies) and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying party(ies), the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying party(ies) shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying party(ies). Notwithstanding the foregoing, the indemnifying party(ies) (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the indemnifying party(ies), in such event the indemnifying party(ies) shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

### **5.3 Indemnified Person:**

If an Indemnified Person is entitled to indemnification under this section 5 as a result of a claim by a third party, and the indemnifying party(ies) fails, after notice and reasonable opportunity to proceed under section 5.2 of this Appendix 2, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying party(ies) contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

### **5.4 Amount Owing:**

If an indemnifying party(ies) is obligated to indemnify and hold any Indemnified Person harmless under this section 5, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

### **5.5 Limitation on Damages:**

Except as otherwise provided in this section 5, the liability of a party(ies) under this Appendix 2 shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any party(ies) or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another party, whether in tort, contract or other basis in law or equity for any special, indirect punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 5.5 are without regard to the cause or causes related thereto, including the negligence of any party(ies), whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any party's rights to obtain equitable relief as otherwise provided in this Appendix 2. The provisions of this section 5.5 shall survive the termination or expiration of this NUCRA.

### **5.6 Limited Liability in Emergency Conditions:**

Except as otherwise provided in the Tariff or the Operating Agreement, no party shall be liable to any other party for any action that it takes in responding to an Emergency Condition, so long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or of the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Project Developer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.

## **6 Breach, Cure and Default**

### **6.1 Breach:**

A Breach of the NUCRA shall include, but not be limited to:

(a) The failure to pay any amount when due;

(b) The failure to comply with any material term or condition of this NUCRA including but not limited to any material breach of a representation, warranty or covenant (other than in sections 6.1(a) and (c)-(d) hereof) made in this Appendix 2;

(c) Assignment of the NUCRA in a manner inconsistent with the terms of this Appendix 2; or

(d) Failure of any party to provide information or data required to be provided to another party under this Appendix 2 for such other party to satisfy its obligations under this NUCRA.

## **6.2 Notice of Breach:**

A party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider agrees to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the notifying party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 12 of this Appendix 2.

## **6.3 Cure and Default:**

A party that commits a Breach and does not take steps to cure the Breach pursuant to this section 6.3 is automatically in Default of this Appendix 2 and of the NUCRA without further notice from the non-Breaching Parties.

## **6.4 Cure of Breach:**

**6.4.1** Except for the event of Breach set forth in section 6.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the parties to the NUCRA. Such agreement shall not be unreasonably withheld.

**6.4.2** In an event of Breach set forth in section 6.1(a), the Breaching Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is a Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use the Security provided by the Project Developer as set forth in section 7.0 of this NUCRA. Upon drawing on such Security, Project Developer shall automatically be deemed in default of this NUCRA.



## **6.5 Right to Compel Performance:**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting party(ies) shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 11 of this Appendix 2, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **7 Termination**

### **7.1 Termination of the NUCRA:**

This NUCRA may be terminated by the following means:

#### **7.1.1 By Mutual Consent:**

This NUCRA may be terminated as of the date on which the parties mutually agree to terminate this NUCRA.

#### **7.1.2 By All Project Developers:**

Subject to payment of Cancellation Costs and of all other unpaid Costs, all Project Developers that are parties to this NUCRA may at the same time unilaterally terminate the NUCRA pursuant to Applicable Laws and Regulations upon providing Transmission Provider sixty days prior written notice thereof. Termination under this section must be performed in parallel with the termination provisions of the applicable GIA, Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party. Project Developers' terminating under this section forfeit Security provided related to the applicable GIA, Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party.

#### **7.1.3 Notification of Final Payment:**

This NUCRA shall terminate upon the date Transmission Provider receives written notice, in a form acceptable to the Transmission Provider from the Transmission Owner that Transmission Owner has received final payment of all Costs for the Common Use Upgrades shown on Schedule A.

### **7.2 Upon Default by Project Developer:**

#### **7.2.1 Consequences of Default by Project Developer:**

If one or more, but not all, Project Developers that are parties to this NUCRA are in Default, such Project Developers shall remain liable for any portion of their cost responsibility for the Costs of

the Common Use Upgrades, and Cancellation Costs, in accordance with Schedule B of this NUCRA. Transmission Provider shall draw on and apply such defaulting Project Developer's Security to any amount under this NUCRA not paid by that Project Developer. Upon drawing on such Security, Project Developer is automatically in default of this NUCRA, and Project Developer's GIA and Construction Service Agreement; and all such agreements shall be deemed terminated and withdrawn, and Project Developer's project shall be removed from the relevant Cycle.

### **7.2.2 Reallocation of Costs upon Default by Project Developer:**

If a defaulting Project Developer cannot pay its amount due after exhausting all available Security, the unpaid costs shall be reallocated to the remaining Project Developers in proportion to the cost responsibility percentages set forth in Schedule B. A remaining Project Developer shall be entitled to exercise such other rights and remedies as it may have in equity or at law against the defaulting Project Developer that caused the reallocation of Costs under this section.

### **7.3 Survival of Rights:**

The obligations of the parties to this NUCRA with respect to payments, Cancellation Costs, warranties, liability and indemnification shall survive termination to the extent necessary to provide for the determination and enforcement of said obligations arising from acts or events that occurred while the NUCRA was in effect. In addition, applicable provisions of this NUCRA will continue in effect after expiration, cancellation or termination to the extent necessary to provide for final billings, payments, and billing adjustments.

## **8 Force Majeure**

### **8.1 Notice:**

A party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify each other party in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **8.2 Duration of Force Majeure:**

A party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

The party affected has a continuing notice obligation to the other parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The affected party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such party shall resume performance and give prompt written notice thereof to the other parties.

### **8.3 Obligation to Make Payments:**

Any party's obligation to make payments pursuant to applicable GIA, Construction Service Agreement, this NUCRA, or other relevant NUCRAs to which the Project Developer is a party shall not be suspended by Force Majeure.

### **8.4 Definition of Force Majeure:**

For the purposes of this section, shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a party's control that, in any of the foregoing cases, by exercise of due diligence, such party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected party.

## **9 Confidentiality**

The Confidentiality provisions of the applicable GIA Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party are incorporated by reference and shall apply to this NUCRA.

## **10 Information Access and Audit Rights**

### **10.1 Information Access:**

Subject to Applicable Laws and Regulations, each party to this NUCRA shall make available to each other party information necessary (i) to verify the costs incurred by the other party for which the requesting party is responsible under this Appendix 2, and (ii) to carry out obligations and responsibilities under this Appendix 2. The parties shall not use such information for purposes other than those set forth in this section and to enforce their rights under this Appendix 2.

## **10.2 Reporting of Non-Force Majeure Events:**

Each party to this NUCRA shall notify each other party when it becomes aware of its inability to comply with the provisions of this Appendix 2 for a reason other than an event of force majeure as defined in section 8 of this Appendix 2. The parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section shall not entitle the receiving party to allege a cause of action for anticipatory breach of this Appendix 2.

## **10.3 Audit Rights:**

Subject to the requirements of confidentiality under section 9 of this Appendix 2, each party to this NUCRA shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent party, to audit at its own expense the other party's accounts and records pertaining to such party's performance and/or satisfaction of obligations arising under this NUCRA. Any audit authorized by this section shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Appendix 2. Any request for audit shall be presented to the other party not later than 24 months after the event as to which the audit is sought. Each party shall preserve all records held by it for the duration of the audit period.

## **11 Disputes**

### **11.1 Submission:**

Any claim or dispute that any party to this NUCRA may have against another party arising out of this Appendix 2 may be submitted for resolution in accordance with the dispute resolution provisions of Tariff, Part I, section 12.

### **11.2 Rights Under The Federal Power Act:**

Nothing in this section shall restrict the rights of any party to file a complaint with FERC under relevant provisions of the Federal Power Act.

### **11.3 Equitable Remedies:**

Nothing in this section shall prevent any party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations.

## **12 Notices**

### **12.1 General:**

Any notice, demand or request required or permitted to be given by any party to this NUCRA to another and any instrument required or permitted to be tendered or delivered by any party, in writing to another shall be provided electronically or may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the party, or personally delivered to the party, at the electronic or other address specified in the NUCRA.

### **12.2 Operational Contacts:**

Each party shall designate, and shall provide to each other party contact information concerning, a representative to be responsible for addressing and resolving operational issues as they arise during the term of the NUCRA.

## **13 Miscellaneous**

### **13.1 Regulatory Filing:**

In the event that this NUCRA contains any terms that deviate materially from the form included in Tariff, Part IX or from the standard terms and conditions in this Appendix 2, the Transmission Provider shall file the executed NUCRA on behalf of itself with FERC as a service schedule under the Tariff. Project Developer may request that any information so provided be subject to the confidentiality provisions of section 9 of this Appendix 2. A Project Developer shall have the right, with respect to any NUCRA tendered to it, to request in writing (a) dispute resolution under section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (b) that Transmission Provider file the agreement unexecuted with FERC. With the filing of any unexecuted NUCRA, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between any parties to this NUCRA.

### **13.2 Waiver:**

Any waiver at any time by any party of its rights with respect to a Breach or Default under this Appendix 2, or with respect to any other matters arising in connection with this Appendix 2, shall not be deemed a waiver or continuing waiver with respect to any other Breach or Default or other matter.

### **13.3 Amendments and Rights Under the Federal Power Act:**

This NUCRA may be amended or supplemented only by a written instrument duly executed by all parties to this NUCRA. An amendment to the NUCRA shall become effective and a part of this NUCRA upon satisfaction of all Applicable Laws and Regulations. Notwithstanding the foregoing, nothing contained in this NUCRA shall be construed as affecting in any way any of the

rights of any party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this NUCRA and every appendix referred to therein shall be amended, as mutually agreed by the parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

#### **13.4 Binding Effect:**

This NUCRA, including this Appendix 2, and the rights and obligations thereunder shall be binding upon, and shall inure to the benefit of, the successors and assigns of the parties.

#### **13.5 Regulatory Requirements:**

Each party's performance of any obligation under this NUCRA for which such party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving party, or the party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

### **14 Representations and Warranties**

#### **14.1 General:**

Each party to this NUCRA hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the party during the time the NUCRA is effective:

##### **14.1.1 Good Standing:**

Such party is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated and operates as stated in the NUCRA.

##### **14.1.2 Authority:**

Such party has the right, power and authority to enter into the NUCRA, to become a party hereto and to perform its obligations hereunder. The NUCRA is a legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **14.1.3 No Conflict:**

The execution, delivery and performance of the NUCRA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of the party, or with any judgment, license, permit, order, material agreement or instrument applicable to or binding upon the party or any of its assets.

#### **14.1.4 Consent and Approval:**

Such party has sought or obtained, or, in accordance with the NUCRA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of the NUCRA and it will provide to any Governmental Authority notice of any actions under this Appendix 2 that are required by Applicable Laws and Regulations.

SCHEDULE A  
COMMON USE UPGRADES



**SCHEDULE B**

**COST RESPONSIBILITY**

[provide as a percentage of estimated cost per Common Use Upgrade]

SCHEDULE C

NON-STANDARD TERMS AND CONDITIONS

[add provisions agreed to by the parties and accepted by FERC]

Tariff, Part IX, Subpart I

FORM OF  
SURPLUS INTERCONNECTION SERVICE STUDY AGREEMENT

Form of  
Surplus Interconnection Study Agreement  
(Project Identifier # \_\_\_\_\_)

RECITALS

1. This Surplus Interconnection Study Agreement (the “Agreement”), dated as of \_\_\_\_\_, is entered into, by and between \_\_\_\_\_ (“Surplus Project Developer”) and PJM Interconnection, L.L.C. (“Transmission Provider”) (individually referred to as a “Party,” or collectively referred to as the “Parties”) pursuant to the Generation Interconnection Procedures (“GIP”) set forth in PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part {[instruction: {use Part VII if this is a transition period Agreement subject to Tariff, Part VII} {use Part VIII if this a new rules Agreement subject to Part VIII}}. Capitalized terms used in this agreement, unless otherwise indicated, shall have the meanings ascribed to them in the Tariff.
2. By submitting this Agreement and complying with the GIP, the Surplus Project Developer has submitted a Surplus Interconnection Request. In accordance with Tariff, Part VIII, Subpart E, section 414, the Surplus Project Developer has also submitted with this Agreement the applicable required deposit to the Transmission Provider.
3. By submitting this Agreement to the Transmission Provider, the Surplus Project Developer requests to utilize Surplus Interconnection Service on the Transmission System of an existing Generating Facility with the following specifications:
  - a. Identification of the specific, existing Generating Facility already interconnected to the PJM Transmission System providing Surplus Interconnection Service, including whether the Surplus Project Developer requesting Surplus Interconnection Service is the owner or affiliate of the existing Generating Facility, and details regarding the existing Generating Facility’s current Generator Interconnection Agreement or Interconnection Service Agreement (“Service Agreement”).

\_\_\_\_\_  
\_\_\_\_\_  
If the Surplus Project Developer is an unaffiliated third party, the Surplus Project Developer must submit with this Agreement the following information and documentation acceptable to the Transmission Provider:

- i. Name and address of the current owner of the existing Generating Facility, including details specific to the existing Generating Facility’s most current Service Agreement, including the Service Agreement Number:
- \_\_\_\_\_  
\_\_\_\_\_

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ii. Written evidence from the owner of the existing Generating Facility granting Surplus Project Developer permission to utilize the existing Generating Facility's unused portion of Interconnection Service established in the existing Generating Facility's Service Agreement; and

iii. Written documentation stating that the owner of the surplus generating unit and the owner of the existing Generating Facility will have entered into, prior to the owner of the existing Generating Facility executing a revised Generator Interconnection Agreement, a shared facilities agreement between the owner of the existing Generating Facility and the owner of the surplus generating unit detailing their respective roles and responsibilities relative to the Surplus Interconnection Service.

b. Evidence of ownership interest in, or right to acquire or control, the surplus generating unit for a minimum of three years, such as a deed, option agreement, lease or other similar document acceptable to the Transmission Provider. Include both a written description of the evidence to be relied upon and attach a Word or PDF version copy thereof.

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c. Location of proposed surplus generating unit site or existing surplus generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the surplus generating unit site):

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d. The megawatt size of the proposed surplus generating unit or the amount of increase in megawatt capability of an existing surplus generating unit.

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e. Identify the fuel type of the surplus generating unit or upgrade thereto:

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f. A PDF format attachment of the site plan/single line diagram together with a description of the equipment configuration, including a set of preliminary electrical design specifications, and if the surplus generating unit is a wind generation facility, then also submit a set of preliminary electrical design specifications depicting the wind generation facility as a single equivalent generator:

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g. Planned date the new surplus generating unit (or increase in megawatt capability of an existing surplus generating unit) will be in service:

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h. Other related information, including for example, but not limited to, identifying: all of Surplus Project Developer's prior Interconnection Requests or Surplus Interconnection Requests; and stating whether the Surplus Project Developer has submitted a previous Surplus Interconnection Request for this particular project:

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i. Describe the circumstances under which Surplus Interconnection Service will be available at the existing Point of Interconnection:

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j. If any Energy Storage Resource, the primary frequency response operating range for a surplus generating unit:

Minimum State of Charge: \_\_\_\_\_ ; and

Maximum State of Charge: \_\_\_\_\_ .

#### **PURPOSE OF THE SURPLUS INTERCONNECTION STUDY**

4. Consistent with the GIP, the Transmission Provider shall conduct a Surplus Interconnection Study to provide the Surplus Project Developer with a determination of whether the surplus generating unit is eligible for Surplus Interconnection Service. In the event that the Transmission Provider is unable to complete the Surplus Interconnection

Study within the timeframe prescribed in the GIP, the Transmission Provider shall notify the Surplus Project Developer and explain the reasons for the delay.

5. The Surplus Interconnection Study conducted hereunder will provide only a sensitivity analysis based on the data specified by the Surplus Project Developer in its Surplus Interconnection Request. The Surplus Interconnection Study necessarily will employ various assumptions regarding the Surplus Interconnection Request, other pending New Service Requests and PJM's Regional Transmission Expansion Plan at the time of the study. The Surplus Interconnection Study will not obligate the Transmission Provider or the Transmission Owner(s) to interconnect with the Surplus Project Developer or construct any facilities or upgrades.

### **CONFIDENTIALITY**

6. The Surplus Project Developer agrees to provide all information requested by the Transmission Provider necessary to complete the Surplus Interconnection Study. Subject to Paragraph 7 of this Agreement and to the extent required by the GIP, information provided pursuant to this Paragraph 6 shall be and remain confidential.
7. Until completion of the Surplus Interconnection Study, the Transmission Provider shall keep confidential all information provided to it by the Surplus Project Developer. Upon completion of the Surplus Interconnection Study and, to the extent required by Commission regulations, will be made publicly available upon request, except that the identity of the Surplus Project Developer shall remain confidential.
8. Surplus Project Developer acknowledges that, consistent with the Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the Surplus Interconnection Study process and that the Transmission Provider may disseminate information to the Transmission Owners.

### **COST RESPONSIBILITY**

9. The Surplus Project Developer shall reimburse the Transmission Provider for the actual cost of the Surplus Interconnection Study. The deposit paid by the Surplus Project Developer described in Paragraph 2 of this Agreement shall be applied toward the Surplus Project Developer's Surplus Interconnection Study cost responsibility. The Surplus Project Developer shall be responsible for and must pay all actual study costs. If at any time the Transmission Provider notifies the Surplus Project Developer of estimated additional study costs, the Surplus Project Developer must pay such estimated additional study costs within 20 Business Days of Transmission Provider sending the Surplus Project Developer notification of such estimated additional study costs. If the Surplus Project Developer fails to pay such estimated additional study costs within 20 Business Days of Transmission Provider sending the Surplus Project Developer notification of such estimated additional study costs, then the Surplus Interconnection Request shall be deemed to be terminated and withdrawn.

## DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

10. In analyzing and preparing the Surplus Interconnection Study, the Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the Surplus Project Developer and possibly by third parties, including the owner of the existing Generating Facility, and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SURPLUS INTERCONNECTION STUDY. The Surplus Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the Surplus Interconnection Study prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of the Surplus Project Developer either at this point in time or in the future.
11. In no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission Provider's obligations under this Surplus Interconnection Study Agreement.

Without limitation of the foregoing, the Surplus Project Developer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any Surplus Interconnection Study shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty, Limitation of Liability."



## MISCELLANEOUS

12. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

### Transmission Provider

PJM Interconnection, L.L.C.

2750 Monroe Blvd.

Audubon, PA 19403

interconnectionagreementnotices@pjm.com

### Surplus Project Developer

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
14. This Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties hereto. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.
15. This Agreement shall be binding upon the Parties hereto, their heirs, executors, administrators, successors, and assigns.
16. Neither this Agreement nor the Surplus Interconnection Study performed hereunder shall be construed as an application for service under Tariff, Part II or Tariff, Part III.
17. The provisions of the GIP that relate to Surplus Interconnection Service are incorporated herein and made a part hereof.
18. **Governing Law, Regulatory Authority, and Rules**

This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party

expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

**19. No Third-Party Beneficiaries**

Except as stated in Paragraph 11 of this Agreement, this Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

**20. Multiple Counterparts**

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all of which constitute one and the same instrument.

**21. No Partnership**

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

**22. Severability**

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

**23. Reservation of Rights**

The Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Surplus Project Developer Surplus Project Developer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered.

## CERTIFICATION

By initialing the line next to each of the following required elements, Surplus Project Developer hereby certifies that it has submitted with this executed Agreement each of the required elements (if this Surplus Interconnection Request is being submitted electronically, each of the required elements must be submitted electronically as individual PDF files, together with an electronic PDF copy of this signed Agreement):

\_\_\_\_\_ Specification of the location of the proposed surplus generating unit site or existing surplus generating unit (including both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the surplus generating unit site)

\_\_\_\_\_ If the Surplus Project Developer is an unaffiliated third party, the information and evidence set forth in Paragraph 3(a)(i) – (iii) of this Agreement

\_\_\_\_\_ Evidence of an ownership interest in, or right to acquire or control the surplus generating unit site

\_\_\_\_\_ The megawatt size of the proposed surplus generating unit or the amount of increase in megawatt capability of an existing surplus generating unit

\_\_\_\_\_ Identification of the fuel type of the proposed surplus generating unit

\_\_\_\_\_ Description of the equipment configuration and a set of preliminary electrical design specifications, and, if the surplus generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator

\_\_\_\_\_ The planned date that the proposed surplus generating unit (or increase in megawatt capability of an existing surplus generating unit) will be in service

\_\_\_\_\_ All additional information prescribed by the Transmission Provider in the PJM Manuals

\_\_\_\_\_ The full amount of the required deposit

IN WITNESS WHEREOF, the Transmission Provider and the Surplus Project Developer  
have caused this Agreement to be executed by their respective authorized officials.

**Transmission Provider: PJM Interconnection, L.L.C.**

By:

Name

# Title

Date \_\_\_\_\_

Printed Name \_\_\_\_\_

**Surplus Project Developer: [Name of Party]**

By:

Name

# Title

Date \_\_\_\_\_

Printed Name

Tariff, Part IX, Subpart J

FORM OF  
CONSTRUCTION SERVICE AGREEMENT

Service Agreement No. [ ]

(Project Identifier # )

**CONSTRUCTION SERVICE AGREEMENT**

**By and Among**

**PJM Interconnection, L.L.C.**

**And**

**[Name of Project Developer, Eligible Customer, or Affected System Customer]**

**And**

**[Name of Transmission Owner]**

**CONSTRUCTION SERVICE AGREEMENT**

**By and Among**

**PJM Interconnection, L.L.C.**

**And**

**[Name of Project Developer, Eligible Customer, or Affected System Customer]**

**And**

**[Name of Transmission Owner]**

**(Project Identifier # )**

This Construction Service Agreement, including the Appendices attached hereto and incorporated herein (collectively, “CSA”) is made and entered into as of the Effective Date (as defined in the attached Appendix III) by and among PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”), (“Developer Party” [OPTIONAL: or “[short name]”]) and (“Transmission Owner” [OPTIONAL: or “[short name]”]). Transmission Provider, Developer Party and Transmission Owner are referred to herein individually as “Party” and collectively as “the Parties.” Developer Party is a {instruction: select [Project Developer, Eligible Customer or Affected System Customer]} as defined in in this GIP. For purposes of this Upgrade CSA, For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}.

**WITNESSETH**

WHEREAS, Developer Party (1) has requested Long-Term Firm Point-To-Point Transmission Service or Network Integration Transmission Service (“Transmission Service”) from Transmission Provider pursuant to Transmission Provider’s Open Access Transmission Tariff (the “PJM Tariff”); (2) is an Affected System Customer that requires Network Upgrades; or (3) is a Project Developer that requires Network Upgrades to the system of a Transmission Owner with which its Generation Facility or Merchant Transmission Facility does not directly interconnect;

WHEREAS, pursuant to Developer Party’s Completed Application, Affected System Customers Facility Study or Interconnection Request, Transmission Provider has conducted the required studies to determine whether such requests can be accommodated, and if so, under what terms and conditions, including the identification of any Network Upgrades that must be constructed in order to provide the service or rights requested by Developer Party;

WHEREAS, Transmission Provider’s studies have identified the Network Upgrades described in Appendix I of this CSA as necessary to provide Developer Party the service or rights it has requested; and

WHEREAS, Developer Party: (i) desires that Transmission Owner construct the required Network Upgrades; and (ii) agrees to assume cost responsibility for the design, engineering, procurement and construction of such Network Upgrades in accordance with the PJM Tariff.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, together with other good and valuable consideration, the receipt and sufficiency is hereby mutually acknowledged by each Party, the Parties mutually covenant and agree as follows:

## **Article 1 – Definitions and Other Documents**

### **1.0 Defined Terms.**

All capitalized terms used in this CSA shall have the meanings ascribed to them in the GIP or in definitions either in the body of this CSA or its attached appendices. In the event of any conflict between defined terms set forth in the PJM Tariff or defined terms in this CSA, such conflict will be resolved in favor of the terms as defined in this CSA. Any provision of the PJM Tariff relating to this CSA that uses any such defined term shall be construed using the definition given to such defined term in this CSA.

### **1.1 Incorporation of Other Documents.**

Subject to the provisions of section 1.0 above, all portions of the PJM Tariff and the Operating Agreement as of the date of this CSA, and as pertinent to the subject of this CSA, are hereby incorporated herein and made a part hereof.

## **Article 2 – Responsibility for Network Upgrades**

### **2.0 Developer Party Financial Responsibilities.**

Developer Party shall pay all Costs for the design, engineering, procurement and construction of the Network Upgrades identified in Appendix I to this CSA. An estimate of such Costs is provided in Appendix I to this CSA.

### **2.1 Obligation to Provide Security.**

Unless Security is provided pursuant to a Generation Interconnection Agreement Developer Party shall provide Security to collateralize Developer Party's obligation to pay the Costs incurred by Transmission Owner to construct the Network Upgrades identified in Appendix I to this CSA, less any Costs already paid by Developer Party, in accordance with the GIP. Developer Party shall deliver such Security to Transmission Provider prior to the Effective Date of this CSA, as described in Appendix III. Unless otherwise specified by the Transmission Provider, such Security shall take the form of a letter of credit, in the amount of \$\_\_\_\_\_ naming the Transmission Provider and Transmission Owner as beneficiaries.

### **2.2 Failure to Provide Security.**



If the Developer Party fails to provide Security in the amount, in the time or in the form required by section 2.1, then this CSA shall terminate immediately and the Developer Party's Completed Application or Interconnection Request shall be deemed terminated and withdrawn.

### **2.3 Costs.**

In accordance with the GIP, the Developer Party shall pay for the Network Upgrades identified in Appendix I to this CSA based upon the Costs of the Network Upgrades described in Appendix I. The Developer Party's obligation to pay the Costs for the Network Upgrades identified in Appendix I to this CSA, whether greater or lesser than the amount of the Security specified in section 2.1, will continue regardless of whether the Developer Party takes Transmission Service pursuant to the terms of the Transmission Service Agreement as defined in section 3.0 of this CSA, if applicable.

### **2.4 Transmission Owner Responsibilities.**

If the Developer Party satisfies all requirements of this Article 2 and applicable requirements set forth in the PJM Tariff, Transmission Owner shall use Reasonable Efforts to construct or cause to be constructed the Network Upgrades, identified in Appendix I to this CSA, on its transmission system. Transmission Owner shall own the Network Upgrades it has, or has arranged to have, constructed and shall have ongoing responsibility to maintain such Network Upgrades consistent with the Operating Agreement and the Transmission Owner's Agreement.

## **Article 3 – Rights to Transmission Service**

### **3.0 No Transmission Service.**

This CSA does not entitle the Developer Party to take Transmission Service under the PJM Tariff. Transmission Provider shall provide Transmission Service to Developer Party pursuant to a separate service agreement by and between Developer Party and Transmission Provider dated as of the same effective date as this CSA (the "Transmission Service Agreement"), if applicable.

## **Article 4 – Early Termination**

### **4.0 Termination by Developer Party.**

Subject to the terms of section 14 of Appendix III, Developer Party may terminate this CSA at any time by providing written notice of termination to Transmission Provider and Transmission Owner. Developer Party's notice of termination shall become effective sixty calendar days after either the Transmission Provider or Transmission Owner receives such notice.

## **Article 5 – Miscellaneous**

### **5.0 Notices.**

Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another

may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

**Transmission Provider:**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

**Developer Party:**

**Transmission Owner:**

**5.1 Waiver.**

No waiver by any Party of one or more Defaults by another in performance of any of the provisions of this CSA shall operate or be construed as a waiver of any other or further Default or Defaults, whether of a like or different character.

**5.2 Amendment.**

This CSA or any part thereof, may not be amended, modified or waived other than by a writing signed by all Parties.

**5.3 No Partnership.**

Notwithstanding any provision of this CSA, the Parties do not intend to create hereby any joint venture, partnership, association taxable as a corporation, or other entity for the conduct of any business for profit.

**5.4 Counterparts.**

This CSA may be executed in multiple counterparts to be construed as one effective as of the Effective Date.

**5.5 Addendum of Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status.**

To the extent required, in accordance with section 4.0 to Appendix III to this CSA, Schedule E to this CSA shall set forth the Interconnection Customer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

**5.6 Addendum of Non-Standard Terms and Conditions for Construction Service.**

Subject to FERC approval, the parties agree that the terms and conditions set forth in the attached Schedule F are hereby incorporated by reference, and made a part of, this CSA. In the event of any conflict between a provision of Schedule F that FERC has accepted and any provision of the standard terms and conditions set forth in Appendix III to this CSA that relates to the same subject matter, the pertinent provision of Schedule F shall control.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this CSA to be executed by their respective authorized officials.

(Project Identifier # \_\_\_\_\_)

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Developer Party: [Name of Developer Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: [Name of Transmission Owner]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

## APPENDIX I

### SCOPE AND SCHEDULE OF WORK FOR NETWORK UPGRADES TO BE BUILT BY TRANSMISSION OWNER

#### A. Scope of Work

Transmission Owner hereby agrees to provide the following Network Upgrades pursuant to the terms of this CSA:

[Identify Network Upgrades to be constructed]

#### B. Schedule of Work

[Add schedule for construction work to be completed]

#### C. Costs

Developer Party shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with section 9.0 of Appendix III to this CSA.

Network Upgrades Charge: \$

[Add additional sections to list: any Contingencies, Applicable Technical Requirements, and Estimate of Tax Gross-ups, as required pursuant to Appendix III]

#### D. Construction of Network Upgrades

[include 1 through 3 below only for Project Developers or Affected System Customers]

1. The Network Upgrades regarding which Transmission Owner shall be the Constructing Entity are described on the attached Appendix I, section A to this CSA.

2. Election of Construction Option. Specify below whether the Constructing Entities have mutually agreed to construction of the Network Upgrades that will be built by the Transmission Owner pursuant to the Standard Option or the Negotiated Contract Option. (See sections 6.1 and 6.1.1 of Appendix III to this CSA.)

Standard Option.

Negotiated Contract Option.

If the parties have mutually agreed to use the Negotiated Contract Option, the permitted, negotiated terms on which they have agreed and which are not already set forth as part of the Scope of Work and/or Schedule of Work attached to this CSA, respectively, shall be as

set forth in Schedule A attached to this CSA. The Negotiated Option can only be used in connection with a Network Upgrade subject to the Network Upgrade Cost Responsibility Agreement all Project Developers and the relevant Transmission Owner agree.

3. Specify whether Developer Party has exercised the Option to Build in accordance with respect to some or all of the Stand Alone Network Upgrades:

Yes

No

If Yes is indicated, Developer Party shall build, in accordance with and subject to the conditions and limitations set forth in section 6.2.3 of Appendix III to this CSA, those portions of the Stand Alone Network Upgrades described below:

**[The following section applies only to Eligible Customers]**

Specify whether Developer Party has exercised the Option to Build with respect to some or all of the Stand Alone Network Upgrades:

Yes

No

If Yes is indicated, Developer Party shall build, in accordance with and subject to the conditions and limitations set forth in section 6.2.3 of Appendix III to this CSA, those portions of the Stand Alone Network Upgrades described below:

APPENDIX II

DEFINITIONS

From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement.

APPENDIX III

GENERAL TERMS AND CONDITIONS



## **1.0 Effective Date and Term**

### **1.1 Effective Date.**

Subject to regulatory acceptance, this CSA shall become effective on the date the agreement has been executed by all Parties, or if the agreement is filed with FERC unexecuted, upon the date specified by FERC. The Transmission Owner shall have no obligation to begin construction or preparation for construction of the Network Upgrades, identified in Appendix I to this CSA, until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with FERC; (ii) such agreement, if unexecuted and non-conforming, has been filed with and accepted by FERC; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

### **1.2 Term.**

This CSA shall continue in full force and effect from the Effective Date until the termination hereof.

### **1.3 Survival.**

This CSA shall continue in effect after termination to the extent necessary to provide for final billings and payments, including billings and payments pursuant to this CSA, and to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this CSA was in effect.

## **2.0 Facilitation by Transmission Provider**

Transmission Provider shall keep itself apprised of the status of the Transmission Owner's construction-related activities and, upon request of Developer Party or Transmission Owner, Transmission Provider shall meet with the Developer Party and Transmission Owner separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this CSA. Transmission Owner shall cooperate in good faith with the other Parties in Transmission Provider's efforts to facilitate resolution of disputes.

### **3.0 Construction Obligations.**

### **3.1 Network Upgrades.**

#### **3.1.1 Generally.**

All Network Upgrades identified in Appendix I to this CSA shall be designed, engineered, procured, installed and constructed in accordance with this section 3.0, Applicable Standards, Applicable Laws and Regulations, Good Utility Practice, the Facilities Study and the Scope of Work under this CSA.

### **3.2 Scope of Applicable Technical Requirements and Standards.**

Applicable technical requirements and standards shall apply to the design, engineering, procurement, construction and installation of the Network Upgrades identified in Appendix I to this CSA only to the extent that the provisions thereof relate to the design, engineering, procurement, construction and/or installation of such Network Upgrades. Such provisions relating to the design, engineering, procurement, construction and/or installation of such Network Upgrades shall be contained in Appendix I appended to this CSA. The Parties shall mutually agree upon, or in the absence of such agreement, Transmission Provider shall determine, which provisions of the applicable technical requirements and standards should be appended to this CSA. In the event of any conflict between the provisions of the applicable technical requirements and standards that are appended to this CSA and any later-modified provisions that are stated in the pertinent PJM Manuals, the provisions appended to this CSA shall control.

## **4.0 Tax Liability**

### **4.1 Safe Harbor Provisions.**

Provided that Developer Party agrees to conform to all requirements of the Internal Revenue Service (“IRS”) (e.g., the “safe harbor” section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016)) that would confer nontaxable status on some or all of the transfer of property, including money, by Developer Party to the Transmission Owner for payment of the Costs of construction of the Network Upgrades, the Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in section 4.4.2 below, shall not include income taxes in the Costs of Network Upgrades that are payable by Developer Party under the Generation Interconnection Agreement or this Agreement. Developer Party shall document its agreement to conform to IRS requirements for such non-taxable status in the Generation Interconnection Agreement or this Agreement.

### **4.2 Tax Indemnity.**

Developer Party shall indemnify the Transmission Owner for any costs that Transmission Owner incurs in the event that the IRS and/or a state department of revenue (“State”) determines that the property, including money, transferred by Developer Party to the Transmission Owner with respect to the construction of the Network Upgrades is taxable income to the Transmission Owner. Developer Party shall pay to the Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Transmission Owner. In the event that the Transmission Owner chooses to contest such assessment, either at the request of Developer Party or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Transmission Owner shall refund to Developer Party the excess of its demand payment made to the Transmission Owner over the amount of the tax, interest and penalty for which the Transmission Owner is finally determined to be liable. Developer Party’s tax indemnification obligation under this section shall survive any termination of the Generation Interconnection Agreement or this Agreement.

### **4.3 Taxes Other Than Income Taxes.**

Upon the timely request by Developer Party, and at Developer Party’s sole expense, the Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Transmission Owner for which Developer Party may be required to reimburse Transmission Provider under the terms of this Appendix 2 or the GIP. Developer Party shall pay to the Transmission Owner on a periodic basis, as invoiced by the Transmission Owner, the Transmission Owner’s documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Developer Party and the Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Developer Party to the Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In

the event that a tax payment is withheld and ultimately due and payable after appeal, Developer Party will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Transmission Owner.

#### **4.4 Income Tax Gross-Up.**

##### **4.4.1 Additional Security.**

In the event that Developer Party does not provide the safe harbor documentation required under section 4.1 prior to execution of the Generation Interconnection Agreement or this Agreement, within the later of 15 days after execution of the Generation Interconnection Agreement or this Agreement, Transmission Provider shall notify Developer Party in writing of the amount of additional Security that Developer Party must provide. The amount of Security that a Transmission Developer Party must provide initially pursuant to the Generation Interconnection Agreement or this Agreement shall include any amounts described as additional Security under this section 4.4 regarding income tax gross-up.

##### **4.4.2 Amount.**

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of any Network Upgrades for which Developer Party previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the total Security provided to the amount that would be sufficient to permit the Transmission Owner to receive and retain, after the payment of all applicable income taxes (“Current Taxes”) and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the “Present Value Depreciation Amount”), an amount equal to the estimated Costs of the Network Upgrades for which Developer Party is responsible under the Generation Interconnection Agreement or this Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the “Current Tax Rate”); and the Present Value Depreciation Amount shall be computed by discounting the Transmission Owner’s anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

##### **4.4.3 Time for Payment.**

Developer Party must provide the additional Security, in a form and with terms as required by the GIP, within 15 days after its receipt of Transmission Provider’s notice under this section.

#### **4.5 Tax Status.**

Each Party shall cooperate with the other to maintain the other Party’s tax status. Nothing in the Generation Interconnection Agreement, this Agreement or the GIP is intended to adversely affect any Transmission Owner’s tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **5.0 Safety**

### **5.1 General.**

Transmission Owner shall perform all work hereunder in accordance with Good Utility Practice, Applicable Standards and Applicable Laws and Regulations pertaining to the safety of persons or property.

### **5.2 Environmental Releases.**

Transmission Owner shall notify Transmission Provider and Developer Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the facility or the facilities, any of which may reasonably be expected to affect Transmission Provider or Developer Party. Transmission Owner shall: (i) provide the notice as soon as possible; (ii) make a good faith effort to provide the notice within 24 hours after it becomes aware of the occurrence; and (iii) promptly furnish to Transmission Provider and Developer Party copies of any publicly available reports filed with any governmental agencies addressing such events.

## **6.0 Schedule of Work**

### **6.1 Standard Option.**

The Transmission Owner shall use Reasonable Efforts to design, engineer, procure, construct and install the Network Upgrades, identified in Appendix I to this CSA, in accordance with the Schedule and Scope of Work.

#### **6.1.1 Negotiated Contract Option.**

Consistent with Appendix 1, section D.2 (negotiated contract option), as an alternative to the Standard Option set forth in section 6.1 of this Appendix III, the Transmission Owner and the Developer Party may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Network Upgrades. Under the Negotiated Contract Option, the Affected System Customer and the Transmission Owner may agree to terms different from those included in the Standard Option of section 6.1 above and the corresponding standard terms set forth in the applicable provisions of Part VI of the Tariff and this Appendix III. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Affected System Customer and the Transmission Owner that are parties to this CSA; no other Developer Party's responsibility for Costs may be affected (section 217 of the Tariff). No other terms of the Tariff or this Appendix III shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option shall be stated in full in an appendix to this CSA.

## **6.2 Option to Build.**

### **6.2.1 Option.**

Developer Party shall have the option, ("Option to Build"), to design, procure, construct and install all or any portion of the Stand Alone Network Upgrades on the dates specified in Appendix I of this Agreement. Transmission Provider and Developer Party must agree as to what constitutes Stand Alone Network Upgrades in Schedule C of this Agreement. If the Transmission Provider and Developer Party disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Developer Party a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination. Transmission Provider and Developer Party must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Schedule C (Option to Build) of this Agreement. Except for Stand Alone Network Upgrades, Developer Party shall have no right to construct Network Upgrades under this option. Unless a Developer party is subject to a Generation Interconnection

Agreement, in order to exercise this Option to Build, the Developer Party must provide Transmission Provider and the Transmission Owner with written notice of its election to exercise the option no later than 30 days from the date the Developer Party receives the results of the Facility Study (or, if no Facilities Study was required completion of the System Impact Study). Developer Party may not elect Option to Build after such date. Developer Party shall indicate its election to exercise the option in this CSA.

### **6.2.2 General Conditions Applicable to Option.**

In addition to the other terms and conditions applicable to the construction of facilities under this Appendix III, the Option to Build is subject to the following conditions:

(a) If Developer Party assumes responsibility for the design, procurement and construction of Stand Alone Network Upgrades:

(i) Developer Party shall engineer, procure equipment, and construct Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Transmission Owner;

(ii) Developer Party's engineering, procurement and construction of Stand Alone Network Upgrades shall comply with all requirements of law to which Transmission Owner shall be subject in the engineering, procurement or construction of Stand Alone Network Upgrades;

(iii) Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Stand Alone Network Upgrades;

(iv) Prior to commencement of construction, Developer Party shall provide to Transmission Owner a schedule for construction of Stand Alone Network Upgrades and shall promptly respond to requests for information from Transmission Owner;

(v) At any time during construction, Transmission Owner shall have the right to gain unrestricted access to the Stand Alone Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Owner, Developer Party shall be obligated to remedy deficiencies in that portion of the Stand Alone Network Upgrades;

(vii) Developer Party shall indemnify Transmission Owner and Transmission Provider for claims arising from Developer Party's construction of Network Upgrades that are Direct Connection Network Upgrades under the terms and procedures applicable to this Appendix III, sections 12.1, 12.2, 12.3, and 12.4;



(viii) Developer Party shall transfer control of Network Upgrades that are Direct Connection Network Upgrades to Transmission Owner;

(ix) Unless Parties otherwise agree, Developer Party shall transfer ownership of Stand Alone Network Upgrades to Transmission Owner;

(x) Transmission Owner shall approve and accept for operation and maintenance for Stand Alone to the extent engineered, procured, and constructed in accordance with this Agreement, Appendix 2, section 3.2.3.2;

(xi) Developer Party shall deliver to Transmission Owner “as-built” drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Stand Alone Network Upgrades are built to the standards and specifications required by Transmission Owner; and

(xii) If Developer Party exercises the Option to Build, Developer Party shall pay Transmission Owner to execute the responsibilities enumerated to Transmission Owner under section 6.2.2. Transmission Owner shall invoice Developer Party for this total amount to be divided on a monthly basis pursuant to Appendix III, section 9.3.

(b) The Developer Party must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Stand Alone Network Upgrades that it is building, provided, however, that when the Transmission Owner’s assistance is required, the Transmission Owner shall assist the Developer Party in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(c) The Developer Party must obtain all necessary land rights for the construction and installation of the Stand Alone Network Upgrades that it is building, provided, however, that upon Developer Party’s reasonable request, the Transmission Owner shall assist the Developer Party in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(d) Notwithstanding anything stated herein, each Transmission Owner shall have the exclusive right and obligation to perform the line attachments (tie-in work), and to calibrate remote terminal units and relay settings, required for the interconnection to such Transmission Owner’s existing facilities of any Stand Alone Network Upgrades that the Developer Party builds; and

(e) The Stand Alone Network Upgrades built by the Developer Party shall be successfully inspected, tested and energized pursuant to sections 19 and 20 of this Appendix III.

### **6.2.3 Additional Conditions Regarding Network Facilities.**

To the extent that the Developer Party utilizes the Option to Build for design, procurement, construction and/or installation of Stand Alone Network Upgrades in existence or under construction by or on behalf of the Transmission Owner on the date that the Developer Party solicits bids under section 6.2.7 below, or Stand Alone Network Upgrades to be located on land or in right-of-way owned or controlled by the Transmission Owner, and in addition to the other terms and conditions applicable to the design, procurement, construction and/or installation of facilities under this Appendix III, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the Developer Party shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Transmission Owner's List of Approved Contractors;

(ii) The Transmission Owner shall have full site control of, and reasonable access to, its property at all times for purposes of tagging or operation, maintenance, repair or construction of modifications to, its existing facilities and/or for performing all tie-ins of Network Upgrades built by or for the Developer Party; and for acceptance testing of any equipment that will be owned and/or operated by the Transmission Owner;

(iii) The Transmission Owner shall have the right to have a reasonable number of appropriate representatives present for all work done on its property/facilities or regarding the Stand Alone Network Upgrades, and the right to stop, or to order corrective measures with respect to, any such work that reasonably could be expected to have an adverse effect on reliability, safety or security of persons or of property of the Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Transmission Owner shall consult with the Developer Party and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The Developer Party and its contractors, employees and agents shall comply with the Transmission Owner's safety, security and work rules, environmental guidelines and training requirements applicable to the area(s) where construction activity is occurring and shall provide all reasonably required documentation to the Transmission Owner, provided that the Transmission Owner previously has provided its safety, security and work rules and training requirements applicable to work on its facilities to Transmission Provider and the Developer Party within 20 business days after a request therefore made by Developer Party following its receipt of the Facilities Study;

(v) The Developer Party shall be responsible for controlling the performance of its contractors, employees and agents; and

(vi) All activities performed by or on behalf of the Developer Party pursuant to its exercise of the Option to Build shall be subject to compliance with Applicable Laws and Regulations, including those governing union staffing and bargaining unit obligations, and Applicable Standards.

#### **6.2.4 Administration of Conditions.**

To the extent that a Transmission Owner exercises any discretion in the application of any of the conditions stated in sections 6.2.2 and 6.2.3 of this Appendix III, it shall apply each such condition in a manner that is reasonable and not unduly discriminatory and it shall not unreasonably withhold, condition, or delay any approval or authorization that the Developer Party may require for the purpose of complying with any of those conditions.

#### **6.2.5 Approved Contractors.**

(a) Each Transmission Owner shall develop and shall provide to Transmission Provider a List of Approved Contractors. Each Transmission Owner shall include on its List of Approved Contractors no fewer than three contractors and no fewer than three manufacturers or vendors of major transmission-related equipment, unless a Transmission Owner demonstrates to Transmission Provider's reasonable satisfaction that it is feasible only to include a lesser number of construction contractors, or manufacturers or vendors, on its List of Approved Contractors. Transmission Provider shall publish each Transmission Owner's List of Approved Contractors in a PJM Manual and shall make such manual available on its internet website.

(b) Upon request of a Developer Party, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the Developer Party provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate contractor is qualified to design, or to install and/or construct new facilities or upgrades or modifications to existing facilities on the Transmission Owner's system, or (2) any manufacturer or vendor of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) regarding which the Developer Party provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate entity's major transmission-related equipment is acceptable for installation and use on the Transmission Owner's system. No Transmission Owner shall unreasonably withhold, condition, or delay its acceptance of a contractor, manufacturer, or vendor proposed for addition to its List of Approved Contractors.

#### **6.2.6 Construction by Multiple Developer Parties.**

In the event that there are multiple Developer Parties that wish to exercise an Option to Build with respect to facilities of the types described in section 6.2.3 to this Appendix III, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

#### **6.2.7 Option Procedures.**

(a) Within 10 days after executing this CSA or directing that this CSA be filed, Developer Party shall solicit bids from one or more Approved Contractors named on the Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design, construct and/or install, the Network Upgrades that the Developer Party seeks to build under the Option to Build on terms (i) that will meet the Developer Party's proposed schedule; (ii) that, if

the Developer Party seeks to have an Approved Contractor construct or install Stand Alone Network Upgrades, will satisfy all of the conditions on construction specified in sections 6.2.2 and 6.2.3 of this Appendix III; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities) under this CSA.

(b) Any additional costs arising from the bidding process or from the final bid of the successful Approved Contractor shall be the sole responsibility of the Developer Party.

(c) Upon receipt of a qualifying bid acceptable to it, the Developer Party shall contract with the Approved Contractor that submitted the qualifying bid. Such contract shall meet the standards stated in paragraph (a) of this section.

(d) In the absence of a qualifying bid acceptable to the Developer Party in response to its solicitation, the Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Network Upgrades in accordance with the Standard Option described in section 6.2.1 of this Appendix III.

#### **6.2.8 Developer Party Drawings.**

Developer Party shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Network Upgrades that Developer Party arranges to build under the Option to Build. The Transmission Owner and Transmission Provider shall review the drawings to assess the consistency of Developer Party's design of the pertinent Network Upgrades with Applicable Standards and the Facilities Study. After consulting with the Transmission Owner, Transmission Provider shall provide comments on such drawings to Developer Party within sixty days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

#### **6.2.9 Effect of Review.**

Transmission Owner's and Transmission Provider's reviews of Developer Party's initial drawings of the Network Upgrades that the Developer Party is building shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, Developer Party shall make such changes to the design of the pertinent Network Upgrades as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Network Upgrades that Developer Party is building meet Applicable Standards and conform with the Facilities Study.

#### **6.3 Revisions to Schedule and Scope of Work.**

The Schedule and Scope of Work shall be revised as required in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Transmission Provider and Transmission Owner, which agreement shall not be unreasonably withheld, conditioned or delayed.

## **7.0 Suspension of Work upon Default**

Upon the occurrence of a Default by Developer Party, the Transmission Provider or the Transmission Owner may, by written notice to Developer Party, suspend further work associated with the Network Upgrades, identified in Appendix I to this CSA, Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this section 7.0. In the event of a suspension by Transmission Provider or Transmission Owner, the Developer Party shall be responsible for the Costs incurred in connection with any suspension hereunder.

## **7.1 Notification and Correction of Defects.**

7.1.1 In the event that inspection and/or testing of any Network Upgrades, identified in Appendix I to this CSA, built by Transmission Owner identifies any defects or failures to comply with Applicable Standards in such Network Upgrades, then Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. If such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion. Such acceptance does not modify and shall not limit the Project Developer's indemnification obligations set forth in Tariff, Attachment P, Appendix 2, section 3.2.3(e).

## **8.0 Transmission Outages**

### **8.1 Outages; Coordination.**

The Transmission Provider and Transmission Owner acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing the Network Upgrades identified in Appendix I to this CSA. The Transmission Provider and Transmission Owner further acknowledge and agree that any such outages shall be coordinated by and through Transmission Provider.

## **9.0 Security, Billing and Payments**

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Developer Party is responsible.

### **9.1 Adjustments to Security.**

The Security provided by Developer Party at or before the Effective Date of this CSA shall be: (a) reduced as portions of the work on Network Upgrades, identified in Appendix I to this CSA, are completed; and/or (b) increased or decreased as required to reflect adjustments to Developer Party's cost responsibility, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals.

### **9.2 Invoice.**

Transmission Owner shall provide Transmission Provider a quarterly statement of its scheduled expenditures during the next three months for, as applicable, the design, engineering and construction of, and/or for other charges related to, construction of the Network Upgrades identified in Appendix I to this CSA, or (b) in the event that the Developer Party exercises the Option to Build, for the Interconnected Transmission Owner's oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Developer Party is complying with the Transmission Owner's standards and specifications for the construction of facilities) associated with the Developer Party's building Stand Alone Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Transmission Owner's oversight costs shall be consistent with Attachment GG, Appendix III, section 6.2.2(a)(12). If Developer Party exercises the Option to Build, Developer Party shall pay Transmission Owner costs associated with its responsibilities pursuant to section 6.2.1 and in accordance with the amount agreed to by the Transmission Owner and Developer Party pursuant to Appendix III, section 6.2.1(a)(12). Transmission Provider shall bill Developer Party, on behalf of Transmission Owner, for Transmission Owner's expected costs during the subsequent three months. Developer Party shall pay each bill within 20 days after receipt thereof. Upon receipt of each of Developer Party's payments of such bills, Transmission Provider shall reimburse the Transmission Owner. Developer Party may request that the Transmission Provider provide quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that section 9.3 of this Appendix III shall govern the timing of the final cost reconciliation upon completion of the work.

### **9.3 Final Invoice.**

Within 120 days after Transmission Owner completes construction and installation of the Network Upgrades under this CSA, Transmission Provider shall provide Developer Party with an accounting of, and the appropriate Party shall make any payment to the other that is necessary to resolve, any difference between: (a) Developer Party's responsibility under the Tariff for the Costs of the Network Upgrades identified in Appendix I to this CSA; and (b) Developer Party's previous

aggregate payments to Transmission Provider for the Costs of the facilities identified in Appendix I to this CSA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to the Developer Party or the Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Party owing the payment.

#### **9.4 Disputes.**

In the event of a billing dispute among the Transmission Provider, Transmission Owner, and Developer Party, Transmission Provider and the Transmission Owner shall continue to perform their respective obligations pursuant to this CSA so long as: (a) the Developer Party continues to make all payments not in dispute, and the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute; or (b) the Developer Party pays to Transmission Provider, or into an independent escrow account established by the Developer Party, the portion of the invoice in dispute, pending resolution of such dispute. If the Developer Party fails to meet any of these requirements, then Transmission Provider shall so inform the other Parties and Transmission Provider or the Transmission Owner may provide notice to Developer Party of a Breach pursuant to section 13 of this Appendix III.

#### **9.5 Interest.**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

#### **9.6 No Waiver.**

Payment of an invoice shall not relieve Developer Party from any other responsibilities or obligations it has under this CSA, nor shall such payment constitute a waiver of any claims arising hereunder.



## **10.0 Assignment**

### **10.1 Assignment with Prior Consent.**

Subject to section 10.2 of this Appendix III, no Party shall assign its rights or delegate its duties, or any part of such rights or duties, under this CSA without the written consent of the other Parties, which consent shall not be unreasonably withheld, conditioned or delayed. Any such assignment or delegation made without such written consent shall be null and void.

In addition, the Transmission Owner shall be entitled, subject to Applicable Laws and Regulations, to assign this CSA to any Affiliate or successor of the Transmission Owner that owns and operates all or a substantial portion of such Transmission Owner's transmission facilities.

### **10.2 Assignment Without Prior Consent.**

#### **10.2.1 Assignment by Developer Party.**

Developer Party may assign this CSA without the Transmission Owner's or Transmission Provider's prior consent to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Developer Party's assets provided that, prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical competence and financial ability to comply with the requirements of this CSA and assumes in a writing provided to the Transmission Owner and Transmission Provider all rights, duties, and obligations of Developer Party arising under this CSA. However, any assignment described herein shall not relieve or discharge the Developer Party from any of its obligations hereunder absent the written consent of the Transmission Owner, such consent not to be unreasonably withheld, conditioned, or delayed.

#### **10.2.2 Assignment by Transmission Owner.**

Transmission Owner shall be entitled, subject to applicable laws and regulations, to assign this Upgrade CSA to an Affiliate or successor that owns and operates all or a substantial portion of Transmission Owner's transmission facilities.

#### **10.2.3 Assignment to Lenders.**

Developer Party may, without the consent of the Transmission Provider or the Transmission Owner, assign this CSA to any Project Finance Entity(ies), provided that such assignment shall not alter or diminish Developer Party's duties and obligations under this CSA. If Developer Party provides the Transmission Owner with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to Article 6 of this CSA, the Transmission Provider or Transmission Owner shall provide notice and reasonable opportunity for such entity(ies) to cure any Breach under this CSA in accordance with this CSA. Transmission Provider or Transmission Owner shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment and status of this CSA,

provided that such documents do not alter or diminish the rights of the Transmission Provider or Transmission Owner under this CSA, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider's and/or the Transmission Owner's invoice therefore, Developer Party shall pay the Transmission Provider and/or the Transmission Owner's reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Developer Party from any of its obligations hereunder absent the written consent of the Transmission Owner and Transmission Provider.

### **10.3 Successors and Assigns.**

This CSA and all of its provisions are binding upon, and inure to the benefit of, the Transmission Provider and Transmission Owner and their respective successors and permitted assigns.

## 11.0 Insurance

### 11.1 Required Coverages.

Constructing Entity shall maintain, at its own expense, insurance as described in paragraphs A through E below. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Network Upgrades, identified in Appendix I to this CSA, will be located. Failure to maintain required insurance shall be a Breach of this CSA.

A. Workers Compensation Insurance with statutory limits, as required by the State and/or jurisdiction in which the work is to be performed, and employer’s liability insurance with limits of not less than one million dollars (\$1,000,000).

B. Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) each accident products and completed operations aggregate.

C. Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of no less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

D. Excess and/or Umbrella Liability Insurance with a limit of liability of twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer’s liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

E. Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Constructing Entity’s duties, responsibilities and performance outlined in this CSA, with limits of liability as follows:

\$10,000,000 each occurrence

\$10,000,000 aggregate

An entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design and engineering work associated with the Network Upgrades, identified in Appendix I to this CSA, necessary for the transmission service to procure professional liability insurance in the amounts and upon the terms prescribed by this section, and providing evidence of such insurance to the other entity. Such

insurance shall be procured from companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Network Upgrades, identified in Appendix I to this CSA, are located. Nothing in this section relieves the entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the entity’s insurance obligations under this section become invalid for any reason, including but not limited to: (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the PJM Tariff; entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an entity will not design, engineer or construct or cause to design, engineer or construct any new Network Upgrades, Transmission Provider, in its discretion, may waive the requirement that an entity maintain the Professional Liability Insurance pursuant to this section.

### **11.2 Additional Insureds.**

The Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability policies procured by each Constructing Entity (“Insuring Constructing Entity”) shall include each other party (the “Insured Party”), its officers, agents and employees as additional insureds, providing all standard coverages and covering liability of the Insured Party arising out of bodily injury and/or property damage (including loss of use) in any way connected with the operations, performance, or lack of performance under this CSA.

### **11.3 Other Required Terms.**

The above-mentioned insurance policies (except workers’ compensation) shall provide the following:

(a) Each policy shall contain provisions that specify that it is primary and non-contributory for any liability arising out of that party’s negligence, and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer’s liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Insuring Constructing Entity shall be responsible for its respective deductibles or retentions.

(b) If any coverage is written on a Claims First Made Basis, continuous coverage shall be maintained or an extended discovery period will be exercised for a period of not less than two years after termination of this CSA.

(c) Provide for a waiver of all rights of subrogation which the Insuring Constructing Entity’s insurance carrier might exercise against the Insured Party.

### **11.4 No Limitation of Liability.**

The requirements contained herein as to the types and limits of all insurance to be maintained by the Constructing Entities are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this CSA.

### **11.5 Self-Insurance.**

Notwithstanding the foregoing, each Constructing Entity may self-insure to meet the minimum insurance requirements of this section to the extent it maintains a self-insurance program; provided that such Constructing Entity's senior secured debt is rated at investment grade or better by Standard & Poor's and its self-insurance program meets the minimum insurance requirements of this section 11. For any period of time that a Constructing Entity's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, it shall comply with the insurance requirements applicable to it under this section 11. In the event that a Constructing Entity is permitted to self-insure pursuant to this section, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in section 11.6 of this Appendix III.

### **11.6 Notices; Certificates of Insurance.**

Prior to the commencement of work pursuant to this CSA, the Constructing Entities agree to furnish certificate(s) of insurance evidencing the insurance coverage obtained in accordance with section 11 of this Appendix III. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation in favor of the other Interconnected Entities. All policies of insurance shall provide for 30 days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide 30 days prior written notice of cancellation or material adverse change, each Constructing Entity shall provide the other Constructing Entities with 30 days prior written notice of cancellation or material adverse change to any of the insurance required in this CSA.

### **11.7 Subcontractor Insurance.**

In accord with Good Utility Practice, each Constructing Entity shall require each of its subcontractors to maintain and provide evidence of insurance coverage of types, and in amounts, commensurate with the risks associated with the services provided by the subcontractor. Bonding of contractors or subcontractors shall be at the hiring Constructing Entity's discretion, but regardless of bonding, the Transmission Owner shall be responsible for the performance or non-performance of any contractor or subcontractor it hires.

### **11.8 Reporting Incidents.**

The Parties shall report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this CSA.

## **12.0 Indemnity**

### **12.1 Indemnity.**

Each Constructing Entity shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property of persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with or resulting from: (i) the indemnifying Constructing Entity's breach of any of the representations or warranties made in, or failure of the indemnifying Constructing Entity or any of its subcontractors to perform any of its obligations under, this CSA; or (ii) the negligence or willful misconduct of the indemnifying Constructing Entity or its contractors; provided, however, that the neither Constructing Entity shall not have any indemnification obligations under this section in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Party seeking indemnity.

### **12.2 Indemnity Procedures.**

Promptly after receipt by a person entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this section 12 may apply, the Indemnified Person shall notify the indemnifying Constructing Entity of such fact. Any failure of or delay in such notification shall not affect a Constructing Entity's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Constructing Entity. The Indemnified Person shall cooperate with the indemnifying Constructing Entity with respect to the matter for which indemnification is claimed. The indemnifying Constructing Entity shall have the right to assume the defense thereof with counsel designated by such indemnifying Constructing Entity and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Constructing Entity and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Constructing Entity, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Constructing Entity shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying Constructing Entity. Notwithstanding the foregoing, the indemnifying Constructing Entity shall not: (i) be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified

Person and the indemnifying Constructing Entity, in such event the indemnifying Constructing Entity shall pay the reasonable expenses of the Indemnified Person; and (ii) settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

### **12.3 Indemnified Person.**

If an Indemnified Person is entitled to indemnification under this section 12 as a result of a claim by a third party, and the indemnifying Constructing Entity fails, after notice and reasonable opportunity to proceed under this section 12, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Constructing Entity contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

### **12.4 Amount Owed.**

If the indemnifying Constructing Entity is obligated to indemnify and hold any Indemnified Person harmless under this section 12, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

### **12.5 Limitation on Damages.**

Except as otherwise provided in this section 12, the liability of a Party shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 12.5 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this CSA. The provisions of this section 12 shall survive the termination or expiration of this CSA.

### **12.6 Limitation of Liability in Event of Breach.**

A Breaching Party shall have no liability hereunder to any other Party, and each other Party hereby releases the Breaching Party, for all claims or damages it incurs that are associated with any interruption in the availability of the Network Upgrades identified in Appendix I to this CSA, the Transmission System, or Transmission Service, or associated with damage to the Network Upgrades identified in Appendix I to this CSA, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this CSA.

### **12.7 Limited Liability in Emergency Conditions.**

Except as otherwise provided in the PJM Tariff or the Operating Agreement, no Party shall be liable to any other Party for any action that it takes in responding to an Emergency Condition, so

long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Developer Party shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.



### **13.0 Breach, Cure and Default**

#### **13.1 Breach.**

A Breach of this CSA shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Appendix 2 or of the other portions of the CSA or any attachments or Schedule hereto, including but not limited to any material breach of a representation, warranty or covenant (other than in subsections (a) and (c)-(e) of this section) made in this Appendix 2;
- (c) Assignment of the CSA in a manner inconsistent with its terms;
- (d) Failure of an Interconnection Party to provide access rights, or an Interconnection Party's attempt to revoke or terminate access rights, that are provided under this Appendix 2; or
- (e) Failure of an Interconnection Party to provide information or data required to be determined under this Appendix 2 to another Interconnection Party for such other Interconnection Party to satisfy its obligations under this Appendix 2.

#### **13.2 Continued Operation.**

In the event of a Breach or Default by either Interconnected Entity, and subject to termination of this CSA under section 16 of this Appendix 2, the Interconnected Entities shall continue to operate and maintain, as applicable, such DC power systems, protection and Metering Equipment, telemetering equipment, SCADA equipment, transformers, Secondary Systems, communications equipment, building facilities, software, documentation, structural components, and other facilities and appurtenances that are reasonably necessary for Transmission Provider and the Transmission Owner to operate and maintain the Transmission System and the Transmission Owner Upgrades and for Developer Party to operate and maintain the Generating Facility or Merchant Transmission Facility and the Developer Party Interconnection Facilities, in a safe and reliable manner.

#### **13.3 Notice of Breach.**

An Interconnection Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Interconnection Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Developer Party, Transmission Provider or the Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Developer Party, to any Project Finance Entity provided that the Developer Party has provided the notifying Interconnection Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 21 of this Appendix 2.

### **13.4 Cure and Default.**

An Interconnection Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 13.4 is automatically in Default of this Appendix 2 and of the CSA, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

#### **13.4.1 Cure of Breach.**

##### **13.4.1.1**

Except for the event of Breach set forth in section 13.1(a) above, the Breaching Interconnection Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.

##### **13.4.1.2**

In an event of Breach set forth in section 13.1(a), the Breaching Interconnection Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Developer Party, and the Developer Party fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Developer Party shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

### **13.5 Right to Compel Performance.**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Interconnection Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 20.1, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **14 Termination**

### **14.1 Termination.**

#### **14.1.1 Upon Completion of Construction.**

##### **14.1.1.1 Conforming CSAs.**

If this CSA is conforming and, therefore, is only reported to FERC on PJM' s Electric Quarterly Report, it shall terminate upon the date Transmission Provider receives written notice, in a form acceptable to the Transmission Provider from the Transmission Owner that the following conditions have occurred: (i) completion of construction of all Transmission Owner Upgrades; (ii) if Developer Party exercised the Option to Build, transfer of title under section 5.5 of this Appendix 2; (iii) final payment of all Costs due and owing under this CSA; and (iv) if Developer Party exercised the Option to Build, delivery to the Transmission Owner of final "as-built" drawings of any Stand Alone Network Upgrades built by the Developer Party in accordance with section 3.2.3.2(a)(xi) of this Appendix 2.

##### **14.1.1.2 Non-Conforming CSAs.**

If this CSA is non-conforming and, therefore, has been filed with and accepted by FERC, it shall terminate upon (a) Transmission Provider receiving written notice, in a form acceptable to Transmission Provider, from Transmission Owner that the following conditions have occurred: (i) completion of construction of all Transmission Owner Upgrades; (ii) if Developer Party exercised the Option to Build, transfer of title under section 5.5 of this Appendix 2; (iii) final payment of all Costs due and owing under this CSA; and (iv) if Developer Party exercised the Option to Build, delivery to Transmission Owner of final "as-built" drawings of any Stand Alone Network built by Developer Party in accordance with section 3.2.3.2(a)(xi) of this CSA; and (b) the effective date of Transmission Provider' s cancellation of the CSA in accordance with Commission rules and regulations. Transmission Provider shall serve the Transmission Owner and Developer Party with a copy of the notice of cancellation of any CSA in accordance with Commission rules and regulations.

#### **14.1.2 Upon Default by Either Constructing Entity.**

Either Constructing Entity may terminate its obligations hereunder in the event of a Default by the other Constructing Entity as defined in section 13.3 of this Appendix 2. Transmission Provider may terminate the CSA upon the Default of Developer Party of its obligations under this CSA or the applicable Generation Interconnection Agreement by providing Developer Party and the Transmission Owner prior written notice of termination

#### **14.1.3 By Developer Party.**

Subject to its payment of Cancellation Costs as explained in section 14.2 below, the Developer Party may be relieved of its obligations hereunder upon sixty days written notice to Transmission Provider and the Transmission Owner.

## **14.2 Cancellation by Developer Party.**

### **14.2.1 Applicability.**

The following provisions shall survive and shall apply in the event that Developer Party terminates the CSA pursuant to this section 14.2.

#### **14.2.1.1 Cancellation Cost Responsibility upon Termination.**

Upon the unilateral termination of the CSA by the Developer Party, the Developer Party shall be liable to pay to the Transmission Owner or Transmission Provider all Cancellation Costs in connection with Construction Service for the Developer Party pursuant to this CSA, including section 14.2.1.2 of this Appendix 2. Cancellation costs may include costs for Network Upgrades assigned to Developer Party, in accordance with the Tariff and as reflected in this CSA, that remain the responsibility of Developer Party under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Developer Parties. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Developer Party, with a written demand for payment and with reasonable documentation of such Cancellation Costs. The Developer Party shall pay the Transmission Provider each bill for Cancellation Costs within 30 days after, as applicable, the Transmission Owner's or Transmission Provider's presentation to the Developer Party of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing party seeks to collect. Upon receipt of each of Developer Party's payments of such bills of the Transmission Owner, Transmission Provider shall reimburse the Transmission Owner for Cancellation Costs incurred by the latter.

#### **14.2.1.2 Disposition of Facilities upon Termination.**

Upon termination of the CSA by a Developer Party, Transmission Provider, after consulting with the Transmission Owner, may, at the sole cost and expense of the Developer Party, authorize the Transmission Owner to (a) cancel supplier and contractor orders and agreements entered into by the Transmission Owner to design, construct, install, operate, maintain and own the Transmission Owner Upgrades, provided, however, that Developer Party shall have the right to choose to take delivery of any equipment ordered by the Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; or (b) remove any Transmission Owner Upgrades built by the Transmission Owner or any Transmission Owner Stand Alone Network (only after title to the subject facilities has been transferred to the Transmission Owner) built by the Developer Party; or (c) partially or entirely complete the Transmission Owner Upgrades as necessary to preserve the integrity or reliability of the Transmission System, provided that Developer Party shall be entitled to receive any rights associated with such facilities and

upgrades as determined in accordance with the CSA; or (d) undo any of the changes to the Transmission System that were made pursuant to this CSA. To the extent that the Developer Party has fully paid for equipment that is unused upon cancellation or which is removed pursuant to subsection (b) above, the Developer Party shall have the right to take back title to such equipment; alternatively, in the event that the Developer Party does not wish to take back title, the Transmission Owner may elect to pay the Developer Party a mutually agreed amount to acquire and own such equipment.

#### **14.2.2 Termination upon Default.**

In the event that Developer Party exercises its right to terminate under section 14.1.2 of this Appendix 2, and notwithstanding any other provision of this CSA, the Developer Party shall be liable for payment of the Transmission Owner's Costs incurred up to the date of Developer Party's notice of termination pursuant to section 14.1.2 and the costs of completion of some or all of the Transmission Owner Transmission Owner Upgrades or specific unfinished portions thereof, and/or removal of any or all of such facilities which have been installed, to the extent that Transmission Provider determines such completion or removal to be required for the Transmission Provider and/or Transmission Owner to perform their respective obligations under the GIP of the Tariff or this CSA, provided, however, that Developer Party's payment of such costs shall be without prejudice to any remedies that otherwise may be available to it under this Appendix 2 for the Default of the Transmission Owner. Developer Party will also be subject to Cancellation Cost responsibility provisions of section 14.2.1.1 of this Appendix 2.

#### **14.3 Survival of Rights.**

Termination of this CSA or the applicable Generation Interconnection Agreement shall not relieve any Interconnection Party of any of its liabilities and obligations arising under this CSA or the applicable Generation Interconnection Agreement (including Appendix 2) prior to the date on which termination becomes effective, and each Interconnection Party may take whatever judicial or administrative actions it deems desirable or necessary to enforce its rights hereunder. Applicable provisions of this Appendix 2 will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the CSA or the applicable Generation Interconnection Agreement was in effect.

## **15 Force Majeure**

### **15.1 Notice.**

A Construction Party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify each other Construction Party in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **15.2 Duration of Force Majeure.**

A party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance. The party affected has a continuing notice obligation to the other parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The affected party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such party shall resume performance and give prompt written notice thereof to the other parties.

### **15.3 Obligation to Make Payments.**

Any Construction Party's obligation to make payments for services shall not be suspended by Force Majeure.

### **15.4 Definition of Force Majeure.**

For the purposes of this section, an event of force majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a party's control that, in any of the foregoing cases, by exercise of due diligence, such party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected party.

## **16.0 Confidentiality**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the other Party receiving the information that the information is confidential. If requested by any Party, the disclosing Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Party may disclose such writing to an appropriate Governmental Authority. Any Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **16.1 Term.**

During the term of this CSA, and for a period of three years after the termination of this CSA, except as otherwise provided in section 16 of this CSA, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any Party.

### **16.2 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of this CSA; or (vi) is required, in accordance with section 16.7 of this Appendix III, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this CSA. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

### **16.3 Release of Confidential Information.**

No Party shall disclose Confidential Information of another Party to any other person, except to its Affiliates (in accordance with FERC's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be or considering providing financing to or equity participation in Developer Party on a need-to-know basis in connection with this CSA, unless such person has first been advised of the confidentiality provisions of this section and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party that provides Confidential Information of another Party to any person shall remain responsible for any release of Confidential Information in contravention of this section.

### **16.4 Rights.**



Each Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Party. A Party's disclosure to another Party of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **16.5 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to any other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **16.6 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this CSA or to comply with Applicable Laws and Regulations.

#### **16.7 Order of Disclosure.**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order, or waive compliance with the terms of this CSA. Notwithstanding the absence of a protective order, or agreement, or waiver, the Party subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **16.8 Termination of Construction Service Agreement.**

Upon termination of this CSA for any reason, each Party shall, within 10 calendar days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting Party) or to return to the requesting Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party.

#### **16.9 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this section 16. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party



breaches or threatens to breach its obligations under this section, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, consequential, or punitive damages of any nature or kind resulting from or arising in connection with a Breach of any obligation under this section 16.

#### **16.10 Disclosure to FERC or its Staff.**

Notwithstanding anything in this section to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this CSA, the Party, shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this CSA prior to the release of the Confidential Information to FERC or its staff. A Party shall notify the other Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### **16.11 Non-Disclosure.**

Subject to the exception noted above in section 16.10 of this Appendix III, no Party shall disclose Confidential Information of Party to any person not employed or retained by the disclosing Party, except to the extent disclosure is: (i) required by law; (ii) reasonably deemed by the disclosing Party to be required in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this CSA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Party's Confidential Information under this subparagraph, the disclosing Party shall promptly notify the other Parties in writing and shall assert confidentiality and cooperate with the other Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

#### **16.12 Information in the Public Domain.**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### **16.13 Return or Destruction of Confidential Information.**

If any Party provides any Confidential Information to another Party in the course of an audit or inspection, the providing Party may request the other Party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days after receiving the request and shall certify in writing to the requesting Party that it has complied with such request.

## **17.0 Information Access And Audit Rights**

### **17.1 Information Access.**

Subject to Applicable Laws and Regulations, each Party shall make available to the other Parties information necessary: (i) to verify the Costs incurred by the other Party for which the requesting Party is responsible under this CSA and the PJM Tariff; and (ii) to carry out obligations and responsibilities under this CSA and the PJM Tariff. The Parties shall not use such information for purposes other than those set forth in this section 17 and to enforce their rights under this CSA and the PJM Tariff.

### **17.2 Reporting of Non-Force Majeure Events.**

Each Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this CSA for a reason other than an event of force majeure as defined in section 1.21 of Appendix 2 of this Attachment GG. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section 17 shall not entitle the receiving Party to allege a cause of action for anticipatory breach of this CSA and the PJM Tariff.

### **17.3 Audit Rights.**

Subject to the requirements of confidentiality of this CSA and the PJM Tariff, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent Party, to audit at its own expense the other Party's accounts and records pertaining to such Party's performance and/or satisfaction of obligations arising under this CSA and the PJM Tariff. Any audit authorized by this section 17 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this CSA. Any request for audit shall be presented to the other Party not later than 24 months after the event as to which the audit is sought. Each Party shall preserve all records held by it for the duration of the audit period.

### **17.4 Waiver.**

Any waiver at any time by any Party of its rights with respect to a Breach or Default under this CSA, or with respect to any other matters arising in connection with this CSA, shall not be deemed a waiver or continuing waiver with respect to any other Breach or Default or other matter.

### **17.5 Amendments and Rights Under the Federal Power Act.**

Except as set forth in this section 17, this CSA may be amended, modified, or supplemented only by written agreement of the Parties. Such amendment shall become effective and a part of this CSA upon satisfaction of all Applicable Laws and Regulations.

Notwithstanding the foregoing, nothing contained in this CSA shall be construed as affecting in any way any of the rights of any Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this CSA shall be amended, as mutually agreed by the Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

#### **17.6 Regulatory Requirements.**

Each Party's performance of any obligation under this CSA for which such Party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **18.0 Representations and Warranties**

### **18.1 General.**

Each Constructing Entity hereby represents, warrants and covenants as follows, with these representations, warranties, and covenants effective as to the Constructing Entity during the full time this CSA is effective:

#### **18.1.1 Good Standing.**

Such Constructing Entity is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated.

#### **18.1.2 Authority.**

Such Constructing Entity has the right, power and authority to enter into this CSA, to become a Party thereto and to perform its obligations thereunder. This CSA is a legal, valid and binding obligation of such Constructing Entity, enforceable against such Constructing Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **18.1.3 No Conflict.**

The execution, delivery and performance of this CSA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Constructing Entity, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Constructing Entity or any of its assets.

## **19.0 Inspection and Testing of Completed Facilities**

### **19.1 Coordination.**

Developer Party and the Transmission Owner shall coordinate the timing and schedule of all inspection and testing of the Network Upgrades, identified in Appendix I to this CSA.

### **19.2 Inspection and Testing.**

Each Constructing Entity shall cause inspection and testing of any Network Upgrades that it constructs in accordance with the provisions of this section. The Parties acknowledge and agree that inspection and testing of facilities may be undertaken as facilities are completed and need not await completion of all of the facilities that a Constructing Entity is building.

#### **19.2.1 Of Developer Party-Built Facilities.**

Upon the completion of the construction and installation, but prior to energization, of any Network Upgrades constructed by the Developer Party shall have the same inspected and/or tested by an authorized electric inspection agency or qualified third party reasonably acceptable to the Transmission Owner to assess whether the facilities substantially comply with Applicable Standards. Said inspection and testing shall be held on a mutually agreed-upon date, and the Transmission Owner and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

#### **19.2.2 Of Transmission Owner-Built Facilities.**

Upon the completion of the construction and installation, but prior to energization, of any Network Upgrades constructed by the Transmission Owner, the Transmission Owner shall have the same inspected and/or tested by qualified personnel or a qualified contractor to assess whether the facilities substantially comply with Applicable Standards. Subject to Applicable Laws and Regulations, said inspection and testing shall be held on a mutually agreed-upon date, and the Developer Party and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

### **19.3 Review of Inspection and Testing by Transmission Owner.**

In the event that the written report, or the observation of either Constructing Entity or Transmission Provider, of the inspection and/or testing pursuant to section 19.2 of this Appendix III reasonably leads the Transmission Provider or Transmission Owner to believe that the inspection and/or testing of some or all of the Network Upgrades built by the Developer Party was inadequate or otherwise deficient, the Transmission Owner may, within 20 days after its receipt of the results of inspection or testing and upon reasonable notice to the Developer Party, perform its own inspection and/or testing of such Network Upgrades to determine whether the facilities are acceptable for energization, which determination shall not be unreasonably delayed, withheld or conditioned.

### **19.4 Notification and Correction of Defects.**

19.4.1 If the Transmission Owner, based on inspection or testing pursuant to section 19.2 or 19.3 of this Appendix III, identifies any defects or failures to comply with Applicable Standards in the Network Upgrades constructed by the Developer Party, the Transmission Owner shall notify the Developer Party and Transmission Provider of any identified defects or failures within 20 days after the Transmission Owner's receipt of the results of such inspection or testing. The Developer Party shall take appropriate actions to correct any such defects or failure at its sole cost and expense, and shall obtain the Transmission Owner's acceptance of the corrections, which acceptance shall not be unreasonably delayed, withheld or conditioned.

19.4.2 In the event that inspection and/or testing of any Network Upgrades built by the Transmission Owner identifies any defects or failures to comply with Applicable Standards in such facilities, Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. In the event that such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.

## **19.5 Notification of Results.**

Within 10 days after satisfactory inspection and/or testing of Network Upgrades built by the Developer Party (including, if applicable, inspection and/or testing after correction of defects or failures), the Transmission Owner shall confirm in writing to the Developer Party and Transmission Provider that the successfully inspected and tested facilities are acceptable for energization.

## **20.0 Energization of Completed Facilities**

(A) Unless otherwise provided in the Schedule of Work, energization, when applicable as determined by Transmission Provider, of the Network Upgrades, identified in Appendix I to this CSA, shall occur in two stages. Stage One energization may occur prior to initial energization of the Network Upgrades. Stage Two energization shall consist of energization of the remainder of the Network Upgrades, identified in Appendix I, to the CSA.

(B) In the case of Network Upgrades for which the Transmission Provider determines that two-stage energization is inapplicable, energization shall occur in a single stage. Such a single-stage energization shall be regarded as Stage Two energization for the purposes of the remaining provisions of this section 20.0 and of section 22.0 of this Appendix III.

**20.1 Stage One energization may not occur prior to the satisfaction of the following additional conditions:**

(a) The Developer Party shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Stand Alone Network Upgrades that Developer Party has constructed; and

(b) The Developer Party shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Stand Alone Network Upgrades that Developer Party has constructed.

**20.2 As soon as practicable after the satisfaction of the conditions for Stage One energization specified in sections 19 and 20.1 of this Appendix III, the Transmission Owner and the Developer Party shall coordinate and undertake the Stage One energization of facilities.**

**20.3 Stage Two energization of the remainder of the Network Upgrades, identified in Appendix I to this CSA, may not occur prior to the satisfaction of the following additional conditions:**

(a) The Developer Party shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Network Upgrades that Developer Party has constructed and operational control of which it has not previously transferred pursuant to section 20.1 of this Appendix III; and

(b) The Developer Party shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Network Upgrades that Developer Party has constructed and which were not included in the Stage One energization, but are included in the Stage Two energization.

**20.4 As soon as practicable after the satisfaction of the conditions for Stage Two energization specified in sections 19 and 20.3 of this Appendix III, the Transmission Owner and the Developer Party shall coordinate and undertake the Stage Two energization of facilities.**



**20.5** To the extent defects in any Network Upgrades are identified during the energization process, the energization will not be deemed successful. In that event, the Constructing Entity shall take action to correct such defects in any Network Upgrades that it built as promptly as practical after the defects are identified. The affected Constructing Entity shall so notify the other Construction Parties when it has corrected any such defects, and the Constructing Entities shall recommence efforts, within 10 days thereafter, to energize the appropriate Network Upgrades in accordance with section 20.0 of this Appendix III; provided that the Transmission Owner may, in the reasonable exercise of its discretion and with the approval of Transmission Provider, require that further inspection and testing be performed in accordance with section 19 of this Appendix III.

## **21.0 Transmission Owner's Acceptance of Facilities Constructed by Developer Party**

Within five days after determining that Network Upgrades have been successfully energized, the Transmission Owner shall issue a written notice to the Developer Party accepting the Network Upgrades built by the Developer Party that were successfully energized. Such acceptance shall not be construed as confirming, endorsing or providing a warranty by the Transmission Owner as to the design, installation, construction, fitness, safety, durability or reliability of any Network Upgrades built by the Developer Party, or their compliance with Applicable Standards.

## **22.0 Transfer of Title to Certain Facilities Constructed by Developer Party**

Within 30 days after the Developer Party's receipt of notice of acceptance under section 21.0 of this Appendix III following Stage Two energization of the Network Upgrades, the Developer Party shall deliver to the Transmission Owner, for the Transmission Owner's review and approval, all of the documents and filings necessary to transfer to the Transmission Owner title to any Network Upgrades constructed by the Developer Party, and to convey to the Transmission Owner any easements and other land rights to be granted by Developer Party that have not then already been conveyed. The Transmission Owner shall review and approve such documentation, such approval not to be unreasonably withheld, delayed, or conditioned. Within 30 days after its receipt of the Transmission Owner's written notice of approval of the documentation, the Developer Party, in coordination and consultation with the Transmission Owner, shall make any necessary filings at the FERC or other governmental agencies for regulatory approval of the transfer of title. Within 20 days after the issuance of the last order granting a necessary regulatory approval becomes final (i.e., is no longer subject to rehearing), the Developer Party shall execute all necessary documentation and shall make all necessary filings to record and perfect the Transmission Owner's title in such facilities and in the easements and other land rights to be conveyed to the Transmission Owner. Prior to such transfer to the Transmission Owner of title to the Network Upgrades built by the Developer Party, the risk of loss or damages to, or in connection with, such facilities shall remain with the Developer Party. Transfer of title to facilities under this section shall not affect the Developer Party's receipt or use of the rights related to the Network Upgrades for which it otherwise may be eligible as provided in Subpart C of Part VI of the Tariff.

## **23.0 Liens**

The Developer Party shall take all reasonable steps to ensure that, at the time of transfer of title in the Network Upgrades built by the Developer Party to the Transmission Owner, those facilities shall be free and clear of any and all liens and encumbrances, including mechanics' liens. To the extent that the Developer Party cannot reasonably clear a lien or encumbrance prior to the time for transferring title to the Transmission Owner, Developer Party shall nevertheless convey title subject to the lien or encumbrance and shall indemnify, defend and hold harmless the Transmission Owner against any and all claims, costs, damages, liabilities and expenses (including without limitation reasonable attorneys' fees) which may be brought or imposed against or incurred by Transmission Owner by reason of any such lien or encumbrance or its discharge.

## **24.0 Charges**

### **24.1 Specified Charges.**

If and to the extent required by the Transmission Owner, after the Initial Operation of the Network Upgrade, Project Developer shall pay one or more of the types of recurring charges described in this section to compensate the Transmission Owner for costs incurred in performing certain of its obligations under this Appendix III. Transmission Provider will deliver a copy of such filing to Project Developer. Permissible charges under this section may include:

(a) Administration Charge - Any such charge may recover only the costs and expenses incurred by the Transmission Owner in connection with administrative obligations such as the preparation of bills. An Administration Charge shall not be permitted to the extent that the Transmission Owner's other charges to the Project Developer under the same CSA include an allocation of the Transmission Owner's administrative and general expenses and/or other corporate overhead costs.

(b) Network Upgrade Operations and Maintenance Charge - Any such charge may recover only the Transmission Owner's costs and expenses associated with operation and maintenance charges related to the Project Developer's Network Upgrade owned by the Transmission Owner.

(c) Other Charges - Any other charges applicable to the Project Developer, as mutually agreed upon by the Project Developer and the Transmission Owner and as accepted by the FERC as part of a CSA.

### **24.2 FERC Filings.**

To the extent required by law or regulation, each Party shall seek FERC acceptance or approval of its respective charges or the methodology for the calculation of such charges.

SCHEDULE A

NEGOTIATED CONTRACT OPTIONS

None.

**SCHEDULE B**

**OPERATION AND MAINTENANCE CHARGES FOR  
NETWORK UPGRADES**

None.

**SCHEDULE C**  
**SCOPE OF WORK**

**A. Transmission Owner Upgrades to be Built by Transmission Owner**

**[Specify Facilities To Be Constructed or state “None”]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Developer Party has sole cost responsibility
- ii. Facilities for which a Network Upgrade Cost Responsibility Service Agreement is required.

**B. Project Developer.**

In the event Developer Party has exercised the Option to Build, it is hereby permitted to build in accordance with and subject to the conditions and limitations set forth in this CSA, the following Stand Alone Network Upgrades:

**[Specify Facilities to Be Constructed or state “None”]**



## SCHEDULE D

### APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

{Include the following language if not required:}

Not Required.

{Otherwise, include the following language:}

The following technical requirements and standards shall apply. To the extent that these Applicable Technical Requirements and Standards conflict with the terms and conditions of the Tariff or any other provision of this CSA, the Tariff and/or this CSA shall control.

*{Instructions: If the relevant TO Applicable Technical Requirements and Standards **are** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply. The [Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] is available on the PJM website.

*{Instructions. If the relevant TO Applicable Technical Requirements and Standards **are not** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply.

**SCHEDULE E**

**DEVELOPER PARTY'S AGREEMENT TO CONFORM WITH IRS SAFE  
HARBOR PROVISIONS FOR NON-TAXABLE STATUS**

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}

Not Required.

[OR]

{Include the following language if applicable to Project Developer:}

As provided in section 4.0 of Appendix III to this CSA and subject to the requirements thereof, Developer Party represents that it meets all qualifications and requirements as set forth in section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Developer Party agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Developer Party to Transmission Owner with respect to the payment of the Costs of construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades specified in this GIA.

Nothing in Developer Party's agreement pursuant to this Schedule E shall change Developer Party's indemnification obligations under section 4.2 of Appendix III to this CSA.

SCHEDULE F

SCHEDULE OF NON-STANDARD TERMS & CONDITIONS

Tariff, Part IX, Subpart K

FORM OF  
UPGRADE APPLICATION AND STUDIES AGREEMENT

## Upgrade Application and Studies Agreement

1. This Upgrade Application and Studies Agreement (“Application” or “Agreement”), dated \_\_\_\_\_, is entered into by and between \_\_\_\_\_ (“Upgrade Customer” or “Applicant”) and PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”) (individually a “Party” and together the “Parties”) pursuant to PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable. Capitalized terms used in this Application, unless otherwise indicated, shall have the meanings ascribed to them in Tariff, Part VII, Subpart A, section 300, or Tariff, Part VIII, Subpart A, 400, as applicable.
2. In order to have a valid Upgrade Request, Applicant must (1) electronically provide to Transmission Provider through PJM’s website a complete (i.e., non-deficient) and executed Application expressly accepted by Transmission Provider, and (2) submit to Transmission Provider the required cash Study Deposit by wire transfer in the amount of \$150,000. Upon satisfaction of the foregoing requirements, subject to Transmission Provider’s deficiency review, Transmission Provider will assign a Request Number to the Upgrade Request, which will establish (1) the validity of the Upgrade Request and (2) the priority of the Upgrade Request relative to other Upgrade Requests.

### SECTION 1: REQUIRED APPLICANT INFORMATION

3. Name, address, telephone number, and e-mail address of Applicant. If Applicant has designated an agent, include the agent’s contact information.

Applicant

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Applicant’s Agent (if applicable)

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Agent’s contact person: \_\_\_\_\_

4. An Internal Revenue Service Form W-9 or comparable state-issued document for Applicant.
5. Documentation proving the existence of a legally binding relationship between Applicant and any entity with a vested interest in this Application and associated project (e.g., a parent company, a subsidiary, or financing company acting as agent for Applicant). Such

documentation may include, but is not limited to, Applicant's Articles of Organization and Operating Agreement describing the nature of the legally binding relationship.

6. Applicant's banking information, or the banking information of any entity with a legally binding relationship to Applicant that wishes to make payments and receive refunds on behalf of Applicant, in association with this Application and corresponding project:

Bank Name:  
Account Holder Name:  
ABA number:  
Account Number:  
Company:  
Tax Reporting Name:  
Tax ID:  
Address:  
City:  
State:  
Zip:  
Phone:  
Email:

## **SECTION 2: REQUIRED UPGRADE REQUEST SPECIFICATIONS**

7. Specify whether Applicant submits this Application pursuant to either:

the process for funding Network Upgrades and requesting Incremental Auction Revenue Rights (IARRs) under the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8; or

the procedures for Merchant Network Upgrades to either (a) upgrade facilities or (b) advance certain already-identified upgrades.

8. If planning to fund Network Upgrades and request IARRs, specify the following, as further described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable, and the PJM Manuals:

- a. the station or transmission line or lines where the upgrades will be made;  
b. the requested source and sink locations;  
c. the increase in capability in megawatts (MW) or megavolt-amperes (MVA);  
d. the MW amount of requested IARRs; and

- e. the proposed in-service or commencement date.
9. If planning Merchant Network Upgrades, complete the following, as further described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable, and the PJM Manuals:
- a. specify the substation or transmission facility or facilities where the upgrade(s) will be made;
  - b. specify the MW or MVA amount by which the normal or emergency rating of the identified facility is to be increased, together with the desired in-service date; or, as applicable, the Regional Transmission Expansion Plan project number and planned and requested advancement dates;
  - c. if requesting Incremental Capacity Transfer Rights (ICTRs), identify up to three Locational Deliverability Areas (LDAs) in which to determine the ICTRs; and
  - d. specify the planned date the proposed Merchant Network Upgrade will be in service, such date to be no more than seven years from the date the valid Upgrade Request is received by Transmission Provider, unless Upgrade Customer demonstrates that engineering, permitting, and construction of the Merchant Network Upgrade will take more than seven years.

### **SECTION 3: CONDUCT OF STUDIES**

10. Transmission Provider, in consultation with the affected Transmission Owner(s), will conduct a System Impact Study as described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable, and provide Upgrade Customer with a System Impact Study report through Transmission Provider's website. The System Impact Study report will include good faith estimates of the cost allocation of the Network Upgrades for Applicant's Upgrade Request, but those estimates shall not be deemed final or binding.
11. In order for the Upgrade Request to proceed to the Facilities Study, Transmission Provider must timely receive from Upgrade Customer a Readiness Deposit as described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable. If Transmission Provider does not timely receive the Readiness Deposit, then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn, and the Upgrade Request will be removed from all studies and will lose its priority position.
12. If Transmission Provider timely receives the Readiness Deposit, then Transmission Provider will proceed with the Facilities Study for the Upgrade Request. The Facilities Study will provide the final details regarding the type, scope, and construction schedule of Network Upgrades and any other facilities that may be required to accommodate the Upgrade Request, and will provide Upgrade Customer with a final estimate of Upgrade Customer's cost responsibility for the Upgrade Request. Upon completion of the Facilities Study, Transmission Provider will provide Upgrade Customer with a Facilities Study

report through Transmission Provider's website, and concurrently tender a draft Upgrade Construction Service Agreement, a form of which is located in Tariff, Part IX, Subpart E.

13. The System Impact Study and Facilities Study necessarily will employ various assumptions regarding Applicant's Upgrade Request, other Upgrade Requests, and PJM's Regional Transmission Expansion Plan at the time of study. IN NO EVENT SHALL THIS AGREEMENT, THE SYSTEM IMPACT STUDY, OR THE FACILITIES STUDY IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR TRANSMISSION OWNER(S) TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF APPLICANT EITHER AT THIS POINT IN TIME OR IN THE FUTURE.

#### **SECTION 4: COST RESPONSIBILITY**

14. Ten percent of Applicant's \$150,000 Study Deposit is non-refundable.
15. Transmission Provider first shall apply Applicant's Study Deposit in payment of the invoices for the costs of the System Impact Study.
16. If Study Deposit monies remain after the System Impact Study is completed, and any outstanding monies owed by Upgrade Customer in connection with outstanding invoices related to the present or prior Upgrade Requests or other New Service Requests have been paid, such remaining deposit monies either shall be:
- a. Applied to the Facilities Study, if Upgrade Customer decides to remain in the Upgrade Request process; or
  - b. Returned to Upgrade Customer, less actual study costs incurred, if Upgrade Customer decides to withdraw its Upgrade Request.
17. Actual costs for the System Impact Study and Facilities Study may exceed the Study Deposit. Notwithstanding the amount of the Study Deposit, Applicant shall reimburse Transmission Provider for all, or for Applicant's allocated portion of, the actual cost of the studies in accordance with Applicant's cost responsibility. Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 days (or, if the 20<sup>th</sup> day is not a Business Day, then the next Business Day) of Transmission Provider sending the notification of such additional study costs, or (ii) withdraw its Upgrade Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn.

#### **SECTION 5: CONFIDENTIALITY**

18. Applicant agrees to provide all information requested by Transmission Provider necessary to complete and review this Application. Subject to this section 5, and to the extent



required by Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable, information provided pursuant to this Application shall be and remain confidential.

19. Upon completion of the System Impact Study and Facilities Study, the corresponding reports will be listed on Transmission Provider's website and, to the extent required by Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable or Commission regulations, will be made publicly available. Applicant acknowledges and consents to such disclosures as may be required under Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable or Commission regulations.
20. Applicant acknowledges that, consistent with the confidentiality provisions of Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable, Transmission Provider may contract with consultants, including Transmission Owners, to provide services or expertise in the study process, and Transmission Provider may disseminate information as necessary to those consultants, and rely upon them to conduct part or all of the System Impact Studies.

#### **SECTION 6: DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

21. In completing the System Impact Study and Facilities Study, Transmission Provider, Transmission Owner(s), and any other subcontractors employed by Transmission Provider must rely on information provided by Applicant and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDY AND FACILITIES STUDY. Applicant acknowledges that it has not relied on any representations or warranties not specifically set forth herein, and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the System Impact Study and Facilities Study conducted hereunder is intended, nor shall be interpreted, to constitute agreement by Transmission Provider or Transmission Owner(s) to provide Interconnection Service or transmission service to or on behalf of Applicant either at this time or in the future.
22. In no event will Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this agreement or otherwise, even if Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider have been advised of the possibility of

such a loss. Nor shall Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of Transmission Provider's obligations under this Agreement.

## **SECTION 7: MISCELLANEOUS**

23. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

Applicant:

\_\_\_\_\_  
\_\_\_\_\_

24. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
25. This Agreement, or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties.
26. This Agreement shall be binding upon the Parties, their heirs, executors, administrators, successors, and permitted assigns.
27. This Agreement shall become effective on the date it is executed by both Parties and shall remain in effect until the earlier of (a) the date on which Applicant enters into an Upgrade Construction Service Agreement with PJM and Transmission Owner, a form of which is available at Tariff, Part IX, Subpart E; or (b) termination or withdrawal of this Application.
28. Prior to entering into a final Upgrade Construction Service Agreement, an Upgrade Customer may assign its Upgrade Request to another entity only if the acquiring entity accepts and acquires all rights and obligations as identified in the Upgrade Request for such project, as evidenced in a writing acceptable to Transmission Provider.

29. Governing Law, Regulatory Authority, and Rules:

This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal laws and/or laws of the State of Delaware without regard to conflicts of law provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

30. No Third-Party Beneficiaries:

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest, and where permitted their assigns.

31. Multiple Counterparts:

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all of which constitute one and the same instrument.

32. No Partnership:

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

33. Severability:

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

34. Reservation of Rights:

Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; and Applicant shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power

Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

Applicant: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

Tariff, Part IX, Subpart L

FORM OF  
AFFECTED SYSTEM CUSTOMER FACILITIES STUDY  
APPLICATION AND AGREEMENT

**Affected System Customer Facilities Study**  
**Application and Agreement**  
(Project Identifier # \_\_\_\_\_)

**RECITALS**

1. This Affected System Customer Facilities Study Application and Agreement ("Agreement"), dated as of \_\_\_\_\_, is entered into by and between \_\_\_\_\_ ("Affected System Customer") and PJM Interconnection, L.L.C. ("Transmission Provider"), pursuant to the PJM Interconnection, L.L.C. Open Access Transmission Tariff ("PJM Tariff").
2. Pursuant to Tariff, Part VII, Subpart G (Affected System rules) or Tariff, Part VIII, Subpart G (Affected System rules), as applicable, Affected System Customer is responsible for an Affected System Facility that requires, or Affected System Facilities that require, Network Upgrades to Transmission Provider's Transmission System, and Transmission Provider has notified Affected System Customer of the need to enter this Agreement.
3. Transmission Provider has informed Affected System Customer that it will use Reasonable Efforts to complete this Affected System Customer Facilities Study by {date}.
4. Affected System Customer desires that Transmission Provider commence an Affected System Customer Facilities Study in connection with the following interconnection request: {instruction – list adjacent region transmission provide and interconnection request number} ("Affected System interconnection request").

**PREVIOUS SUBMISSIONS**

5. Previous submissions: {instructions – complete the following section if there was an earlier Affected System Customer Facilities Study Agreement or other agreement between PJM and the Affected System Customer, otherwise replace the following language with "Not Applicable"} Except as otherwise specifically set forth in an attachment to this Agreement, Affected System Customer represents and warrants that the information provided in {list applicable agreement} dated \_\_\_\_\_, is accurate and complete as of the date of execution of this Agreement.

**MILESTONES**

6. Affected System Customer must meet the following milestone dates relating to the development of its generation or merchant transmission project(s) or interconnection request:

**[Specify Project Specific Milestones]**

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand]

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## **PURPOSE AND SCOPE OF THE AFFECTED SYSTEM CUSTOMER FACILITIES STUDY**

7. Transmission Provider, in consultation with the affected Transmission Owner(s), shall commence an Affected System Customer Facilities Study pursuant to this Agreement to evaluate the Network Upgrades to the Transmission Provider's Transmission System necessary to accommodate Affected System Customer's Affected System interconnection request.

A. **Scope of Affected System Customer Facilities Study:** The purpose of the Affected System Customer Facilities Study is to provide, commensurate with any mutually agreed parameters regarding the scope and degree of specificity described in Schedule A attached to this agreement, an assessment of project related system reliability issues and conceptual engineering and, as appropriate, detailed design, plus cost estimates and project schedules, to implement the conclusions of the Facilities Study regarding the Network Upgrades necessary to accommodate the Affected System interconnection request. The nature and scope of the materials that Transmission Provider shall deliver to the Affected System Customer upon completion of the Affected System Customer Facilities Study shall be described in the PJM Manuals.

B. **Affected System Customer Facilities Study Time Estimate:** Transmission Provider's estimates of the date for completion of the Affected System Customer Facilities Study is stated in section 3 of this Agreement. In the event that Transmission Provider determines that it will be unable to complete the Affected System Customer Facilities Study by the estimated completion date stated in section 3 of this Agreement, it shall notify Affected System Customer and will explain the reasons for the delay.

C. **Issuance of Affected System Customer Facility Study Report and Obligation to Construction Service Agreement:** Upon receipt of the Affected System Customer Facility Study report, Transmission Provider and the Affected System Customer shall enter into a stand-alone Construction Service Agreement and, if applicable Network Upgrade Cost Responsibility Agreement (forms of which are set forth in Tariff, Part IX) for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades. Transmission



Provider shall provide in electronic form a draft stand-alone Construction Service Agreement and, if applicable a Network Upgrade Cost Responsibility Agreement.

8. The Affected System Customer Facilities Study necessarily will employ various assumptions including assumptions regarding Affected System Customer's Affected System interconnection request, other pending Interconnection Request(s), and PJM's Regional Transmission Expansion Plan at the time of the study. IN NO EVENT SHALL THIS AGREEMENT OR THE AFFECTED SYSTEM CUSTOMER FACILITIES STUDY IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR THE TRANSMISSION OWNERS TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF NEW SERVICE CUSTOMER EITHER AT THIS POINT IN TIME OR IN THE FUTURE.

### **CONFIDENTIALITY**

9. Affected System Customer agrees to provide all information requested by Transmission Provider necessary to complete the Affected System Customer Facilities Study. Subject to section 10 of this Agreement and to the extent required by Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, information provided pursuant to this section 9 shall be and remain confidential.
10. Until completion of the Affected System Customer Facilities Study, Transmission Provider shall keep confidential all information provided to it by the Affected System Customer. Upon completion of the Affected System Customer Facilities Study, the Affected System Customer Facilities Study results will be publicly available on Transmission Provider's website; Affected System Customers must obtain the results from Transmission Provider's website. Transmission Provider shall provide a copy of the study to Affected System Customer, along with (to the extent consistent with Transmission Provider's confidentiality obligations in section 18.17 of the Operating Agreement) all related work papers. Affected System Customer acknowledges and consents to such other, additional disclosures of information as may be required under the PJM Tariff or the FERC's rules and regulations.
11. Affected System Customer acknowledges the affected Transmission Owner(s) may participate in the Affected System Customer Facilities Study process and that Transmission Provider may disseminate information to the affected Transmission Owner(s) and may consult with them regarding part or all of the Affected System Customer Facilities Study.

### **COST RESPONSIBILITY**

12. Concurrent with execution of this Agreement, Affected System Customer shall provide a study deposit of \$100,000 ("Study Deposit"), through electronic wire transfer, which must in cash. Transmission Provider shall apply Affected System Customer's Study Deposit in payment of the invoices for the costs of the Affected System Customer Facilities Study. Actual study costs may exceed the Study Deposit. Affected System Customer shall include the project identification or reference number assigned to the Affected System Facility by

the Affected System Operator and attach the relevant Affected System Operator Study that identified the need for such Facilities Study Agreement. Notwithstanding the amount of the Study Deposit, Affected System Customer shall reimburse Transmission Provider for all of the actual cost of the Affected System Customer Facilities Study. If Transmission Provider sends Affected System Customer notification of additional study costs, then Affected System Customer must pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs. If Affected System Customer fails to pay such amounts, then Transmission Provider shall deem this Agreement to be terminated and withdrawn.

### **DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

13. In analyzing and preparing the Affected System Customer Facilities Study, Transmission Provider, the Transmission Owners, and any other subcontractors employed by Transmission Provider shall have to rely on information provided by Affected System Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNERS, NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE AFFECTED SYSTEM CUSTOMER FACILITIES STUDY. Affected System Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the Facilities Studies prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by Transmission Provider or Transmission Owner(s) to provide Interconnection Service or transmission service to or on behalf of Applicant either at this time or in the future.
14. In no event will Transmission Provider, the Transmission Owners or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the Affected System Customer Facilities Study, even if Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider be liable for any delay in delivery, or for the non-performance or delay in performance, of Transmission Provider's obligations under this Agreement.

Without limitation of the foregoing, Affected System Customer further agrees that the Transmission Owners and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Affected System Customer Facilities Study shall

be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

### **MISCELLANEOUS**

15. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

#### **Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

#### **Affected System Customer**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

16. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
17. This Agreement or any part thereof, may not be amended, modified, assigned or waived other than by a writing signed by all parties hereto.
18. This Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
19. Neither this Agreement nor the Affected System Customer Facilities Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
20. The provisions of Tariff, Part VII or Tariff, Part VIII, as applicable are incorporated herein and made a part hereof.
21. Capitalized terms used but not otherwise defined herein shall have the meaning ascribed to them in the PJM Tariff.
22. This Agreement shall become effective on the date it is executed by all parties and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders

the completed Affected System Customer Facilities Study and, as applicable, a proposed Upgrade Construction Service Agreement to Affected System Customer, or (b) termination and withdrawal of the Affected System interconnection request(s).

23. No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.

24. Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

25. No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

26. Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

27. Governing Law, Regulatory Authority, and Rules

This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

28. Reservation of Rights

Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; and Applicant shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, Transmission Provider and the Affected System Customer  
have caused this Agreement to be executed by their respective authorized officials.

(Project Identifier # \_\_\_\_\_)

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

**Affected System Customer: [Name of Party]**

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

**Schedule A**  
**Details of Design and Cost Estimates/Quality**  
**For the Affected System Customer Facilities Study**

[insert details regarding degree of accuracy of cost estimates and associated scope of design as mutually agreed by Transmission Provider and Affected System Customer]

Effective December 31, 9998

(Marked/Redline Format)



## **TABLE OF CONTENTS**

### **I. COMMON SERVICE PROVISIONS**

- 1 Definitions**
  - OATT Definitions – A – B**
  - OATT Definitions – C – D**
  - OATT Definitions – E – F**
  - OATT Definitions – G – H**
  - OATT Definitions – I – J – K**
  - OATT Definitions – L – M – N**
  - OATT Definitions – O – P – Q**
  - OATT Definitions – R – S**
  - OATT Definitions – T – U – V**
  - OATT Definitions – W – X – Y – Z**
- 2 Initial Allocation and Renewal Procedures**
- 3 Ancillary Services**
- 3B PJM Administrative Service**
- 3C Mid-Atlantic Area Council Charge**
- 3D Transitional Market Expansion Charge**
- 3E Transmission Enhancement Charges**
- 3F Transmission Losses**
- 4 Open Access Same-Time Information System (OASIS)**
- 5 Local Furnishing Bonds**
- 6 Reciprocity**
- 6A Counterparty**
- 7 Billing and Payment**
- 8 Accounting for a Transmission Owner's Use of the Tariff**
- 9 Regulatory Filings**
- 10 Force Majeure and Indemnification**
- 11 Creditworthiness**
- 12 Dispute Resolution Procedures**
- 12A PJM Compliance Review**

### **II. POINT-TO-POINT TRANSMISSION SERVICE**

#### **Preamble**

- 13 Nature of Firm Point-To-Point Transmission Service**
- 14 Nature of Non-Firm Point-To-Point Transmission Service**
- 15 Service Availability**
- 16 Transmission Customer Responsibilities**
- 17 Procedures for Arranging Firm Point-To-Point Transmission Service**
- 18 Procedures for Arranging Non-Firm Point-To-Point Transmission Service**
- 19 System Impact Feasibility Study Procedures For Long-Term Firm Point-To-Point Transmission Service Requests**
- 20 [Reserved]**

- 21 [Reserved]
- 22 Changes in Service Specifications
- 23 Sale or Assignment of Transmission Service
- 24 Metering and Power Factor Correction at Receipt and Delivery Points(s)
- 25 Compensation for Transmission Service
- 26 Stranded Cost Recovery
- 27 Compensation for New Facilities and Redispatch Costs
- 27A Distribution of Revenues from Non-Firm Point-to-Point Transmission Service

### **III. NETWORK INTEGRATION TRANSMISSION SERVICE**

#### **Preamble**

- 28 Nature of Network Integration Transmission Service
- 29 Initiating Service
- 30 Network Resources
- 31 Designation of Network Load
- 32 System Impact Study Procedures for Network Integration Transmission Service Requests
- 33 Load Shedding and Curtailments
- 34 Rates and Charges
- 35 Operating Arrangements

### **IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM**

#### **Preamble**

#### **Subpart A –INTERCONNECTION PROCEDURES**

- 36 Interconnection Requests
- 37 Additional Procedures
- 38 Service on Merchant Transmission Facilities
- 39 Local Furnishing Bonds
- 40 Non-Binding Dispute Resolution Procedures
- 41 Interconnection Study Statistics

42 – 108 [Reserved]

Subpart B – [Reserved]

Subpart C – [Reserved]

Subpart D – [Reserved]

Subpart E – [Reserved]

Subpart F – [Reserved]

#### **Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE**

#### **Preamble**

- 109 Pre-application Process
- 110 Permanent Capacity Resource Additions Of 20 MW Or Less
- 111 Permanent Energy Resource Additions of 20 MW or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)
- 112 Temporary Energy Resource Additions of 20 MW or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)

- 112A Permanent or Temporary Energy Resources of 2 MW or Less (Synchronous) or 5 MW or Less (Inverter-based)
- 112B Certified Inverter-Based Small Generating Facilities No Larger than 10 kW
- 112C [Reserved]

**V. GENERATION DEACTIVATION**

**Preamble**

- 113 Notices
- 114 Deactivation Avoidable Cost Credit
- 115 Deactivation Avoidable Cost Rate
- 116 Filing and Updating of Deactivation Avoidable Cost Rate
- 117 Excess Project Investment Required
- 118 Refund of Project Investment Reimbursement
- 118A Recovery of Project Investment
- 119 Cost of Service Recovery Rate
- 120 Cost Allocation
- 121 Performance Standards
- 122 Black Start Units
- 123-199 [Reserved]

**VI. ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; RIGHTS ASSOCIATED WITH CUSTOMER-FUNDED UPGRADES**

**Preamble**

- 200 Applicability
  - 201 Queue Position
- Subpart A – SYSTEM IMPACT STUDIES AND FACILITIES STUDIES FOR NEW SERVICE REQUESTS**

- 202 Coordination with Affected Systems
- 203 System Impact Study Agreement
- 204 Tender of System Impact Study Agreement
- 205 System Impact Study Procedures
- 206 Facilities Study Agreement
- 207 Facilities Study Procedures
- 208 Expedited Procedures for Part II Requests
- 209 Optional Interconnection Studies
- 210 Responsibilities of the Transmission Provider and Transmission Owners

**Subpart B– AGREEMENTS AND COST RESPONSIBILITY FOR CUSTOMER-FUNDED UPGRADES**

- 211 Interim Interconnection Service Agreement
- 212 Interconnection Service Agreement
- 213 Upgrade Construction Service Agreement
- 214 Filing/Reporting of Agreements
- 215 Transmission Service Agreements
- 216 Interconnection Requests Designated as Market Solutions
- 217 Cost Responsibility for Necessary Facilities and Upgrades

- 218 New Service Requests Involving Affected Systems
- 219 Inter-queue Allocation of Costs of Transmission Upgrades
- 220 Advance Construction of Certain Network Upgrades
- 221 Transmission Owner Construction Obligation for Necessary Facilities and Upgrades
- 222 Confidentiality
- 223 Confidential Information
- 224 – 229 [Reserved]
- Subpart C – RIGHTS RELATED TO CUSTOMER-FUNDED UPGRADES
- 230 Capacity Interconnection Rights
- 231 Incremental Auction Revenue Rights
- 232 Transmission Injection Rights and Transmission Withdrawal Rights
- 233 Incremental Available Transfer Capability Revenue Rights
- 234 Incremental Capacity Transfer Rights
- 235 Incremental Deliverability Rights
- 236 Interconnection Rights for Certain Transmission Interconnections
- 237 IDR Transfer Agreements
- 238 – 299 [Reserved]

## **VII. TRANSITION CYCLE, GENERATION INTERCONNECTION PROCEDURE**

### **Subpart A – INTRODUCTION**

- 300 Definitions
- 301 Transition Introduction
- 302 Site Control

### **Subpart B – AE1-AG1 TRANSITION CYCLE #1**

- 303 Transition Eligibility
- 304 AE1-AG1 Expedited Process Eligibility

### **Subpart C – AG2-AH1 TRANSITION CYCLE #2**

- 305 Introduction, Overview and Eligibility
- 306 Application Rules

### **Subpart D – PHASES AND DECISION POINTS**

- 307 Introduction
- 308 Phase I
- 309 Decision Point I
- 310 Phase II
- 311 Decision Point II
- 312 Phase III
- 313 Decision Point III

- 314 Final Agreement Negotiation Phase

### **Subpart E – MISCELLANEOUS**

- 315 Assignment of Project Identifier
- 316 Service Below The Meter Generator
- 317 Behind The Meter Generation
- 318 Base Case Data
- 319 Service on Merchant Transmission Facilities

320	Local Furnishing Bonds
321	Internal Dispute Resolution Procedures
322	Responsibilities of Transmission Provider and Transmission Owner
323	Additional Upgrades
324	IDR Transfer Agreement
325	Regional Transmission Expansion Plan
326	Transmission Owner Construction Obligation for Necessary Facilities and Upgrade
327	Confidentiality
328	Capacity Interconnection Rights
329	Incremental Rights
330	Rights for Transmission Interconnections
331	Milestones
332	Winter Capacity Interconnection Rights
333	Interconnection Studies Processing Time and Metrics
334	Transmission Provider Website Postings
Subpart F – WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL AGREEMENTS	
335	Wholesale Market Participation Agreement/Non-Jurisdictional Agreements
Subpart G – AFFECTED SYSTEM RULES	
336	Affected System Rules
Subpart H – UPGRADE REQUESTS	
337	Upgrade Requests
338 – 399 [Reserved]	

VIII.	<del>400 — 499 [Reserved]</del> <u>NEW RULES, GENERATION INTERCONNECTION PROCEDURE</u>
	<u>Subpart A – INTRODUCTION</u>
400	<u>Definitions</u>
401	<u>Applications for Cycle Process, Introduction</u>
402	<u>Applications for Cycle Process, Site Control</u>
	<u>Subpart B – APPLICATION RULES</u>
403	<u>Application Rules</u>
	<u>Subpart C – PHASES AND DECISION POINTS</u>
404	<u>Introduction</u>
405	<u>Phase I</u>
406	<u>Decision Point I</u>
407	<u>Phase II</u>
408	<u>Decision Point II</u>
409	<u>Phase III</u>
410	<u>Decision Point III</u>
	<u>Subpart D – FINAL AGREEMENT NEGOTIATION PHASE</u>
411	<u>Final Agreement Negotiation Phase</u>
	<u>Subpart E – MISCELLANEOUS</u>
412	<u>Assignment of Project Identifier</u>
413	<u>Service Below Generating Capability</u>

<u>414</u>	<u>Surplus Interconnection Service</u>
<u>415</u>	<u>Behind The Meter Generation</u>
<u>416</u>	<u>Base Case Data</u>
<u>417</u>	<u>Service on Merchant Transmission Facilities</u>
<u>418</u>	<u>Local Furnishing Bonds</u>
<u>419</u>	<u>Internal Dispute Resolution Procedures</u>
<u>420</u>	<u>Responsibilities of Transmission Provider and Transmission Owners</u>
<u>421</u>	<u>Additional Upgrades</u>
<u>422</u>	<u>IDR Transfer Agreement</u>
<u>423</u>	<u>Regional Transmission Expansion Plan</u>
<u>424</u>	<u>Transmission Owner Construction Obligation for Necessary Facilities and Upgrades</u>
<u>425</u>	<u>Confidentiality</u>
<u>426</u>	<u>Capacity Interconnection Rights</u>
<u>427</u>	<u>Incremental Rights</u>
<u>428</u>	<u>Rights for Transmission Interconnections</u>
<u>429</u>	<u>Milestones</u>
<u>430</u>	<u>Winter Capacity Interconnection Rights</u>
<u>431</u>	<u>Interconnection Studies Processing Time and Metrics</u>
<u>432</u>	<u>Transmission Provider Website Postings</u>
<u>Subpart F – WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL AGREEMENTS</u>	
<u>433</u>	<u>Wholesale Market Participation Agreement/Non-Jurisdictional Agreements</u>
<u>Subpart G – AFFECTED SYSTEM RULES</u>	
<u>434</u>	<u>Affected System Rules</u>
<u>Subpart H – UPGRADE REQUESTS</u>	
<u>435</u>	<u>Upgrade Requests</u>
<u>436 – 499 [Reserved]</u>	

## **IX. FORMS OF INTERCONNECTION-RELATED AGREEMENTS**

<b>500</b>	<b>Execution Deadlines</b>
<b>Subpart A – FORM OF APPLICATION AND STUDIES AGREEMENT</b>	
<b>Subpart B – FORM OF GENERATION INTERCONNECTION AGREEMENT COMBINED WITH CONSTRUCTION SERVICE AGREEMENT</b>	
<b>Subpart C – FORM OF WHOLESALE MARKET PARTICIPATION AGREEMENT</b>	
<b>Subpart D – FORM OF ENGINEERING AND PROCUREMENT AGREEMENT</b>	
<b>Subpart E – FORM OF UPGRADE CONSTRUCTION SERVICE AGREEMENT</b>	
<b>Subpart F – FORM OF COST RESPONSIBILITY AGREEMENT</b>	
<b>Subpart G – FORM OF NECESSARY STUDIES AGREEMENT</b>	
<b>Subpart H – FORM OF NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT</b>	
<b>Subpart I – FORM OF SURPLUS INTERCONNECTION SERVICE STUDY AGREEMENT</b>	
<b>Subpart J – FORM OF CONSTRUCTION SERVICE AGREEMENT</b>	

**Subpart K – FORM OF UPGRADE APPLICATION AND STUDIES  
AGREEMENT**

**Subpart L – FORM OF AFFECTED SYSTEM CUSTOMER FACILITIES STUDY  
APPLICATION AND AGREEMENT**

**SCHEDULE 1**

**Scheduling, System Control and Dispatch Service**

**SCHEDULE 1A**

**Transmission Owner Scheduling, System Control and Dispatch Service**

**SCHEDULE 2**

**Reactive Supply and Voltage Control from Generation Sources Service**

**SCHEDULE 3**

**Regulation and Frequency Response Service**

**SCHEDULE 4**

**Energy Imbalance Service**

**SCHEDULE 5**

**Operating Reserve – Synchronized Reserve Service**

**SCHEDULE 6**

**Operating Reserve - Supplemental Reserve Service**

**SCHEDULE 6A**

**Black Start Service**

**SCHEDULE 7**

**Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service**

**SCHEDULE 8**

**Non-Firm Point-To-Point Transmission Service**

**SCHEDULE 9**

**PJM Interconnection L.L.C. Administrative Services**

**SCHEDULE 9-1**

**Control Area Administration Service**

**SCHEDULE 9-2**

**Financial Transmission Rights Administration Service**

**SCHEDULE 9-3**

**Market Support Service**

**SCHEDULE 9-4**

**Regulation and Frequency Response Administration Service**

**SCHEDULE 9-5**

**Capacity Resource and Obligation Management Service**

**SCHEDULE 9-6**

**Management Service Cost**

**SCHEDULE 9-FERC**

**FERC Annual Charge Recovery**

**SCHEDULE 9-OPSI**

**OPSI Funding**

**SCHEDULE 9-CAPS**

**CAPS Funding**

**SCHEDULE 9-FINCON**

**Finance Committee Retained Outside Consultant**  
**SCHEDULE 9-MMU**  
**MMU Funding**  
**SCHEDULE 9 – PJM SETTLEMENT**  
**SCHEDULE 10 - [Reserved]**  
**SCHEDULE 10-NERC**  
**North American Electric Reliability Corporation Charge**  
**SCHEDULE 10-RFC**  
**Reliability First Corporation Charge**  
**SCHEDULE 11**  
**[Reserved for Future Use]**  
**SCHEDULE 11A**  
**Additional Secure Control Center Data Communication Links and Formula Rate**  
**SCHEDULE 12**  
**Transmission Enhancement Charges**  
**SCHEDULE 12 APPENDIX**  
**SCHEDULE 12-A**  
**SCHEDULE 13**  
**Expansion Cost Recovery Change (ECRC)**  
**SCHEDULE 14**  
**Transmission Service on the Neptune Line**  
**SCHEDULE 14 - Exhibit A**  
**SCHEDULE 15**  
**Non-Retail Behind The Meter Generation Maximum Generation Emergency Obligations**  
**SCHEDULE 16**  
**Transmission Service on the Linden VFT Facility**  
**SCHEDULE 16 Exhibit A**  
**SCHEDULE 16 – A**  
**Transmission Service for Imports on the Linden VFT Facility**  
**SCHEDULE 17**  
**Transmission Service on the Hudson Line**  
**SCHEDULE 17 - Exhibit A**  
**ATTACHMENT A**  
**Form of Service Agreement For Firm Point-To-Point Transmission Service**  
**ATTACHMENT A-1**  
**Form of Service Agreement For The Resale, Reassignment or Transfer of Point-to-Point Transmission Service**  
**ATTACHMENT B**  
**Form of Service Agreement For Non-Firm Point-To-Point Transmission Service**  
**ATTACHMENT C**  
**Methodology To Assess Available Transfer Capability**  
**ATTACHMENT C-1**  
**Conversion of Service in the Dominion and Duquesne Zones**  
**ATTACHMENT C-2**



**Conversion of Service in the Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc. ("DEOK") Zone**  
**ATTACHMENT C-4**  
**Conversion of Service in the OVEC Zone**  
**ATTACHMENT D**  
**Methodology for Completing a System Impact Study**  
**ATTACHMENT E**  
**Index of Point-To-Point Transmission Service Customers**  
**ATTACHMENT F**  
**Service Agreement For Network Integration Transmission Service**  
**ATTACHMENT F-1**  
**Form of Umbrella Service Agreement for Network Integration Transmission Service Under State Required Retail Access Programs**  
**ATTACHMENT G**  
**Network Operating Agreement**  
**ATTACHMENT H-1**  
**Annual Transmission Rates -- Atlantic City Electric Company for Network Integration Transmission Service**  
**ATTACHMENT H-1A**  
**Atlantic City Electric Company Formula Rate Appendix A**  
**ATTACHMENT H-1B**  
**Atlantic City Electric Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-2**  
**Annual Transmission Rates -- Baltimore Gas and Electric Company for Network Integration Transmission Service**  
**ATTACHMENT H-2A**  
**Baltimore Gas and Electric Company Formula Rate**  
**ATTACHMENT H-2B**  
**Baltimore Gas and Electric Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-3**  
**Annual Transmission Rates -- Delmarva Power & Light Company for Network Integration Transmission Service**  
**ATTACHMENT H-3A**  
**Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points**  
**ATTACHMENT H-3B**  
**Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points**  
**ATTACHMENT H-3C**  
**Delmarva Power & Light Company Under-Frequency Load Shedding Charge**  
**ATTACHMENT H-3D**  
**Delmarva Power & Light Company Formula Rate – Appendix A**  
**ATTACHMENT H-3E**  
**Delmarva Power & Light Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-3F**  
**Old Dominion Electric Cooperative Formula Rate – Appendix A**

**ATTACHMENT H-3G**

**Old Dominion Electric Cooperative Formula Rate Implementation Protocols**

**ATTACHMENT H-4**

**Annual Transmission Rates -- Jersey Central Power & Light Company for Network Integration Transmission Service**

**ATTACHMENT H-4A**

**Other Supporting Facilities - Jersey Central Power & Light Company**

**ATTACHMENT H-4B**

**Jersey Central Power & Light Company – [Reserved]**

**ATTACHMENT H-5**

**Annual Transmission Rates -- Metropolitan Edison Company for Network Integration Transmission Service**

**ATTACHMENT H-5A**

**Other Supporting Facilities -- Metropolitan Edison Company**

**ATTACHMENT H-6**

**Annual Transmission Rates -- Pennsylvania Electric Company for Network Integration Transmission Service**

**ATTACHMENT H-6A**

**Other Supporting Facilities Charges -- Pennsylvania Electric Company**

**ATTACHMENT H-7**

**Annual Transmission Rates -- PECO Energy Company for Network Integration Transmission Service**

**ATTACHMENT H-7A**

**PECO Energy Company Formula Rate Template**

**ATTACHMENT H-7B**

**PECO Energy Company Monthly Deferred Tax Adjustment Charge**

**ATTACHMENT H-7C**

**PECO Energy Company Formula Rate Implementation Protocols**

**ATTACHMENT H-8**

**Annual Transmission Rates – PPL Group for Network Integration Transmission Service**

**ATTACHMENT H-8A**

**Other Supporting Facilities Charges -- PPL Electric Utilities Corporation**

**ATTACHMENT 8C**

**UGI Utilities, Inc. Formula Rate – Appendix A**

**ATTACHMENT 8D**

**UGI Utilities, Inc. Formula Rate Implementation Protocols**

**ATTACHMENT 8E**

**UGI Utilities, Inc. Formula Rate – Appendix A**

**ATTACHMENT H-8G**

**Annual Transmission Rates – PPL Electric Utilities Corp.**

**ATTACHMENT H-8H**

**Formula Rate Implementation Protocols – PPL Electric Utilities Corp.**

**ATTACHMENT H-9**

**Annual Transmission Rates -- Potomac Electric Power Company for Network Integration Transmission Service**

**ATTACHMENT H-9A**

**Potomac Electric Power Company Formula Rate – Appendix A**

**ATTACHMENT H-9B**

**Potomac Electric Power Company Formula Rate Implementation Protocols**

**ATTACHMENT H-9C**

**Annual Transmission Rate – Southern Maryland Electric Cooperative, Inc. for Network Integration Transmission Service**

**ATTACHMENT H-10**

**Annual Transmission Rates -- Public Service Electric and Gas Company for Network Integration Transmission Service**

**ATTACHMENT H-10A**

**Formula Rate -- Public Service Electric and Gas Company**

**ATTACHMENT H-10B**

**Formula Rate Implementation Protocols – Public Service Electric and Gas Company**

**ATTACHMENT H-11**

**Annual Transmission Rates -- Allegheny Power for Network Integration Transmission Service**

**ATTACHMENT 11A**

**Other Supporting Facilities Charges - Allegheny Power**

**ATTACHMENT H-12**

**Annual Transmission Rates -- Rockland Electric Company for Network Integration Transmission Service**

**ATTACHMENT H-13**

**Annual Transmission Rates – Commonwealth Edison Company for Network Integration Transmission Service**

**ATTACHMENT H-13A**

**Commonwealth Edison Company Formula Rate – Appendix A**

**ATTACHMENT H-13B**

**Commonwealth Edison Company Formula Rate Implementation Protocols**

**ATTACHMENT H-14**

**Annual Transmission Rates – AEP East Operating Companies for Network Integration Transmission Service**

**ATTACHMENT H-14A**

**AEP East Operating Companies Formula Rate Implementation Protocols**

**ATTACHMENT H-14B Part 1**

**ATTACHMENT H-14B Part 2**

**ATTACHMENT H-15**

**Annual Transmission Rates -- The Dayton Power and Light Company for Network Integration Transmission Service**

**ATTACHMENT H-16**

**Annual Transmission Rates -- Virginia Electric and Power Company for Network Integration Transmission Service**

**ATTACHMENT H-16A**

**Formula Rate - Virginia Electric and Power Company**

**ATTACHMENT H-16B**

**Formula Rate Implementation Protocols - Virginia Electric and Power Company**

**ATTACHMENT H-16C**

**Virginia Retail Administrative Fee Credit for Virginia Retail Load Serving  
Entities in the Dominion Zone**

**ATTACHMENT H-16D – [Reserved]**

**ATTACHMENT H-16E – [Reserved]**

**ATTACHMENT H-16AA**

**Virginia Electric and Power Company**

**ATTACHMENT H-17**

**Annual Transmission Rates -- Duquesne Light Company for Network Integration  
Transmission Service**

**ATTACHMENT H-17A**

**Duquesne Light Company Formula Rate – Appendix A**

**ATTACHMENT H-17B**

**Duquesne Light Company Formula Rate Implementation Protocols**

**ATTACHMENT H-17C**

**Duquesne Light Company Monthly Deferred Tax Adjustment Charge**

**ATTACHMENT H-18**

**Annual Transmission Rates – Trans-Allegheny Interstate Line Company**

**ATTACHMENT H-18A**

**Trans-Allegheny Interstate Line Company Formula Rate – Appendix A**

**ATTACHMENT H-18B**

**Trans-Allegheny Interstate Line Company Formula Rate Implementation Protocols**

**ATTACHMENT H-19**

**Annual Transmission Rates – Potomac-Appalachian Transmission Highline, L.L.C.**

**ATTACHMENT H-19A**

**Potomac-Appalachian Transmission Highline, L.L.C. Summary**

**ATTACHMENT H-19B**

**Potomac-Appalachian Transmission Highline, L.L.C. Formula Rate Implementation  
Protocols**

**ATTACHMENT H-20**

**Annual Transmission Rates – AEP Transmission Companies (AEPTCo) in the AEP  
Zone**

**ATTACHMENT H-20A**

**AEP Transmission Companies (AEPTCo) in the AEP Zone - Formula Rate  
Implementation Protocols**

**ATTACHMENT H-20A APPENDIX A**

**Transmission Formula Rate Settlement for AEPTCo**

**ATTACHMENT H-20B - Part I**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-20B - Part II**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-21**

**Annual Transmission Rates – American Transmission Systems, Inc. for Network  
Integration Transmission Service**

**ATTACHMENT H-21A - ATSI**

**ATTACHMENT H-21A Appendix A - ATSI**

**ATTACHMENT H-21A Appendix B - ATSI**

**ATTACHMENT H-21A Appendix C - ATSI**

**ATTACHMENT H-21A Appendix C - ATSI [Reserved]**

**ATTACHMENT H-21A Appendix D – ATSI**

**ATTACHMENT H-21A Appendix E - ATSI**

**ATTACHMENT H-21A Appendix F – ATSI [Reserved]**

**ATTACHMENT H-21A Appendix G - ATSI**

**ATTACHMENT H-21A Appendix G – ATSI (Credit Adj)**

**ATTACHMENT H-21B ATSI Protocol**

**ATTACHMENT H-22**

**Annual Transmission Rates – DEOK for Network Integration Transmission Service  
and Point-to-Point Transmission Service**

**ATTACHMENT H-22A**

**Duke Energy Ohio and Duke Energy Kentucky (DEOK) Formula Rate Template**

**ATTACHMENT H-22B**

**DEOK Formula Rate Implementation Protocols**

**ATTACHMENT H-22C**

**Additional provisions re DEOK and Indiana**

**ATTACHMENT H-23**

**EP Rock springs annual transmission Rate**

**ATTACHMENT H-24**

**EKPC Annual Transmission Rates**

**ATTACHMENT H-24A APPENDIX A**

**EKPC Schedule 1A**

**ATTACHMENT H-24A APPENDIX B**

**EKPC RTEP**

**ATTACHMENT H-24A APPENDIX C**

**EKPC True-up**

**ATTACHMENT H-24A APPENDIX D**

**EKPC Depreciation Rates**

**ATTACHMENT H-24-B**

**EKPC Implementation Protocols**

**ATTACHMENT H-25 - [Reserved]**

**ATTACHMENT H-25A - [Reserved]**

**ATTACHMENT H-25B - [Reserved]**

**ATTACHMENT H-26**

**Transource West Virginia, LLC Formula Rate Template**

**ATTACHMENT H-26A**

**Transource West Virginia, LLC Formula Rate Implementation Protocols**

**ATTACHMENT H-27**

**Annual Transmission Rates – Silver Run Electric, LLC**

**ATTACHMENT H-27A**

**Silver Run Electric, LLC Formula Rate Template**

**ATTACHMENT H-27B**

**Silver Run Electric, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-28**  
**Annual Transmission Rates – Mid-Atlantic Interstate Transmission, LLC for**  
**Network Integration Transmission Service**  
**ATTACHMENT H-28A**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Template**  
**ATTACHMENT H-28B**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-29**  
**Annual Transmission Rates – Transource Pennsylvania, LLC**  
**ATTACHMENT H-29A**  
**Transource Pennsylvania, LLC Formula Rate Template**  
**ATTACHMENT H-29B**  
**Transource Pennsylvania, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-30**  
**Annual Transmission Rates – Transource Maryland, LLC**  
**ATTACHMENT H-30A**  
**Transource Maryland, LLC Formula Rate Template**  
**ATTACHMENT H-30B**  
**Transource Maryland, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-31**  
**Annual Transmission Revenue Requirement – Ohio Valley Electric Corporation for**  
**Network Integration Transmission Service**  
**ATTACHMENT H-32**  
**Annual Transmission Revenue Requirements and Rates - AMP Transmission, LLC**  
**ATTACHMENT H-32A**  
**AMP Transmission, LLC - Formula Rate Template**  
**ATTACHMENT H-32B**  
**AMP Transmission, LLC - Formula Rate Implementation Protocols**  
**ATTACHMENT H-32C**  
**Annual Transmission Revenue Requirement and Rates - AMP Transmission, LLC**  
**for Network Integration Transmission Service**  
**ATTACHMENT H-33**  
**Annual Transmission Rates – NextEra Energy Transmission MidAtlantic Indiana,**  
**Inc.**  
**ATTACHMENT H-33A**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate**  
**Implementation Protocols**  
**ATTACHMENT H-33B**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate Template**  
**ATTACHMENT H-A**  
**Annual Transmission Rates -- Non-Zone Network Load for Network Integration**  
**Transmission Service**  
**ATTACHMENT I**  
**Index of Network Integration Transmission Service Customers**  
**ATTACHMENT J**

**PJM Transmission Zones**  
**ATTACHMENT K**  
**Transmission Congestion Charges and Credits**  
**Preface**

**ATTACHMENT K -- APPENDIX**

Preface

**1. MARKET OPERATIONS**

- 1.1 Introduction
- 1.2 Cost-Based Offers
- 1.2A Transmission Losses
- 1.3 [Reserved for Future Use]
- 1.4 Market Buyers
- 1.5 Market Sellers
- 1.5A Economic Load Response Participant
- 1.6 Office of the Interconnection
- 1.6A PJM Settlement
- 1.7 General
- 1.8 Selection, Scheduling and Dispatch Procedure Adjustment Process
- 1.9 Prescheduling
- 1.10 Scheduling
- 1.11 Dispatch
- 1.12 Dynamic Transfers

**2. CALCULATION OF LOCATIONAL MARGINAL PRICES**

- 2.1 Introduction
- 2.2 General
- 2.3 Determination of System Conditions Using the State Estimator
- 2.4 Determination of Energy Offers Used in Calculating
- 2.5 Calculation of Real-time Prices
- 2.6 Calculation of Day-ahead Prices
- 2.6A Interface Prices
- 2.7 Performance Evaluation

**3. ACCOUNTING AND BILLING**

- 3.1 Introduction
- 3.2 Market Buyers
- 3.3 Market Sellers
  - 3.3A Economic Load Response Participants
- 3.4 Transmission Customers
- 3.5 Other Control Areas
- 3.6 Metering Reconciliation
- 3.7 Inadvertent Interchange
- 3.8 Market-to-Market Coordination

**4. [Reserved For Future Use]**

**5. CALCULATION OF CHARGES AND CREDITS FOR TRANSMISSION CONGESTION AND LOSSES**

- 5.1 Transmission Congestion Charge Calculation
- 5.2 Transmission Congestion Credit Calculation
- 5.3 Unscheduled Transmission Service (Loop Flow)

- 5.4 Transmission Loss Charge Calculation
- 5.5 Distribution of Total Transmission Loss Charges
- 5.6 Transmission Constraint Penalty Factors
- 6. **“MUST-RUN” FOR RELIABILITY GENERATION**
  - 6.1 Introduction
  - 6.2 Identification of Facility Outages
  - 6.3 Dispatch for Local Reliability
  - 6.4 Offer Price Caps
  - 6.5 [Reserved]
  - 6.6 Minimum Generator Operating Parameters –  
Parameter-Limited Schedules
- 6A. **[Reserved]**
  - 6A.1 [Reserved]
  - 6A.2 [Reserved]
  - 6A.3 [Reserved]
- 7. **FINANCIAL TRANSMISSION RIGHTS AUCTIONS**
  - 7.1 Auctions of Financial Transmission Rights
  - 7.1A Long-Term Financial Transmission Rights Auctions
  - 7.2 Financial Transmission Rights Characteristics
  - 7.3 Auction Procedures
  - 7.4 Allocation of Auction Revenues
  - 7.5 Simultaneous Feasibility
  - 7.6 New Stage 1 Resources
  - 7.7 Alternate Stage 1 Resources
  - 7.8 Elective Upgrade Auction Revenue Rights
  - 7.9 Residual Auction Revenue Rights
  - 7.10 Financial Settlement
  - 7.11 PJM Settlement as Counterparty
- 8. **EMERGENCY AND PRE-EMERGENCY LOAD RESPONSE PROGRAM**
  - 8.1 Emergency Load Response and Pre-Emergency Load Response Program Options
  - 8.2 Participant Qualifications
  - 8.3 Metering Requirements
  - 8.4 Registration
  - 8.5 Pre-Emergency Operations
  - 8.6 Emergency Operations
  - 8.7 Verification
  - 8.8 Market Settlements
  - 8.9 Reporting and Compliance
  - 8.10 Non-Hourly Metered Customer Pilot
  - 8.11 Emergency Load Response and Pre-Emergency Load Response Participant  
Aggregation

**ATTACHMENT L**

**List of Transmission Owners**

**ATTACHMENT M**

**PJM Market Monitoring Plan**

**ATTACHMENT M – APPENDIX**



**PJM Market Monitor Plan Attachment M Appendix**

- I Confidentiality of Data and Information
- II Development of Inputs for Prospective Mitigation
- III Black Start Service
- IV Deactivation Rates
- V Opportunity Cost Calculation
- VI FTR Forfeiture Rule
- VII Forced Outage Rule
- VIII Data Collection and Verification

**ATTACHMENT M-1 (FirstEnergy)**

**Energy Procedure Manual for Determining Supplier Total Hourly Energy Obligation**

**ATTACHMENT M-2 (First Energy)**

**Energy Procedure Manual for Determining Supplier Peak Load Share  
Procedures for Load Determination**

**ATTACHMENT M-2 (ComEd)**

**Determination of Capacity Peak Load Contributions and Network Service Peak Load  
Contributions**

**ATTACHMENT M-2 (PSE&G)**

**Procedures for Determination of Peak Load Contributions and Hourly Load  
Obligations for Retail Customers**

**ATTACHMENT M-2 (Atlantic City Electric Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load  
Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load  
Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load  
Obligations for Retail Customers**

**ATTACHMENT M-2 (Duke Energy Ohio, Inc.)**

**Procedures for Determination of Peak Load Contributions, Network Service Peak  
Load and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-3**

**Additional Procedures for Planning of Supplemental Projects**

**ATTACHMENT N**

**Form of Generation Interconnection Feasibility Study Agreement**

**ATTACHMENT N-1**

**Form of System Impact Study Agreement**

**ATTACHMENT N-2**

**Form of Facilities Study Agreement**

**ATTACHMENT N-3**

**Form of Optional Interconnection Study Agreement**

**ATTACHMENT O**

**Form of Interconnection Service Agreement**

- 1.0 Parties
- 2.0 Authority

- 3.0 Customer Facility Specifications
- 4.0 Effective Date
- 5.0 Security
- 6.0 Project Specific Milestones
- 7.0 Provision of Interconnection Service
- 8.0 Assumption of Tariff Obligations
- 9.0 Facilities Study
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 11.0 Interconnection Specifications
- 12.0 Power Factor Requirement
- 12.0A RTU
- 13.0 Charges
- 14.0 Third Party Benefits
- 15.0 Waiver
- 16.0 Amendment
- 17.0 Construction With Other Parts Of The Tariff
- 18.0 Notices
- 19.0 Incorporation Of Other Documents
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 21.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 22.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 23.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

**Specifications for Interconnection Service Agreement**

- 1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the  
Customer Facility) to be Interconnected with the Transmission System in the PJM  
Region
- 2.0 Rights
- 3.0 Construction Responsibility and Ownership of Interconnection Facilities
- 4.0 Subject to Modification Pursuant to the Negotiated Contract Option
- 4.1 Attachment Facilities Charge
- 4.2 Network Upgrades Charge
- 4.3 Local Upgrades Charge
- 4.4 Other Charges
- 4.5 Cost breakdown
- 4.6 Security Amount Breakdown

**ATTACHMENT O APPENDIX 1: Definitions**

**ATTACHMENT O APPENDIX 2: Standard Terms and Conditions for Interconnections**

- 1 Commencement, Term of and Conditions Precedent to  
Interconnection Service**
  - 1.1 Commencement Date
  - 1.2 Conditions Precedent
  - 1.3 Term
  - 1.4 Initial Operation

- 1.4A Other Interconnection Options
- 1.5 Survival
- 2 Interconnection Service**
  - 2.1 Scope of Service
  - 2.2 Non-Standard Terms
  - 2.3 No Transmission Services
  - 2.4 Use of Distribution Facilities
  - 2.5 Election by Behind The Meter Generation
- 3 Modification Of Facilities**
  - 3.1 General
  - 3.2 Interconnection Request
  - 3.3 Standards
  - 3.4 Modification Costs
- 4 Operations**
  - 4.1 General
  - 4.2 [Reserved]
  - 4.3 Interconnection Customer Obligations
  - 4.4 Transmission Interconnection Customer Obligations
  - 4.5 Permits and Rights-of-Way
  - 4.6 No Ancillary Services
  - 4.7 Reactive Power
  - 4.8 Under- and Over-Frequency and Under- and Over- Voltage Conditions
  - 4.9 System Protection and Power Quality
  - 4.10 Access Rights
  - 4.11 Switching and Tagging Rules
  - 4.12 Communications and Data Protocol
  - 4.13 Nuclear Generating Facilities
- 5 Maintenance**
  - 5.1 General
  - 5.2 [Reserved]
  - 5.3 Outage Authority and Coordination
  - 5.4 Inspections and Testing
  - 5.5 Right to Observe Testing
  - 5.6 Secondary Systems
  - 5.7 Access Rights
  - 5.8 Observation of Deficiencies
- 6 Emergency Operations**
  - 6.1 Obligations
  - 6.2 Notice
  - 6.3 Immediate Action
  - 6.4 Record-Keeping Obligations
- 7 Safety**
  - 7.1 General
  - 7.2 Environmental Releases
- 8 Metering**
  - 8.1 General

- 8.2 Standards
- 8.3 Testing of Metering Equipment
- 8.4 Metering Data
- 8.5 Communications
- 9 Force Majeure**
  - 9.1 Notice
  - 9.2 Duration of Force Majeure
  - 9.3 Obligation to Make Payments
  - 9.4 Definition of Force Majeure
- 10 Charges**
  - 10.1 Specified Charges
  - 10.2 FERC Filings
- 11 Security, Billing And Payments**
  - 11.1 Recurring Charges Pursuant to Section 10
  - 11.2 Costs for Transmission Owner Interconnection Facilities
  - 11.3 No Waiver
  - 11.4 Interest
- 12 Assignment**
  - 12.1 Assignment with Prior Consent
  - 12.2 Assignment Without Prior Consent
  - 12.3 Successors and Assigns
- 13 Insurance**
  - 13.1 Required Coverages for Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 13.1A Required Coverages for Generation Resources Of 20 Megawatts Or Less
  - 13.2 Additional Insureds
  - 13.3 Other Required Terms
  - 13.3A No Limitation of Liability
  - 13.4 Self-Insurance
  - 13.5 Notices; Certificates of Insurance
  - 13.6 Subcontractor Insurance
  - 13.7 Reporting Incidents
- 14 Indemnity**
  - 14.1 Indemnity
  - 14.2 Indemnity Procedures
  - 14.3 Indemnified Person
  - 14.4 Amount Owing
  - 14.5 Limitation on Damages
  - 14.6 Limitation of Liability in Event of Breach
  - 14.7 Limited Liability in Emergency Conditions
- 15 Breach, Cure And Default**
  - 15.1 Breach
  - 15.2 Continued Operation
  - 15.3 Notice of Breach
  - 15.4 Cure and Default

	15.5	Right to Compel Performance
	15.6	Remedies Cumulative
<b>16</b>		<b>Termination</b>
	16.1	Termination
	16.2	Disposition of Facilities Upon Termination
	16.3	FERC Approval
	16.4	Survival of Rights
<b>17</b>		<b>Confidentiality</b>
	17.1	Term
	17.2	Scope
	17.3	Release of Confidential Information
	17.4	Rights
	17.5	No Warranties
	17.6	Standard of Care
	17.7	Order of Disclosure
	17.8	Termination of Interconnection Service Agreement
	17.9	Remedies
	17.10	Disclosure to FERC or its Staff
	17.11	No Interconnection Party Shall Disclose Confidential Information
	17.12	Information that is Public Domain
	17.13	Return or Destruction of Confidential Information
<b>18</b>		<b>Subcontractors</b>
	18.1	Use of Subcontractors
	18.2	Responsibility of Principal
	18.3	Indemnification by Subcontractors
	18.4	Subcontractors Not Beneficiaries
<b>19</b>		<b>Information Access And Audit Rights</b>
	19.1	Information Access
	19.2	Reporting of Non-Force Majeure Events
	19.3	Audit Rights
<b>20</b>		<b>Disputes</b>
	20.1	Submission
	20.2	Rights Under The Federal Power Act
	20.3	Equitable Remedies
<b>21</b>		<b>Notices</b>
	21.1	General
	21.2	Emergency Notices
	21.3	Operational Contacts
<b>22</b>		<b>Miscellaneous</b>
	22.1	Regulatory Filing
	22.2	Waiver
	22.3	Amendments and Rights Under the Federal Power Act
	22.4	Binding Effect
	22.5	Regulatory Requirements
<b>23</b>		<b>Representations And Warranties</b>
	23.1	General

- 24 Tax Liability**
  - 24.1 Safe Harbor Provisions
  - 24.2 Tax Indemnity
  - 24.3 Taxes Other Than Income Taxes
  - 24.4 Income Tax Gross-Up
  - 24.5 Tax Status

**ATTACHMENT O - SCHEDULE A**

**Customer Facility Location/Site Plan**

**ATTACHMENT O - SCHEDULE B**

**Single-Line Diagram**

**ATTACHMENT O - SCHEDULE C**

**List of Metering Equipment**

**ATTACHMENT O - SCHEDULE D**

**Applicable Technical Requirements and Standards**

**ATTACHMENT O - SCHEDULE E**

**Schedule of Charges**

**ATTACHMENT O - SCHEDULE F**

**Schedule of Non-Standard Terms & Conditions**

**ATTACHMENT O - SCHEDULE G**

**Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status**

**ATTACHMENT O - SCHEDULE H**

**Interconnection Requirements for a Wind Generation Facility**

**ATTACHMENT O – SCHEDULE I**

**Interconnection Specifications for an Energy Storage Resource**

**ATTACHMENT O – SCHEDULE J**

**Schedule of Terms and Conditions for Surplus Interconnection Service**

**ATTACHMENT O – SCHEDULE K**

**Requirements for Interconnection Service Below Full Electrical Generating Capability**

**ATTACHMENT O-1**

**Form of Interim Interconnection Service Agreement**

**ATTACHMENT O-2**

**Form of Network Upgrade Funding Agreement**

**ATTACHMENT P**

**Form of Interconnection Construction Service Agreement**

- 1.0 Parties
- 2.0 Authority
- 3.0 Customer Facility
- 4.0 Effective Date and Term
  - 4.1 Effective Date
  - 4.2 Term
  - 4.3 Survival
- 5.0 Construction Responsibility
- 6.0 [Reserved.]
- 7.0 Scope of Work

- 8.0 Schedule of Work
- 9.0 [Reserved.]
- 10.0 Notices
- 11.0 Waiver
- 12.0 Amendment
- 13.0 Incorporation Of Other Documents
- 14.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 15.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 16.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 17.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

#### **ATTACHMENT P - APPENDIX 1 – DEFINITIONS**

#### **ATTACHMENT P - APPENDIX 2 – STANDARD CONSTRUCTION TERMS AND CONDITIONS**

##### **Preamble**

##### **1 Facilitation by Transmission Provider**

##### **2 Construction Obligations**

- 2.1 Interconnection Customer Obligations
- 2.2 Transmission Owner Interconnection Facilities and Merchant  
Network Upgrades
- 2.2A Scope of Applicable Technical Requirements and Standards
- 2.3 Construction By Interconnection Customer
- 2.4 Tax Liability
- 2.5 Safety
- 2.6 Construction-Related Access Rights
- 2.7 Coordination Among Constructing Parties

##### **3 Schedule of Work**

- 3.1 Construction by Interconnection Customer
- 3.2 Construction by Interconnected Transmission Owner
- 3.2.1 Standard Option
- 3.2.2 Negotiated Contract Option
- 3.2.3 Option to Build
- 3.3 Revisions to Schedule of Work
- 3.4 Suspension
  - 3.4.1 Costs
  - 3.4.2 Duration of Suspension
- 3.5 Right to Complete Transmission Owner Interconnection  
Facilities
- 3.6 Suspension of Work Upon Default
- 3.7 Construction Reports
- 3.8 Inspection and Testing of Completed Facilities
- 3.9 Energization of Completed Facilities
- 3.10 Interconnected Transmission Owner's Acceptance of  
Facilities Constructed by Interconnection Customer

- 4 Transmission Outages**
  - 4.1 Outages; Coordination
- 5 Land Rights; Transfer of Title**
  - 5.1 Grant of Easements and Other Land Rights
  - 5.2 Construction of Facilities on Interconnection Customer Property
  - 5.3 Third Parties
  - 5.4 Documentation
  - 5.5 Transfer of Title to Certain Facilities Constructed By Interconnection Customer
  - 5.6 Liens
- 6 Warranties**
  - 6.1 Interconnection Customer Warranty
  - 6.2 Manufacturer Warranties
- 7 [Reserved.]**
- 8 [Reserved.]**
- 9 Security, Billing And Payments**
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10 Assignment**
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11 Insurance**
  - 11.1 Required Coverages For Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 11.1A Required Coverages For Generation Resources of 20 Megawatts Or Less
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.3A No Limitation of Liability
  - 11.4 Self-Insurance
  - 11.5 Notices; Certificates of Insurance
  - 11.6 Subcontractor Insurance
  - 11.7 Reporting Incidents
- 12 Indemnity**
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing
  - 12.5 Limitation on Damages
  - 12.6 Limitation of Liability in Event of Breach
  - 12.7 Limited Liability in Emergency Conditions



- 13 Breach, Cure And Default**
  - 13.1 Breach
  - 13.2 Notice of Breach
  - 13.3 Cure and Default
    - 13.3.1 Cure of Breach
  - 13.4 Right to Compel Performance
  - 13.5 Remedies Cumulative
- 14 Termination**
  - 14.1 Termination
  - 14.2 [Reserved.]
  - 14.3 Cancellation By Interconnection Customer
  - 14.4 Survival of Rights
- 15 Force Majeure**
  - 15.1 Notice
  - 15.2 Duration of Force Majeure
  - 15.3 Obligation to Make Payments
  - 15.4 Definition of Force Majeure
- 16 Subcontractors**
  - 16.1 Use of Subcontractors
  - 16.2 Responsibility of Principal
  - 16.3 Indemnification by Subcontractors
  - 16.4 Subcontractors Not Beneficiaries
- 17 Confidentiality**
  - 17.1 Term
  - 17.2 Scope
  - 17.3 Release of Confidential Information
  - 17.4 Rights
  - 17.5 No Warranties
  - 17.6 Standard of Care
  - 17.7 Order of Disclosure
  - 17.8 Termination of Construction Service Agreement
  - 17.9 Remedies
  - 17.10 Disclosure to FERC or its Staff
  - 17.11 No Construction Party Shall Disclose Confidential Information of Another Construction Party
  - 17.12 Information that is Public Domain
  - 17.13 Return or Destruction of Confidential Information
- 18 Information Access And Audit Rights**
  - 18.1 Information Access
  - 18.2 Reporting of Non-Force Majeure Events
  - 18.3 Audit Rights
- 19 Disputes**
  - 19.1 Submission
  - 19.2 Rights Under The Federal Power Act
  - 19.3 Equitable Remedies
- 20 Notices**
  - 20.1 General

	20.2	Operational Contacts
<b>21</b>		<b>Miscellaneous</b>
	21.1	Regulatory Filing
	21.2	Waiver
	21.3	Amendments and Rights under the Federal Power Act
	21.4	Binding Effect
	21.5	Regulatory Requirements
<b>22</b>		<b>Representations and Warranties</b>
	22.1	General
<b>ATTACHMENT P - SCHEDULE A</b>		
		<b>Site Plan</b>
<b>ATTACHMENT P - SCHEDULE B</b>		
		<b>Single-Line Diagram of Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE C</b>		
		<b>Transmission Owner Interconnection Facilities to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE D</b>		
		<b>Transmission Owner Interconnection Facilities to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE E</b>		
		<b>Merchant Network Upgrades to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE F</b>		
		<b>Merchant Network Upgrades to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE G</b>		
		<b>Customer Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE H</b>		
		<b>Negotiated Contract Option Terms</b>
<b>ATTACHMENT P - SCHEDULE I</b>		
		<b>Scope of Work</b>
<b>ATTACHMENT P - SCHEDULE J</b>		
		<b>Schedule of Work</b>
<b>ATTACHMENT P - SCHEDULE K</b>		
		<b>Applicable Technical Requirements and Standards</b>
<b>ATTACHMENT P - SCHEDULE L</b>		
		<b>Interconnection Customer's Agreement to Confirm with IRS Safe Harbor Provisions For Non-Taxable Status</b>
<b>ATTACHMENT P - SCHEDULE M</b>		
		<b>Schedule of Non-Standard Terms and Conditions</b>
<b>ATTACHMENT P - SCHEDULE N</b>		
		<b>Interconnection Requirements for a Wind Generation Facility</b>
<b>ATTACHMENT Q</b>		
		<b>PJM Credit Policy</b>
<b>ATTACHMENT R</b>		

**Lost Revenues Of PJM Transmission Owners And Distribution of Revenues  
Remitted By MISO, SECA Rates to Collect PJM Transmission Owner Lost  
Revenues Under Attachment X, And Revenues From PJM Existing Transactions**

**ATTACHMENT S**

**Form of Transmission Interconnection Feasibility Study Agreement**

**ATTACHMENT T**

**Identification of Merchant Transmission Facilities**

**ATTACHMENT U**

**Independent Transmission Companies**

**ATTACHMENT V**

**Form of ITC Agreement**

**ATTACHMENT W**

**COMMONWEALTH EDISON COMPANY**

**ATTACHMENT X**

**Seams Elimination Cost Assignment Charges**

**NOTICE OF ADOPTION OF NERC TRANSMISSION LOADING RELIEF  
PROCEDURES**

**NOTICE OF ADOPTION OF LOCAL TRANSMISSION LOADING RELIEF  
PROCEDURES**

**SCHEDULE OF PARTIES ADOPTING LOCAL TRANSMISSION LOADING  
RELIEF PROCEDURES**

**ATTACHMENT Y**

**Forms of Screens Process Interconnection Request (For Generation Facilities of 2  
MW or less)**

**ATTACHMENT Z**

**Certification Codes and Standards**

**ATTACHMENT AA**

**Certification of Small Generator Equipment Packages**

**ATTACHMENT BB**

**Form of Certified Inverter-Based Generating Facility No Larger Than 10 kW  
Interconnection Service Agreement**

**ATTACHMENT CC**

**Form of Certificate of Completion  
(Small Generating Inverter Facility No Larger Than 10 kW)**

**ATTACHMENT DD**

**Reliability Pricing Model**

**ATTACHMENT EE**

**Form of Upgrade Request**

**ATTACHMENT FF**

**[Reserved]**

**ATTACHMENT GG**

**Form of Upgrade Construction Service Agreement**

**Article 1 – Definitions And Other Documents**

**1.0 Defined Terms**

**1.1 Incorporation of Other Documents**

Article 2 – Responsibility for Direct Assignment Facilities or Customer-Funded Upgrades

- 2.0 New Service Customer Financial Responsibilities
- 2.1 Obligation to Provide Security
- 2.2 Failure to Provide Security
- 2.3 Costs
- 2.4 Transmission Owner Responsibilities

Article 3 – Rights To Transmission Service

- 3.0 No Transmission Service

Article 4 – Early Termination

- 4.0 Termination by New Service Customer

Article 5 – Rights

- 5.0 Rights
- 5.1 Amount of Rights Granted
- 5.2 Availability of Rights Granted
- 5.3 Credits

Article 6 – Miscellaneous

- 6.0 Notices
- 6.1 Waiver
- 6.2 Amendment
- 6.3 No Partnership
- 6.4 Counterparts

**ATTACHMENT GG - APPENDIX I –**

**SCOPE AND SCHEDULE OF WORK FOR DIRECT ASSIGNMENT  
FACILITIES OR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY  
TRANSMISSION OWNER**

**ATTACHMENT GG - APPENDIX II - DEFINITIONS**

1 Definitions

- 1.1 Affiliate
- 1.2 Applicable Laws and Regulations
- 1.3 Applicable Regional Reliability Council
- 1.4 Applicable Standards
- 1.5 Breach
- 1.6 Breaching Party
- 1.7 Cancellation Costs
- 1.8 Commission
- 1.9 Confidential Information
- 1.10 Constructing Entity
- 1.11 Control Area
- 1.12 Costs
- 1.13 Default
- 1.14 Delivering Party
- 1.15 Emergency Condition
- 1.16 Environmental Laws
- 1.17 Facilities Study
- 1.18 Federal Power Act

- 1.19 FERC
- 1.20 Firm Point-To-Point
- 1.21 Force Majeure
- 1.22 Good Utility Practice
- 1.23 Governmental Authority
- 1.24 Hazardous Substances
- 1.25 Incidental Expenses
- 1.26 Local Upgrades
- 1.27 Long-Term Firm Point-To-Point Transmission Service
- 1.28 MAAC
- 1.29 MAAC Control Zone
- 1.30 NERC
- 1.31 Network Upgrades
- 1.32 Office of the Interconnection
- 1.33 Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement
- 1.34 Part I
- 1.35 Part II
- 1.36 Part III
- 1.37 Part IV
- 1.38 Part VI
- 1.39 PJM Interchange Energy Market
- 1.40 PJM Manuals
- 1.41 PJM Region
- 1.42 PJM West Region
- 1.43 Point(s) of Delivery
- 1.44 Point(s) of Receipt
- 1.45 Project Financing
- 1.46 Project Finance Entity
- 1.47 Reasonable Efforts
- 1.48 Receiving Party
- 1.49 Regional Transmission Expansion Plan
- 1.50 Schedule and Scope of Work
- 1.51 Security
- 1.52 Service Agreement
- 1.53 State
- 1.54 Transmission System
- 1.55 VACAR

#### **ATTACHMENT GG - APPENDIX III – GENERAL TERMS AND CONDITIONS**

- 1.0 Effective Date and Term
  - 1.1 Effective Date
  - 1.2 Term
  - 1.3 Survival
- 2.0 Facilitation by Transmission Provider
- 3.0 Construction Obligations
  - 3.1 Direct Assignment Facilities or Customer-Funded Upgrades

- 3.2 Scope of Applicable Technical Requirements and Standards
- 4.0 Tax Liability
  - 4.1 New Service Customer Payments Taxable
  - 4.2 Income Tax Gross-Up
  - 4.3 Private Letter Ruling
  - 4.4 Refund
  - 4.5 Contests
  - 4.6 Taxes Other Than Income Taxes
  - 4.7 Tax Status
- 5.0 Safety
  - 5.1 General
  - 5.2 Environmental Releases
- 6.0 Schedule Of Work
  - 6.1 Standard Option
  - 6.2 Option to Build
  - 6.3 Revisions to Schedule and Scope of Work
  - 6.4 Suspension
- 7.0 Suspension of Work Upon Default
  - 7.1 Notification and Correction of Defects
- 8.0 Transmission Outages
  - 8.1 Outages; Coordination
- 9.0 Security, Billing and Payments
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10.0 Assignment
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11.0 Insurance
  - 11.1 Required Coverages
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.4 No Limitation of Liability
  - 11.5 Self-Insurance
  - 11.6 Notices: Certificates of Insurance
  - 11.7 Subcontractor Insurance
  - 11.8 Reporting Incidents
- 12.0 Indemnity
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing

- 12.5 Limitation on Damages
- 12.6 Limitation of Liability in Event of Breach
- 12.7 Limited Liability in Emergency Conditions
- 13.0 Breach, Cure And Default
  - 13.1 Breach
  - 13.2 Notice of Breach
  - 13.3 Cure and Default
  - 13.4 Right to Compel Performance
  - 13.5 Remedies Cumulative
- 14.0 Termination
  - 14.1 Termination
  - 14.2 Cancellation By New Service Customer
  - 14.3 Survival of Rights
  - 14.4 Filing at FERC
- 15.0 Force Majeure
  - 15.1 Notice
  - 15.2 Duration of Force Majeure
  - 15.3 Obligation to Make Payments
- 16.0 Confidentiality
  - 16.1 Term
  - 16.2 Scope
  - 16.3 Release of Confidential Information
  - 16.4 Rights
  - 16.5 No Warranties
  - 16.6 Standard of Care
  - 16.7 Order of Disclosure
  - 16.8 Termination of Upgrade Construction Service Agreement
  - 16.9 Remedies
  - 16.10 Disclosure to FERC or its Staff
  - 16.11 No Party Shall Disclose Confidential Information of Party 16.12  
Information that is Public Domain
  - 16.13 Return or Destruction of Confidential Information
- 17.0 Information Access And Audit Rights
  - 17.1 Information Access
  - 17.2 Reporting of Non-Force Majeure Events
  - 17.3 Audit Rights
  - 17.4 Waiver
  - 17.5 Amendments and Rights under the Federal Power Act
  - 17.6 Regulatory Requirements
- 18.0 Representation and Warranties
  - 18.1 General
- 19.0 Inspection and Testing of Completed Facilities
  - 19.1 Coordination
  - 19.2 Inspection and Testing
  - 19.3 Review of Inspection and Testing by Transmission Owner
  - 19.4 Notification and Correction of Defects

- 19.5 Notification of Results
- 20.0 Energization of Completed Facilities
- 21.0 Transmission Owner's Acceptance of Facilities Constructed  
by New Service Customer
- 22.0 Transfer of Title to Certain Facilities Constructed By New Service Customer
- 23.0 Liens

**ATTACHMENT HH – RATES, TERMS, AND CONDITIONS OF SERVICE FOR  
PJMSETTLEMENT, INC.**

**ATTACHMENT II – MTEP PROJECT COST RECOVERY FOR ATSI ZONE**

**ATTACHMENT JJ – MTEP PROJECT COST RECOVERY FOR DEOK ZONE**

**ATTACHMENT KK - FORM OF DESIGNATED ENTITY AGREEMENT**

**ATTACHMENT LL - FORM OF INTERCONNECTION COORDINATION  
AGREEMENT**

**ATTACHMENT MM – FORM OF PSEUDO-TIE AGREEMENT – WITH NATIVE BA  
AS PARTY**

**ATTACHMENT MM-1 – FORM OF SYSTEM MODIFICATION COST  
REIMBURSEMENT AGREEMENT – PSEUDO-TIE INTO PJM**

**ATTACHMENT NN – FORM OF PSEUDO-TIE AGREEMENT WITHOUT NATIVE BA  
AS PARTY**

**ATTACHMENT OO – FORM OF DYNAMIC SCHEDULE AGREEMENT INTO THE  
PJM REGION**

**ATTACHMENT PP – FORM OF FIRM TRANSMISSION FEASIBILITY STUDY  
AGREEMENT**



Tariff, Part VIII  
NEW RULES  
GENERATION INTERCONNECTION PROCEDURE

Tariff, Part VIII, Subpart A  
INTRODUCTION

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions**

For purposes of these Generation Interconnection Procedures and any agreement set forth in Tariff, Part IX, in the event of a conflict between the definitions set forth herein and the definitions set forth in Tariff, Part I, the definitions set forth in these Generation Interconnection Procedures shall control.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions A**

**Abnormal Condition:**

“Abnormal Condition” shall mean any condition on the Interconnection Facilities which, determined in accordance with Good Utility Practice, is: (i) outside normal operating parameters such that facilities are operating outside their normal ratings or that reasonable operating limits have been exceeded; and (ii) could reasonably be expected to materially and adversely affect the safe and reliable operation of the Interconnection Facilities; but which, in any case, could reasonably be expected to result in an Emergency Condition. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not, standing alone, constitute an Abnormal Condition.

**Affected System:**

“Affected System” shall mean an electric system other than the Transmission Provider’s Transmission System that may be affected by a proposed interconnection or on which a proposed interconnection or addition of facilities or upgrades may require modifications or upgrades to the Transmission System.

**Affected System Customer**

“Affected System Customer” shall mean the developer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider’s Transmission System,

**Affected System Facility**

“Affected System Facility” shall mean a new, expanded or upgraded generation or transmission facility outside of Transmission Provider’s Transmission System, the effect of which requires Network Upgrades to Transmission Provider’s Transmission System.

**Affected System Operator**

“Affected System Operator” shall mean an entity that operates an Affected System or, if the Affected System is under the operational control of an independent system operator or a regional transmission organization, such independent entity.

**Affected System Study Agreement**

“Affected System Study Agreement” shall mean the agreement set forth in Tariff, Part IX, Subpart N.

**Affiliate:**

“Affiliate” shall mean any two or more entities, one of which Controls the other or that are under common Control. “Control,” as that term is used in this definition, shall mean the possession, directly or indirectly, of the power to direct the management or policies of an entity. Ownership of publicly-traded equity securities of another entity shall not result in Control or affiliation for purposes of the Tariff or Operating Agreement if the securities are held as an investment, the holder owns (in its name or via intermediaries) less than 10 percent of the outstanding securities of the entity, the holder does not have representation on the entity’s board of directors (or equivalent managing entity) or vice versa, and the holder does not in fact exercise influence over day-to-day management decisions. Unless the contrary is demonstrated to the satisfaction of the Members Committee, Control shall be presumed to arise from the ownership of or the power to vote, directly or indirectly, 10 percent or more of the voting securities of such entity.

#### **Ancillary Services:**

“Ancillary Services” shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider’s Transmission System in accordance with Good Utility Practice.

#### **Applicable Laws and Regulations:**

“Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the relevant parties, their respective facilities, and/or the respective services they provide.

#### **Applicable Regional Entity:**

“Applicable Regional Entity” shall mean the Regional Entity for the region in which a Network Customer, Transmission Customer, Project Developer, Eligible Customer, or Transmission Owner operates.

#### **Applicable Standards:**

“Applicable Standards” shall mean the requirements and guidelines of NERC, the Applicable Regional Entity, the Control Area in which the Generating Facility or Merchant Transmission Facility is electrically located and the Transmission Owner FERC Form No. 715 – Annual Transmission Planning and Evaluation Report for each Applicable Regional Entity; the PJM Manuals; and Applicable Technical Requirements and Standards.

#### **Applicable Technical Requirements and Standards:**

“Applicable Technical Requirements and Standards” shall mean those certain technical requirements and standards applicable to interconnections of generation and/or transmission facilities with the facilities of an Transmission Owner or, as the case may be and to the extent applicable, of an Electric Distributor, as published by Transmission Provider in a PJM Manual.

All Applicable Technical Requirements and Standards shall be publicly available through postings on Transmission Provider's internet website.

**Application and Studies Agreement:**

"Application and Studies Agreement" shall mean the application that must be submitted by a Project Developer or Eligible Customer that seeks to initiate a New Service Request, a form of which is set forth in Tariff, Part VIII, Subpart A. An Application and Studies Agreement must be submitted electronically through PJM's web site in accordance with PJM's Manuals.

**Application Deadline:**

"Application Deadline" shall mean the Cycle deadline for submitting a Completed New Service Request, as set forth in Tariff, Part VIII, Subpart B, section 403(A). If Project Developer's or Eligible Customer's Completed New Service Request is received by Transmission Provider after a particular Cycle deadline, such Completed New Service Request shall automatically be considered as part of the immediate subsequent Cycle.

**Application Phase:**

"Application Phase" shall mean the Cycle period encompassing both the submission and review of New Service Requests as set forth in Tariff, Part VIII, Subpart B, subsections 403(A) and (B).

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions B**

**Behind The Meter Generation:**

“Behind The Meter Generation” shall refer to a generation unit that delivers energy to load without using the Transmission System or any distribution facilities (unless the entity that owns or leases the distribution facilities has consented to such use of the distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection); provided, however, that Behind The Meter Generation does not include (i) at any time, any portion of such generating unit’s capacity that is designated as a Generation Capacity Resource; or (ii) in an hour, any portion of the output of such generating unit that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy Market.

**Breach:**

“Breach” shall mean the failure of a party to perform or observe any material term or condition of the Tariff, Part VIII, or any agreement entered into thereunder as described in the relevant provisions of such agreement.

**Breaching Party:**

“Breaching Party” shall mean a party that is in Breach of the Tariff, Part VIII and/or an agreement entered into thereunder.

**Business Day:**

“Business Day” shall mean a day ending at 5 pm Eastern prevailing time in which the Federal Reserve System is open for business and is not a scheduled PJM holiday.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions C**

**Cancellation Costs:**

“Cancellation Costs” shall mean costs and liabilities incurred in connection with: (a) cancellation of supplier and contractor written orders and agreements entered into to design, construct and install Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, and/or (b) completion of some or all of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, or specific unfinished portions and/or removal of any or all of such facilities which have been installed, to the extent required for the Transmission Provider and/or Transmission Owner(s) to perform their respective obligations under the Tariff, Part VIII. Cancellation costs may include costs for Customer-Funded Upgrades assigned to Project Developer or Eligible Customer, in accordance with the Tariff and as reflected in this GIA, that remain the responsibility of Project Developer or Eligible Customer under the Tariff, even if such New Service Request is terminated or withdrawn.

**Capacity:**

“Capacity” shall mean the installed capacity requirement of the Reliability Assurance Agreement or similar such requirements as may be established.

**Capacity Interconnection Rights:**

“Capacity Interconnection Rights” shall mean the rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection.

**Capacity Resource:**

“Capacity Resource” shall have the meaning provided in the Reliability Assurance Agreement.

**Commencement Date:**

“Commencement Date” shall mean the date on which Interconnection Service commences in accordance with a Generation Interconnection Agreement.

**Common Use Upgrade:**

“Common Use Upgrade” or “CUU” shall mean a Network Upgrade that is needed for the interconnection of Generating Facilities or Merchant Transmission Facilities of more than one Project Developer or Eligible Customer and which is the shared responsibility of each Project Developer or Eligible Customer.

**Completed Application:**



“Completed Application” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

**Completed New Service Request:**

“Completed New Service Request” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit(s). A Completed New Service Request, if accepted upon review, shall become a valid New Service Request.

**Confidential Information:**

“Confidential Information” shall mean any confidential, proprietary, or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy, or compilation relating to the present or planned business of a Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party, which is designated as confidential by the party supplying the information, whether conveyed verbally, electronically, in writing, through inspection, or otherwise, and shall include, without limitation, all information relating to the producing party’s technology, research and development, business affairs and pricing, and any information supplied by any Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party to another such party prior to the execution of an Generation Interconnection Agreement or a Construction Service Agreement.

**Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:**

“Consolidated Transmission Owners Agreement,” “PJM Transmission Owners Agreement” or “Transmission Owners Agreement” shall mean the certain Consolidated Transmission Owners Agreement dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

**Constructing Entity:**

“Constructing Entity” shall mean either the Transmission Owner, Project Developer, Eligible Customer, or Affected System Customer, depending on which entity has the construction responsibility pursuant to the Tariff, Part VIII and the applicable GIA or Construction Service Agreement; this term shall also be used to refer to a Project Developer or Eligible Customer with respect to the construction of the Interconnection Facilities.

**Construction Party:**

“Construction Party” shall mean a party to a Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or a party to a GIA that requires activities pursuant to a GIA.

**Construction Service Agreement:**

“Construction Service Agreement” shall mean either an Interconnection Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

**Contingent Facilities:**

“Contingent Facilities” shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Control Area:**

“Control Area” shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common automatic generation control scheme is applied in order to:

(1) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);

(2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;

(3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and

(4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Controllable A.C. Merchant Transmission Facilities:**

“Controllable A.C. Merchant Transmission Facilities” shall mean transmission facilities that (1) employ technology which Transmission Provider reviews and verifies will permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were direct current transmission facilities, and (2) that are interconnected with the Transmission System pursuant to the Tariff, Part VIII.

**Cost Responsibility Agreement:**

“Cost Responsibility Agreement” shall mean a form of agreement between Transmission Provider and a Project Developer with an existing generating facility, intended to provide the terms and conditions for the Transmission Provider to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner. A form of the Cost Responsibility Agreement is set forth in Tariff, Part IX, Subpart F.

### **Costs:**

As used in the Tariff, Part VIII and related agreements and attachments, “Costs” shall mean costs and expenses, as estimated or calculated, as applicable, including, but not limited to, capital expenditures, if applicable, and overhead, return, and the costs of financing and taxes and any Incidental Expenses.

### **Customer-Funded Upgrade:**

“Customer-Funded Upgrade” shall mean any Network Upgrade, Distribution Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on a Project Developer or Eligible Customer pursuant to Tariff, Part VIII, Subpart C, section 404(A)(5), or (ii) is voluntarily undertaken by an Upgrade Customer in fulfillment of an Upgrade Request. No Network Upgrade, Distribution Upgrade or Merchant Network Upgrade or other transmission expansion or enhancement shall be a Customer-Funded Upgrade if and to the extent that the costs thereof are included in the rate base of a public utility on which a regulated return is earned.

### **Cycle:**

“Cycle” shall mean that period of time between the start of an Application phase and conclusion of the corresponding Final Agreement Negotiation Phase. The Cycle consists of the Application Phase, Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions D**

**Decision Point I:**

“Decision Point I” shall mean the time period that commences on the first Business Day immediately following Phase I of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point II:**

“Decision Point II” shall mean the time period that commences on the first Business Day immediately following Phase II of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point III:**

“Decision Point III” shall mean the time period that commences on the first Business Day immediately following Phase III of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Default:**

As used in the Generation Interconnection Agreement, Construction Service Agreement, and Network Upgrade Cost Responsibility Agreement, “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with the applicable provisions of a Generation Interconnection Agreement, Construction Service Agreement, or Network Upgrade Cost Responsibility Agreement.

**Distribution System:**

“Distribution System” shall mean the Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades:**

“Distribution Upgrades” shall mean the additions, modifications, and upgrades to the Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the delivery service necessary to affect Project Developer’s wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions E**

**Eligible Customer:**

“Eligible Customer” shall mean:

(i) Any electric utility (including any Transmission Owner and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner.

(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff. As used in Tariff, Part VIII, Eligible Customer shall mean only those Eligible Customers that have submitted an Application and Study Agreement.

**Emergency Condition:**

“Emergency Condition” shall mean a condition or situation (i) that in the judgment of any Interconnection Party is imminently likely to endanger life or property; or (ii) that in the judgment of the Transmission Owner or Transmission Provider is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Transmission System, the Interconnection Facilities, or the transmission systems or distribution systems to which the Transmission System is directly or indirectly connected; or (iii) that in the judgment of Project Developer is imminently likely (as determined in a non-discriminatory manner) to cause damage to the Generating Facility or to the Project Developer Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions, provided that a Generation Project Developer is not obligated by a Generation Interconnection Agreement to possess black start capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one or more of the enumerated conditions or situations identified in this definition also exists.

**Energy Resource:**

“Energy Resource” shall mean a Generating Facility that is not a Capacity Resource.

**Energy Storage Resource:**

“Energy Storage Resource” shall mean a resource capable of receiving electric energy from the grid and storing it for later injection to the grid that participates in the PJM Energy, Capacity and/or Ancillary Services markets as a Market Participant

**Engineering and Procurement Agreement:**

“Engineering and Procurement Agreement” shall mean an agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request. An Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. A form of the Engineering and Procurement Agreement is set forth in Tariff, Part IX, Subpart D. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions F**

**Facilities Study:**

"Facilities Study" shall be an engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to: (1) determine the required modifications to the Transmission Provider's Transmission System necessary to implement the conclusions of the System Impact Studies; and (2) complete any additional studies or analyses documented in the System Impact Studies or required by PJM Manuals, and determine the required modifications to the Transmission Provider's Transmission System based on the conclusions of such additional studies.

**Federal Power Act:**

"Federal Power Act" shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a, et seq.

**FERC or Commission:**

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

**Final Agreement Negotiation Phase:**

"Final Agreement Negotiation Phase" shall mean the phase set forth in Tariff, Part VIII, Subpart D, section 411 to tender, negotiate, and execute any service agreement in Tariff, Part IX.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions G**

**Generating Facility:**

“Generating Facility” shall mean Project Developer’s device for the production and/or storage for later injection of electricity identified in the New Service Request, but shall not include the Project Developer’s Interconnection Facilities. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**Generation Interconnection Agreement (“GIA”):**

“Generation Interconnection Agreement” (“GIA”) shall mean the form of interconnection agreement applicable to a Generation Interconnection Request or Transmission Interconnection Request. A form of the GIA is set forth in Tariff, Part IX, Subpart B.

**Generation Interconnection Procedures (“GIP”):**

“Generation Interconnection Procedures” (“GIP”) shall mean the interconnection procedures set forth in Tariff, Part VIII.

**Generation Interconnection Request:**

“Generation Interconnection Request” shall mean a request by a Generation Project Developer pursuant to Tariff, Part VIII, Subpart B, section 403(A)(1), to interconnect a generating unit with the Transmission System or to increase the capacity of a generating unit interconnected with the Transmission System in the PJM Region.

**Generation Project Developer:**

“Generation Project Developer” shall mean an entity that submits a Generation Interconnection Request to interconnect a new generation facility or to increase the capacity of an existing generation facility interconnected with the Transmission System in the PJM Region.

**Good Utility Practice:**

“Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act, section 215(a)(4).



**Governmental Authority:**

“Governmental Authority” shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, arbitrating body, or other governmental authority having jurisdiction over any Interconnection Party or Construction Party or regarding any matter relating to a Generation Interconnection Agreement or Construction Service Agreement, as applicable.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions H**

**Hazardous Substances:**

“Hazardous Substance” shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions I**

**Incidental Expenses:**

“Incidental Expenses” shall mean those expenses incidental to the performance of construction pursuant to an Interconnection Construction Service Agreement, including, but not limited to, the expense of temporary construction power, telecommunications charges, Interconnected Transmission Owner expenses associated with, but not limited to, document preparation, design review, installation, monitoring, and construction-related operations and maintenance for the Customer Facility and for the Interconnection Facilities.

**Incremental Auction Revenue Rights:**

“Incremental Auction Revenue Rights” shall mean the additional Auction Revenue Rights, not previously feasible, created by the addition of Incremental Rights-Eligible Required Transmission Enhancements, Merchant Transmission Facilities, or of one or more Customer-Funded Upgrades.

**Incremental Capacity Transfer Rights:**

“Incremental Capacity Transfer Right” shall mean a Capacity Transfer Right allocated to a Generation Project Developer or Transmission Project Developer obligated to fund a transmission facility or upgrade, to the extent such upgrade or facility increases the transmission import capability into a Locational Deliverability Area, or a Capacity Transfer Right allocated to a Responsible Customer in accordance with Tariff, Schedule 12A.

**Incremental Deliverability Rights (IDRs):**

“Incremental Deliverability Rights” (“IDR”) shall mean the rights to the incremental ability, resulting from the addition of Merchant Transmission Facilities, to inject energy and capacity at a point on the Transmission System, such that the injection satisfies the deliverability requirements of a Capacity Resource. Incremental Deliverability Rights may be obtained by a generator or a Generation Project Developer, pursuant to an IDR Transfer Agreement, to satisfy, in part, the deliverability requirements necessary to obtain Capacity Interconnection Rights.

**Initial Operation:**

“Initial Operation” shall mean the commencement of operation of the Generating Facility and Project Developer Interconnection Facilities after satisfaction of the conditions of Tariff, Part IX, Subpart B, Appendix 2, section 1.4.

**Interconnected Entity:**

“Interconnected Entity” shall mean either the Project Developer or the Transmission Owner; Interconnected Entities shall mean both of them.

**Interconnection Construction Service Agreement:**

“Interconnection Construction Service Agreement” shall mean the agreement entered into by an Project Developer, Transmission Owner and the Transmission Provider pursuant to this Tariff, Part VIII in the form set forth in Tariff, Part IX, Subpart J or Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades, Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades and/or Transmission Owner Interconnection Facilities and coordination of the construction and interconnection of an associated Generating Facility.

**Interconnection Facilities:**

“Interconnection Facilities” shall mean the Transmission Owner’s Interconnection Facilities and the Project Developer’s Interconnection Facilities. Collectively Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modifications, additions, or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades, or Network Upgrades.

**Interconnection Party:**

“Interconnection Party” shall mean a Transmission Provider, Project Developer, or the Transmission Owner. Interconnection Parties shall mean all of them.

**Interconnection Request:**

“Interconnection Request” shall mean a Generation Interconnection Request, a Transmission Interconnection Request and/or an IDR Transfer Agreement.

**Interconnection Service:**

“Interconnection Service” shall mean the physical and electrical interconnection of the Generating Facility with the Transmission System pursuant to the terms of this Tariff, Part VIII and the Generation Interconnection Agreement entered into pursuant thereto by Project Developer, the Transmission Owner and Transmission Provider.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions L**

**List of Approved Contractors:**

“List of Approved Contractors” shall mean a list developed by each Transmission Owner and published in a PJM Manual of (a) contractors that the Transmission Owner considers to be qualified to install or construct new facilities and/or upgrades or modifications to existing facilities on the Transmission Owner’s system, provided that such contractors may include, but need not be limited to, contractors that, in addition to providing construction services, also provide design and/or other construction-related services, and (b) manufacturers or vendors of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) whose products the Transmission Owner considers acceptable for installation and use on its system.

**Load Serving Entity (LSE):**

“Load Serving Entity” or “LSE” shall have the meaning specified in the Reliability Assurance Agreement.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions M**

**Material Modification:**

“Material Modification” shall mean, as determined through a Necessary Study, any modification to a Generation Interconnection Agreement that has a material adverse effect on the cost or timing of Interconnection Studies related to, or any Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades or Transmission Owner Interconnection Facilities needed to accommodate, any Interconnection Request with a later Cycle.

**Maximum Facility Output:**

“Maximum Facility Output” shall mean the maximum (not nominal) net electrical power output in megawatts, specified in the Generation Interconnection Agreement, after supply of any parasitic or host facility loads, that a Generation Project Developer’s Generating Facility is expected to produce, provided that the specified Maximum Facility Output shall not exceed the output of the proposed Generating Facility that Transmission Provider utilized in the System Impact Study.

**Maximum State of Charge:**

“Maximum State of Charge” shall mean the maximum State of Charge that should not be exceeded, measured in units of megawatt-hours.

**Merchant A.C. Transmission Facilities:**

“Merchant A.C. Transmission Facility” shall mean Merchant Transmission Facilities that are alternating current (A.C.) transmission facilities, other than those that are Controllable A.C. Merchant Transmission Facilities.

**Merchant D.C. Transmission Facilities:**

“Merchant D.C. Transmission Facilities” shall mean direct current (D.C.) transmission facilities that are interconnected with the Transmission System pursuant to the Tariff.

**Merchant Network Upgrades:**

“Merchant Network Upgrades” shall mean additions to, or modifications or replacements of, or advancement of additions to, or modifications or replacement of, physical facilities of the Transmission Owner that, on the date of the pertinent Upgrade Customer’s Upgrade Request, are part of the Transmission System or are included in the Regional Transmission Expansion Plan, but that are not already subject to an already existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

### **Merchant Transmission Facilities:**

“Merchant Transmission Facilities” shall mean A.C. or D.C. transmission facilities that are interconnected with or added to the Transmission System pursuant to the Tariff, Part VIII and that are so identified in Tariff, Attachment T, provided, however, that Merchant Transmission Facilities shall not include (i) any Project Developer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20, 2003 ; (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Tariff, Attachment T, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.

### **Merchant Transmission Provider:**

“Merchant Transmission Provider” shall mean an Project Developer that (1) owns, controls, or controls the rights to use the transmission capability of, Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area, (2) has elected to receive Transmission Injection Rights and Transmission Withdrawal Rights associated with such facility pursuant to this Tariff, Part VIII, Subpart E, section 428, and (3) makes (or will make) the transmission capability of such facilities available for use by third parties under terms and conditions approved by the Commission and stated in the Tariff, consistent with Tariff, Part VIII, Subpart E, section 417.

### **Metering Equipment:**

“Metering Equipment” shall mean all metering equipment installed at the metering points designated in the appropriate appendix to a Generation Interconnection Agreement.

### **Minimum State of Charge:**

“Minimum State of Charge” shall mean the minimum State of Charge that should be maintained in units of megawatt-hours.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions N**

**NERC:**

“NERC” shall mean the North American Electric Reliability Corporation or any successor thereto.

**Necessary Study Agreement:**

“Necessary Study Agreement” shall mean the form of agreement for preparation of one or more Necessary Studies, as set forth in Tariff, Part IX, Subpart G.

**Necessary Study:**

“Necessary Study(ies)” shall mean the assessment(s) undertaken by the Transmission Provider to determine whether a planned modification under Appendix 2, section 3.4.1 of the GIA will have a permanent material impact on the Transmission System and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice, and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the planned modifications. A form of the Necessary Study Agreement is set forth in Tariff, Part IX, Subpart G.

**Network Upgrade Cost Responsibility Agreement:**

“Network Upgrade Cost Responsibility Agreement” shall mean the agreement entered into by the Project Developer Parties and the Transmission Provider pursuant to this GIP, and in the form set forth in Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades and coordination of the construction and interconnection of associated Generating Facilities. In regard to Common Use Upgrades, a separate Network Upgrade Cost Responsibility Agreement will be executed for each set of Common Use Upgrades on the system of a specific Transmission Owner that is associated with the interconnection of a Generating Facility.

**Network Upgrades:**

“Network Upgrades” shall mean modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System. Network Upgrades shall include Stand Alone Network Upgrades which are Network Upgrades that are not part of an Affected System; only serve the Generating Facility or Merchant Transmission Facility; and have no impact or potential impact on the Transmission System until the final tie-in is complete. Both Transmission Provider and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in the GIA, Schedule L or in the Interconnection Construction Service Agreement, Schedule D. If the Transmission Provider and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Project Developer a written technical explanation outlining why the



Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**New Service Request:**

“New Service Request” shall mean an Interconnection Request or a Completed Application.

**Nominal Rated Capability:**

“Nominal Rated Capability” shall mean the nominal maximum rated capability in megawatts of a Transmission Project Developer’s Generating Facility or the nominal increase in transmission capability in megawatts of the Transmission System resulting from the interconnection or addition of a Transmission Project Developer’s Generating Facility, as determined in accordance with pertinent Applicable Standards and specified in the Generation Interconnection Agreement.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions O**

**Open Access Same-Time Information System (OASIS) or PJM Open Access Same-Time Information System:**

“Open Access Same-Time Information System,” “PJM Open Access Same-Time Information System” or “OASIS” shall mean the electronic communication and information system and standards of conduct contained in Part 37 and Part 38 of the Commission’s regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS for the collection and dissemination of information about transmission services in the PJM Region, established and operated by the Office of the Interconnection in accordance with FERC standards and requirements.

**Operating Agreement of the PJM Interconnection, L.L.C., Operating Agreement or PJM Operating Agreement:**

“Operating Agreement of the PJM Interconnection, L.L.C.,” “Operating Agreement” or “PJM Operating Agreement” shall mean the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. dated as of April 1, 1997 and as amended and restated as of June 2, 1997, including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time thereafter, among the Members of the PJM Interconnection, L.L.C., on file with the Commission.

**Option to Build:**

“Option to Build” shall mean the option of the Project Developer to build certain Stand Alone Network Upgrades, as set forth in, and subject to the terms of, the Construction Service Agreement.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions P**

**Part I:**

“Part I” shall mean the Tariff Definitions and Common Service Provisions contained in Tariff, Part I, sections 1 through 12A.

**Part II:**

“Part II” shall mean Tariff, Part II, sections 13 through 27A pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part III:**

“Part III” shall mean Tariff, Part III, sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part IV:**

“Part IV” shall mean Tariff, Part IV, sections 36 through 112C pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VI:**

“Part VI” shall mean Tariff, Part VI, sections 200 through 237 pertaining to the queuing, study, and agreements relating to New Service Requests, and the rights associated with Customer-Funded Upgrades in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VII:**

“Part VII” shall mean Tariff, Part VII, sections 300 through 337 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VIII:**

“Part VIII” shall mean Tariff, Part VIII, sections 400 through 435 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the

applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

### **Part IX:**

“Part IX” shall mean Tariff, Part IX, section 500 and Subparts A through L pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

### **Parties:**

“Parties” shall mean the Transmission Provider, as administrator of the Tariff, and the Transmission Customer receiving service under the Tariff. PJMSettlement shall be the Counterparty to Transmission Customers.

### **Permissible Technological Advancement:**

"Permissible Technological Advancement" shall mean a proposed technological change such as an advancement to turbines, inverters, plant supervisory controls or other similar advancements to the technology proposed in the Interconnection Request that is submitted to the Transmission Provider no later than the end of Decision Point II. Provided such change may not: (i) increase the capability of the Generating Facility or Merchant Transmission Facility as specified in the original Interconnection Request; (ii) represent a different fuel type from the original Interconnection Request; or (iii) cause any material adverse impact(s) on the Transmission System with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response. If the proposed technological advancement is a Permissible Technological Advancement, no additional study will be necessary and the proposed technological advancement will not be considered a Material Modification.

### **Phase I**

“Phase I” shall start on the first Business Day immediately after the close of the Application Phase of a Cycle, but no earlier than 30 calendar days following the distribution of the Phase I System Impact Study Base Case Data. During Phase I, Transmission Provider shall conduct the Phase I System Impact Study.

### **Phase I System Impact Study:**

“Phase I System Impact Study” shall mean System Impact Study conducted during the Phase I System Impact Study Phase.

### **Phase II**

“Phase II” shall start on the first Business Day immediately after the close of Decision Point I Phase unless the Decision Point III of the immediately preceding Cycle is still open. In no event,

shall Phase II of a Cycle commence before the conclusion of Decision Point III of the immediately preceding Cycle. During Phase II, Transmission Provider shall conduct the Phase II System Impact Study.

### **Phase II System Impact Study:**

“Phase II System Impact Study” shall mean System Impact Study conducted during the Phase II System Impact Study Phase.

### **Phase III**

“Phase III” shall start on the first Business Day immediately after the close of Decision Point II, unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle. During Phase III, Transmission Provider shall conduct the Phase III System Impact Study.

### **Phase III System Impact Study:**

“Phase III System Impact Study” shall mean System Impact Study conducted during Phase III.

### **PJM:**

“PJM” shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

### **PJM Manuals:**

“PJM Manuals” shall mean the instructions, rules, procedures and guidelines established by the Office of the Interconnection for the operation, planning, and accounting requirements of the PJM Region and the PJM Interchange Energy Market.

### **PJM Region:**

“PJM Region” shall have the meaning specified in the Operating Agreement.

### **PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:**

“PJM Tariff,” “Tariff,” “O.A.T.T.,” “OATT,” or “PJM Open Access Transmission Tariff” shall mean that certain PJM Open Access Transmission Tariff, including any schedules, appendices or exhibits attached thereto, on file with FERC and as amended from time to time thereafter.

### **Point of Change in Ownership:**

“Point of Change in Ownership” shall mean the point, as set forth Schedule B of the Generation Interconnection Agreement, where the Project Developer’s Interconnection Facilities connect to the Transmission Owner’s Interconnection Facilities.

**Point of Interconnection:**

“Point of Interconnection” shall mean the point or points where the Interconnection Facilities connect with the Transmission System.

**Project Developer:**

“Project Developer” shall mean a Generation Project Developer and/or a Transmission Project Developer.

**Project Developer Interconnection Facilities:**

“Project Developer Interconnection Facilities” shall mean all facilities and equipment owned and/or controlled, operated and maintained by Project Developer on Project Developer’s side of the Point of Change of Ownership identified in the Schedule B of the Generation Interconnection Agreement, including any modifications, additions, or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System.

**Project Finance Entity:**

“Project Finance Entity” shall mean: (a) a holder, trustee or agent for holders, of any component of Project Financing; or (b) any purchaser of capacity and/or energy produced by the Generating Facility to which Project Developer has granted a mortgage or other lien as security for some or all of Project Developer’s obligations under the corresponding power purchase agreement.

**Provisional Interconnection Service:**

“Provisional Interconnection Service” shall mean interconnection service provided by Transmission Provider associated with interconnecting the Project Developer’s Generating Facility to Transmission Provider’s Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions Q**

**Qualifying Facility:**

“Qualifying Facility” shall mean means an electric energy generating facility that complies with the qualifying facility definition established by Public Utility Regulatory Policies Act (“PURPA”) and any FERC rules as amended from time to time (18 C.F.R. part 292, section 292.203 et seq.) implementing PURPA and, to the extent required to obtain or maintain Qualifying Facility status, is self-certified as a Qualifying Facility or is certified as a Qualified Facility by the FERC.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions R**

**Readiness Deposit:**

“Readiness Deposit” shall mean the deposit or deposits required by Tariff, Part VIII, Subpart A, section 401(D).

**Reasonable Efforts:**

“Reasonable Efforts” shall mean, with respect to any action required to be made, attempted, or taken by an Interconnection Party under the Tariff, Part VIII, a Generation Interconnection Agreement, or a Construction Service Agreement, such efforts as are timely and consistent with Good Utility Practice and with efforts that such party would undertake for the protection of its own interests.

**Regional Entity:**

“Regional Entity” shall have the same meaning specified in the Operating Agreement.

**Regional Transmission Expansion Plan:**

“Regional Transmission Expansion Plan” shall mean the plan prepared by the Office of the Interconnection pursuant to Operating Agreement, Schedule 6 for the enhancement and expansion of the Transmission System in order to meet the demands for firm transmission service in the PJM Region.

**Reliability Assurance Agreement or PJM Reliability Assurance Agreement:**

“Reliability Assurance Agreement” or “PJM Reliability Assurance Agreement” shall mean that certain Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, on file with FERC as PJM Interconnection L.L.C. Rate Schedule FERC No. 44, and as amended from time to time thereafter.



**Tariff, Part VIII, Subpart A, section 400**  
**Definitions S**

**Schedule of Work:**

“Schedule of Work” shall mean that Schedule of Work set forth in section 8.0 of a GIA, or Schedule of an ICSA, as applicable, setting forth the timing of work to be performed by the Constructing Entity(ies), based upon the System Impact Study(ies) and subject to modification, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Scope of Work:**

“Scope of Work” shall mean that scope of the work set forth in Specification section 3.0 of the GIA to be performed by the Constructing Entity(ies) pursuant to the Interconnection Construction Service Agreement, provided that such Scope of Work may be modified, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Secondary Systems:**

“Secondary Systems” shall mean control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers.

**Security:**

“Security” shall mean the financial guaranty provided by the Project Developer, Eligible Customer or Upgrade Customer pursuant to Tariff, Part VIII, Subpart C, sections 406(A)(2) and (3), 408(A)(2)(d), and 410(A)(1) to secure the Project Developer’s, Eligible Customer’s or Upgrade Customer responsibility for Costs under an interconnection-related agreement set forth in Tariff, Part IX.

**Service Agreement:**

“Service Agreement” shall mean the initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

**Site:**

“Site” shall mean all of the real property including, but not limited to, any owned or leased real property, bodies of water and/or submerged land, and easements, or other forms of property rights acceptable to PJM, on which the Generating Facility or Merchant Transmission Facility is situated and/or on which the Project Developer Interconnection Facilities are to be located.

**Site Control:**

“Site Control” shall mean the evidentiary documentation provided by Project Developer in relation to a New Service Request demonstrating the requirements as set forth in the following Tariff, Part VIII, Subpart A, section 402, and Tariff, Part VIII, Subpart B, section 403, and Subpart C, sections 406 and 410.

**Stand Alone Network Upgrades:**

“Stand Alone Network Upgrades” shall mean Network Upgrades, which are not part of an Affected System, which a Project Developer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Specifications section 3.0 of Appendix L of the GIA. If the Transmission Provider or Transmission Owner and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider or Transmission Owner that disagrees with the Project Developer must provide the Project Developer a written technical explanation outlining why the Transmission Provider or Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**State:**

“State” shall mean the District of Columbia and any State or Commonwealth of the United States.

**State of Charge:**

“State of Charge” shall mean the operating parameter that represents the quantity of physical energy stored (measured in units of megawatt-hours) in an Energy Storage Resource Model Participant in proportion to its maximum State of Charge capability. State of Charge is quantified as defined in the PJM Manuals.

**Station Power:**

“Station Power” shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility; (iii) used in association with restoration or black start service; or (iv) that is Direct Charging Energy.

**Study Deposit:**

“Study Deposit” shall mean the payment in the form of cash required to initiate and fund any study provided for in Tariff, Part VIII, Subpart A, section 401.

### **Surplus Project Developer:**

“Surplus Project Developer” shall mean either a Project Developer whose Generating Facility is already interconnected to the PJM Transmission System or one of its affiliates, or an unaffiliated entity that submits a Surplus Interconnection Request to utilize Surplus Interconnection Service within the Transmission System in the PJM Region.

### **Surplus Interconnection Request:**

“Surplus Interconnection Request” shall mean a request submitted by a Surplus Project Developer, pursuant to Tariff, Part VIII, Subpart E, section 414, to utilize Surplus Interconnection Service within the Transmission System in the PJM Region. A Surplus Interconnection Request is not a New Service Request.

### **Surplus Interconnection Service:**

“Surplus Interconnection Service” shall mean any unneeded portion of Interconnection Service established in a Generation Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

### **Switching and Tagging Rules:**

“Switching and Tagging Rules” shall mean the switching and tagging procedures of Transmission Owners and Project Developer as they may be amended from time to time.

### **System Impact Study:**

“System Impact Study” shall mean an assessment(s) by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a New Service Request, (ii) whether any additional costs may be incurred in order to provide such transmission service or to accommodate a New Service Request, and (iii) an estimated date that the New Service Requests can be interconnected with the Transmission System and an estimate of the cost responsibility for the interconnection of the New Service Request; and (iv) with respect to an Upgrade Request, the estimated cost of the requested system upgrades or expansion, or of the cost of the system upgrades or expansion, necessary to provide the requested incremental rights.

### **System Protection Facilities:**

“System Protection Facilities” shall refer to the equipment required to protect (i) the Transmission System, other delivery systems and/or other generating systems connected to the Transmission System from faults or other electrical disturbance occurring at or on the Generating Facility, and (ii) the Generating Facility from faults or other electrical system disturbance occurring on the Transmission System or on other delivery systems and/or other generating systems to which the Transmission System is directly or indirectly connected. System Protection Facilities shall include such protective and regulating devices as are identified in the Applicable Technical Requirements

and Standards or that are required by Applicable Laws and Regulations or other Applicable Standards, or as are otherwise necessary to protect personnel and equipment and to minimize deleterious effects to the Transmission System arising from the Generating Facility.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions T**

**Transmission Facilities:**

“Transmission Facilities” shall have the meaning set forth in the Operating Agreement.

**Transmission Injection Rights:**

“Transmission Injection Rights” shall mean Capacity Transmission Injection Rights and Energy Transmission Injection Rights.

**Transmission Interconnection Request:**

“Transmission Interconnection Request” shall mean a request by a Transmission Interconnection Project Developer pursuant to Tariff, Part VIII, Subpart B, section 403(A)(4) to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of existing Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

**Transmission Owner:**

“Transmission Owner” shall mean a Member that owns or leases with rights equivalent to ownership Transmission Facilities and is a signatory to the PJM Transmission Owners Agreement. Taking transmission service shall not be sufficient to qualify a Member as a Transmission Owner.

**Transmission Owner Interconnection Facilities:**

“Transmission Owner Interconnection Facilities” shall mean all Interconnection Facilities that are not Project Developer Interconnection Facilities and that, after the transfer under Appendix 2, section 23.3.5 of the GIA to the Transmission Owner of title to any Transmission Owner Interconnection Facilities that the Project Developer constructed, are owned, controlled, operated and maintained by the Transmission Owner on the Transmission Owner’s side of the Point of Change of Ownership identified in appendices to the Generation Interconnection Agreement and if applicable, the Interconnection Construction Service Agreement, including any modifications, additions or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System or interconnected distribution facilities.

**Transmission Owner Upgrades:**

“Transmission Owner Upgrades” shall mean Distribution Upgrades, Merchant Transmission Upgrades, Network Upgrades and Stand-Alone Network Upgrades.

**Transmission Project Developer:**

“Transmission Project Developer” shall mean an entity that submits a request to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

**Transmission Provider:**

The “Transmission Provider” shall be the Office of the Interconnection for all purposes, provided that the Transmission Owners will have the responsibility for the following specified activities:

(a) The Office of the Interconnection shall direct the operation and coordinate the maintenance of the Transmission System, except that the Transmission Owners will continue to direct the operation and maintenance of those transmission facilities that are not listed in the PJM Designated Facilities List contained in the PJM Manual on Transmission Operations;

(b) Each Transmission Owner shall physically operate and maintain all of the facilities that it owns; and

(c) When studies conducted by the Office of the Interconnection indicate that enhancements or modifications to the Transmission System are necessary, the Transmission Owners shall have the responsibility, in accordance with the applicable terms of the Tariff, Operating Agreement and/or the Consolidated Transmission Owners Agreement to construct, own, and finance the needed facilities or enhancements or modifications to facilities.

**Transmission Service:**

“Transmission Service” shall mean Point-To-Point Transmission Service provided under Tariff, Part II on a firm and non-firm basis.

**Transmission System:**

“Transmission System” shall mean the facilities controlled or operated by the Transmission Provider within the PJM Region that are used to provide transmission service under Tariff, Part II and Part III.

**Transmission Withdrawal Rights:**

“Transmission Withdrawal Rights” shall mean Firm Transmission Withdrawal Rights and Non-Firm Transmission Withdrawal Rights.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions U**

**Upgrade Customer:**

“Upgrade Customer” shall mean an entity that submits an Upgrade Request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8, or that submits an Upgrade Request for Merchant Network Upgrades (including accelerating the construction of any transmission enhancement or expansion, other than Merchant Transmission Facilities, that is included in the Regional Transmission Expansion Plan prepared pursuant to Operating Agreement, Schedule 6).

**Upgrade Request:**

“Upgrade Request” shall mean a request submitted in the form prescribed in Tariff, Part IX, Subpart K, for evaluation by the Transmission Provider of the feasibility and estimated costs of (a) a Merchant Network Upgrade or (b) the Customer-Funded Upgrades that would be needed to provide Incremental Auction Revenue Rights specified in a request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions V**

**Valid Upgrade Request:**

“Valid Upgrade Request” shall mean an Upgrade Request that has been determined by Transmission Provider to meet the requirements of Tariff, Part VIII, Subpart B, section 403.



**Tariff, Part VIII, Subpart A, section 400**  
**Definitions W**

**Wholesale Market Participation Agreement (“WMPA”):**

“Wholesale Market Participation Agreement” (“WMPA”) shall mean the form of agreement intended to allow a Project Developer to effectuate in wholesale sales in the PJM markets. A form of the WMPA is set forth in Tariff, Part IX, Subpart C.

**Wholesale Transaction:**

“Wholesale Transaction” shall mean any transaction involving the transmission or sale for resale of electricity in interstate commerce that utilizes any portion of the Transmission System.

**Tariff, Part VIII, Subpart A, section 401**  
**Applications for Cycle Process**  
**Introduction**

A. New Cycle Process

Part VIII of the Tariff applies to valid New Service Requests submitted on or after October 1, 2021, and sets forth the procedures and other terms governing the Transmission Provider's administration of the Cycle process; procedures and other terms regarding studies and other processing of New Service Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to Project Developers and Eligible Customers. To initiate a New Services Request, Eligible Customers must first submit a Completed Application following the procedures outlined in Tariff, Parts II and III as applicable. For projects submitted by Eligible Customers, the project's priority is defined by the Cycle in which an Eligible Customer submits a Completed Application. For projects submitted by Project Developers, the project's priority is defined by the Cycle in which a Project Developer submits a completed New Service Request. A Cycle's priority is established by the Application deadline. A given Cycle has priority over Cycles that commence at a later date.

B. Part VIII of the Tariff applies to (a) Generation Interconnection Requests; (b) Transmission Interconnection Requests; and (c) Completed Applications.

C. A Project Developer that proposes to (i) interconnect a Generating Facility to the Transmission System in the PJM Region, (ii) increase the capability of a Generating Facility in the PJM Region, (iii) interconnect Merchant Transmission Facilities with the Transmission System; (iv) increase the capability of existing Merchant Transmission Facilities interconnected to the Transmission System, or (v) interconnect a Generating Facility to distribution facilities located in the PJM Region that are used for transmission of power in interstate commerce, and to make wholesale sales using the output of the Generating Facility, shall request interconnection with the Transmission System pursuant to, and shall comply with, the terms, conditions, and procedures set forth in Tariff, Part VIII and related portions of the PJM Manuals.

D. Required Study Deposits and Readiness Deposits.

1. Study Deposits. Pursuant to Tariff, Part VIII, Subpart B, section 403, each New Service Request must submit with its Application a Study Deposit, the amount of which will be determined based upon the MWs requested in such Application. Ten percent of the Study Deposit is non-refundable. Project Developer and Eligible Customers are responsible for actual study costs, which may exceed the Study Deposit amount.

a. If any Study Deposit monies remain after all System Impact Studies are completed and any outstanding monies owed by Project Developer or Eligible Customer in connection with outstanding invoices related to the

present or prior New Service Requests have been paid, such remaining deposit monies shall be returned to the Project Developer or Eligible Customer at the conclusion of the required studies for the New Service Request.

2. Readiness Deposits. Readiness Deposits are funds committed by the Project Developer or Eligible Customer based upon the MW size of the project and, where applicable, the study results.

a. Readiness Deposits are due at the following Phases of a Cycle:

i. Readiness Deposit No. 1: Application Submission

ii. Readiness Deposit No. 2: Decision Point I; and

iii. Readiness Deposit No. 3: Decision Point II

b. Readiness Deposits No. 2 and/or No. 3 may equal an amount equal to or greater than zero, but may never be a negative dollar amount.

c. Readiness Deposit refunds will be handled as follows:

i. If the project is withdrawn or terminated, the Readiness Deposit refunds for the project will be determined by the study phase at which the project was withdrawn or terminated, and adverse study results tests, as set forth below in Tariff, Part VIII, Subpart C, section 408(B)(3)(b).

ii. When all Cycle New Service Requests have either entered into final agreements and met the Decision Point III Site Control requirements, or have withdrawn, remaining Readiness Deposit funds will be dispositioned as follows:

(a) Transmission Provider will incorporate all project withdraws and retool analysis results to provide a final determination on the Network Upgrades that are required for the Cycle.

(b) Underfunded Network Upgrades will be identified as those where one or more withdrawn New Service Requests that were identified as having a cost allocation in the Phase III analysis results. In the event that there are no underfunded Network Upgrades, all Readiness Deposits will be refunded.

(c) Readiness Deposits will be applied to underfunded Network Upgrades on a pro-rata share of funds missing from the Phase III cost allocation. In the event that all underfunded Network Upgrades are made whole relative to the withdrawn New Service Requests, remaining Readiness Deposits will be refunded on a pro-rata share.

3. Study Deposits and Readiness Deposits are separate financial obligation, and non-transferrable and cannot be commingled. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific New Service Request be applied in whole or in part to a different New Service Request.
- E. If Project Developer is proposing a Generating Facility that will physically connect to non-jurisdictional distribution or sub-transmission facilities for the purpose of engaging in wholesale sales in the PJM markets, such Project Developer must provide additional required information and documentation associated with the non-jurisdictional arrangements, as set forth in Tariff, Part VIII, Subpart C, sections 406 and 410 and Tariff, Part IX, Subpart F.
- F. A Project Developer or Eligible Customer cannot combine, swap or exchange all or part of a New Service Request with any other New Service Request within the same or a different Cycle.
- G. Prior to entering into a final agreement from Tariff, Part IX, a Project Developer or Eligible Customer may assign its New Service Request to another entity only if the acquiring entity:
  1. as applicable, accepts and acquires the rights to the same Point of Interconnection and Point of Change of Ownership as identified in the New Service Request for such project; and/or
  2. as applicable, accepts, the same receipt and delivery points or the same source and sink points as stated in the New Service Request for such project.
  3. Additional Interconnection-Related Agreements. In connection with interconnection with the Transmission System pursuant to Tariff, Part VIII, Project Developer may be required, or may elect, to enter into one or more of the following interconnection-related agreements:
    - a. Cost Responsibility Agreement. A Project Developer with an existing generating facility that is not a party to an interconnection agreement with Transmission Provider and the relevant Transmission Owner, that desires to enter into a GIA with Transmission Provider and Transmission Owner, shall be required to enter into a Cost Responsibility Agreement in the form set forth in Tariff, Part IX, Subpart F. The Cost Responsibility Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with Transmission Provider and Transmission Owner.
    - b. Engineering and Procurement Agreement. A Project Developer that wishes to advance the implementation of its Interconnection Request during Phase III of a Cycle may enter into an Engineering and Procurement Agreement with Transmission Provider and Transmission Owner, in the form set forth in Tariff, Part IX, Subpart D, to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. An

Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

- c. Necessary Study Agreement. A Project Developer that has entered into a GIA that plans to undertake modifications pursuant to that GIA to its Generating Facility or Merchant Transmission Facility shall be required to enter into a Necessary Study Agreement with Transmission Provider in the form set forth in Tariff, Part IX, Subpart G. The Necessary Study Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform the Necessary Study(ies) to determine: (a) the type and scope of the permanent material impact, if any, the change will have on the Transmission System; (b) the additions, modifications, or replacements to the Transmission System required to accommodate the change; and (c) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the change.

**Tariff, Part VIII, Subpart A, section 402**  
**Applications for Cycle Process**  
**Site Control**

A. Site Control Evidentiary Requirements

Site Control is evidence provided by the Project Developer to Transmission Provider in relation to Project Developer's New Service Request demonstrating Project Developer's interest in, control over, and right to utilize the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities, and, if applicable, the Transmission Owner's Interconnection Facilities and/or Network Upgrades at the Point of Interconnection. Specific Site Control phase requirements are set forth in the following Tariff, Part VIII, Subpart B, section 403, and Subpart C, sections 406 and 410

1. Site Control consistent with the requirements herein is required for a project to have a valid position within a Cycle.
2. Proof of Site Control can be in the form of one of the following: (1) deed; (2) lease; (3) option to lease or purchase; or (4) as deemed acceptable by the Transmission Provider, any other contractual or legal right to possess, occupy and control the Site.
  - a. Memorandums are not acceptable.
  - b. Documentation solely evidencing an intent to purchase or control the Site is not acceptable.
  - c. Rights of Way are only acceptable for Project Developer Interconnection Facilities up to the Point of Interconnection.
  - d. Notwithstanding the foregoing, for a New Service Request, all or a portion of which requires the use of Sites owned or physically controlled by a state and/or federal governmental entity, and authorization for such use is subject to environmental and other state and/or federal governmental permitting requirements, including 42 U.S.C.A. § 4331 et seq. and any succeeding statutes, acceptable evidence of Site Control can be in any form the governmental entity issues. For Decision Point I and Decision Point III, Project Developers shall provide evidence that the Project Developer is taking identifiable steps acceptable to the Transmission Provider in furtherance of the issuance of such authorization by the state and/or federal governmental entity, including documentation sufficiently describing and explaining the source of and effects of such regulatory requirements, including a description of any conditions that must be met in order to satisfy the regulatory requirements and the anticipated time by which the Project Developer expects to satisfy the regulatory requirements. For Decision Point I and Decision Point III, Project Developers shall also identify any additional property rights for the portion of the Site that is not owned or physically controlled by a state and/or federal governmental entity but

which cannot be secured until the regulatory requirements have been met and authorization has been provided by the requisite state and/or federal governmental entity.

3. Demonstration of Site Control must include verification, to PJM's satisfaction, that the total feet or acreage ("acreage") of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, as set forth in the PJM Manuals.
  - a. The Project Developer must submit a Geographic Information System (GIS) Site Plan map and data files acceptable to PJM demonstrating the arrangement of the resource-specific proposed facilities for the amount of MW requested.
  - b. Any GIS Site Plan map and data files submitted in accordance with this section must be consistent with all other modeling data submitted in connection with Project Developer's New Service Request.
  - c. In the event of a disagreement between the Transmission Provider and the Project Developer over whether the total acreage of the Site is fully sufficient for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, Transmission Provider will accept a Professional Engineer (PE) stamped Site plan drawing (licensed in the state of the facility location) that depicts the proposed generation arrangement and specifies the Maximum Facility Output for that arrangement.
    - i. Failure to verify to Transmission Provider's satisfaction that the total acreage of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility shall result in the New Service Request being deemed terminated and withdrawn.
4. Site Control must be in the name of the Project Developer identified on the corresponding New Service Request. Otherwise, the Project Developer must demonstrate to PJM's satisfaction the relationship between the entity owning or controlling the Site ("landowner" or "owner") with Site Control and the Project Developer identified on the New Service Request.
5. Project Developers are prohibited from submitting evidence of Site Control that utilizes the same Site for multiple New Service Requests unless the total acreage amount of such Site is adequate to support all such New Service Requests.
  - a. To the extent that multiple New Service Requests are submitted by a Project Developer using the same Site Control evidence and the total acreage amount of such Site is not adequate to support all such New Service Requests, all such New Service Requests shall be deemed terminated and withdrawn.

- b. To the extent that a Project Developer submits a New Service Request with Site Control evidence utilizing the Site that is also the subject of Site Control in New Service Requests submitted by other Project Developer's, such Project Developer shall include with its New Service Request evidence, to Transmission Provider's satisfaction, demonstrating that the project referenced in the Project Developer's New Service Request is concurrently feasible with the development of any other projects that will share the Site identified in the Site Control. Such proof of concurrent feasibility shall include:
    - i. Identification of any other New Service Requests that will share all or a portion of the Site identified in the Site Control; and
    - ii. Identification of the proposed location and space utilization of all projects that will share the Site, including acreage and boundaries for all projects sharing the Site identified in the Site Control; and
    - iii. Any related technical information required by the Transmission Provider to enable the Transmission Provider to determine that development of the project referenced in the submitted New Service Request is not inconsistent with development of any of the other New Service Requests that will share all or a portion of the same Site.
- 6. Multiple projects may share Project Developer Interconnection Facilities. A shared facilities agreement is required if jointly owned common Interconnection Facilities are proposed.
- 7. Project Developers are prohibited from submitting evidence of Site Control for the Site which is also the subject of an interconnect request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system. To the extent that Project Developers submit evidence of Site Control for the Site which is also the subject of an interconnection request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system, the relevant New Service Request submitted to Transmission Provider shall be deemed terminated and withdrawn.
- 8. Site Control must demonstrate three key elements: conveyance, term, and exclusivity:
  - a. Term

Term is the minimum duration required to evidence Site Control. The Term requirements vary, and are established in the following Tariff, Part VIII rules, at various points within a Cycle. The Term cannot be satisfied by an agreement with an initial term shorter than the requisite required term that has extensions, including unilateral extensions, unless those extensions have been exercised and any requisite conditions fulfilled, including any payment obligations, by the Project Developer at the time evidence of Site Control is provided to the Transmission Provider.



b. Exclusivity

With the exception of Tariff, Part VIII, Subpart A, section 402(A)(5)(b), exclusivity is evidenced by written acknowledgement from the land owner provided to the Transmission Provider by the Project Developer as part of the Site Control that, for the Term, that the Project Developer has exclusive use of the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities and, if applicable, the Transmission Owner's Interconnection Facilities and/or Network Upgrades, and the landowner cannot make the Site Control identified for the Site available for purchase or lease, to any person or entity other than the Project Developer for any purpose or use that will interfere with the rights granted to Project Developer.

c. Conveyance

The Site Control evidence submitted by the Project Developer must demonstrate that the subject Site is or will be conveyed to the Project Developer, e.g., through a deed or an option to purchase or lease or other form of property rights acceptable to PJM, or that the Project Developer is guaranteed a right to future conveyance at Project Developer's sole discretion, e.g., through a deed or an option to purchase or lease or other forms of property rights acceptable to PJM, consistent with the Site Control Evidentiary Requirements provisions in Tariff, Part VIII, Subpart A, section 302(A)(2), above.

9. At each point within a Cycle where a Project Developer is required to provide Site Control, the Project Developer shall also provide Site Control certification in a form set forth in PJM Manual 14G, executed by an officer or authorized representative of Project Developer, verifying that the Site Control requirements are met.

a. At PJM's request, Project Developer shall provide copies of landowner attestations, county recordings, or other similar documentation acceptable to PJM to validate such Site Control certifications.

Tariff, Part VIII, Subpart B  
APPLICATION RULES

**Tariff, Part VIII, Subpart B, section 403**  
**Application Rules**

**A. Application Submission**

A Project Developer or Eligible Customer (collectively, “Applicant”) that seeks to initiate a New Service Request must submit the following information to the Transmission Provider: (i) a Project Developer Applicant electronically submits through the PJM web site, an Application and Studies Agreement (“Application”), a form of which is provided in Tariff, Part IX, Subpart A, (ii) an Eligible Customer Applicant electronically submits a Completed Application and subsequently executes an Application, a form of which is provided in Tariff, Part IX, Subpart A following the procedures outlined in Tariff, Parts II and III as applicable.

To be considered in a Cycle, a Project Developer must submit a completed and signed Application, including the required Study Deposit and Readiness Deposit, to Transmission Provider prior to the Cycle’s Application Deadline. To be considered in a Cycle, an Eligible Customer must submit a Completed Application, to Transmission Provider prior to the Cycle’s Application Deadline. Transmission Provider will post a firm Application Deadline for a Cycle at the beginning of Phase II of the immediately prior Cycle, no less than 180 days in advance of the Application Deadline. Only Completed New Service Requests received from Project Developers by the Application Deadline will be considered for the corresponding Cycle. Only Completed Applications received from Eligible Customers by the Application Deadline will be considered for the corresponding Cycle. Completed New Service Requests and Completed Applications shall be assigned a tentative Project Identifier. Transmission Provider will review and validate New Service Requests and the Project Identifier during the Application Phase, prior to Phase I of the corresponding Cycle. Only valid New Service Requests will proceed past the Application Phase.

**1. Generation Interconnection Request Requirements**

For Transmission Provider to consider an Application for a Generation Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the location of the proposed Point of Interconnection to the Transmission System, including the substation name or the name of the line to be tapped (including the voltage), the estimated distance from the substation endpoints of a line tap, address, and GPS coordinates.
- c. Provide information about the Generating Facility project, including whether it is (1) a proposed new Generating Facility, (2) an increase in

capability of an existing Generating Facility, or (3) the replacement of an existing Generating Facility.

- d. Indicate the type of Interconnection Service requested, whether (1) Energy Resource only or (2) Capacity Resource (includes Energy Resource) with Capacity Interconnection Rights.
- e. Specify the project location and provide a detailed site plan.
- f. Submit required evidence of Generating Facility Site Control (including the location of the main step-up transformer), including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- g. Provide information about Qualifying Facility status under the Public Utility Regulatory Policies Act, as applicable.
- h. Submit required information and documentation if the Generating Facility will share Applicant's Interconnection Facilities with another Generating Facility.
- i. For a new Generating Facility, specify requested Maximum Facility Output and Capacity Interconnection Rights.
- j. For a requested increase in generation capability of an existing Generating Facility, specify the existing Maximum Facility Output and Capacity Interconnection Rights, and requested increases.
- k. Provide a detailed description of the equipment configuration and electrical design specifications for the Generating Facility.
- l. Specify the fuel type for the Generating Facility; or, in the case of a multi-fuel Generating Facility, the fuel types.
- m. For a multi-fuel Generating Facility, provide a detailed description of the physical and electrical configuration.
- n. If the Generating Facility will include a storage component, provide detailed information about (1) whether and how the storage device(s) will charge using energy from the Transmission System, (2) the primary frequency response operating range for the storage device(s), (3) the MWh stockpile, and (4) the hour class, as applicable.
- o. Specify the proposed date that the project or uprate associated with the Application will be in service.

- p. Provide other relevant information, including whether Applicant or an affiliate has submitted a previous Application for the Generating Facility; and, if an increase in generation capability, information about existing PJM Service Agreements and associated Queue Position Nos. or Project Identifier Nos.

## 2. Behind the Meter Generator Application Requirements

In addition to the above requirements for a Generating Facility, in order for Transmission Provider to consider an Application for behind-the-meter generation Interconnection Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Specify gross output, behind the meter load, requested Maximum Facility Output, and requested Capacity Interconnection Rights.
- b. For a requested increase in generation capability of an existing Behind the Meter Generating Facility, specify existing and requested increase in gross output, behind the meter load, Maximum Facility Output, and Capacity Interconnection Rights.

## 3. Long Term Firm Transmission Service Application Requirements

For Transmission Provider to consider an Application for Long Term Firm Transmission Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the locations of the Point(s) of Receipt and Point(s) of Delivery.
- c. Specify the requested Service Commencement Date and term of service.
- d. Specify the transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission System.

## 4. Merchant Transmission Application Requirements

For Transmission Provider to consider an Application for a Transmission Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.

- b. Specify the location of the proposed facilities, and the name and description of the substation where Applicant proposes to interconnect or add its facilities.
- c. Specify the proposed voltage and nominal capability of new facilities or increase in capability of existing facilities.
- d. Provide a detailed description of the equipment configuration and electrical design specifications for the project.
- e. Specify the proposed date that the project or increase in capability will be in service.
- f. Specify whether the proposed facilities will be either (1) merchant A.C., (2) Merchant D.C. Transmission Facilities, or (3) Controllable A.C. Merchant Transmission Facilities.
- g. If Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities, specify whether Applicant elects to receive (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR) or (2) Incremental Delivery Rights, Incremental Auction Revenue Rights, and/or Incremental Capacity Transfer Rights.
  - i. If Applicant elects to receive TIRs or TWRs, specify (1) total project MWs to be evaluated as Firm (capacity) injection for TIR; (2) total project MWs to be evaluated as Non-firm (energy) injection for TIR; (3) total project MWs to be evaluated as Firm (capacity) withdrawal for TWR; and (4) total project MWs to be evaluated as Non-firm (energy) withdrawal for TWR.
  - ii. If Applicant elects to receive Incremental Delivery Rights, specify the location on the Transmission System where it proposes to receive Incremental Delivery Rights associated with its proposed facilities.
- h. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Applicant contractually binds itself in its interconnection-related service agreement always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the interconnection-related service agreement will provide Applicant with the same types of transmission rights that are available under the Tariff for Merchant D.C. Transmission Facilities. In the Application, Applicant shall represent that, should it execute an interconnection-related service agreement for its project described in the Application, it will agree in the interconnection-

related service agreement to operate its facilities continuously in a controllable mode.

- i. Specify the site where Applicant intends to install its major equipment, and provide a detailed site plan.
- j. Submit required evidence of Site Control for the major equipment, including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- k. Provide evidence acceptable to Transmission Provider that Applicant has submitted a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting, as applicable. Applicant shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Applicant fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

#### 5. Additional Requirements Applicable to All Applications

- a. Study Deposit: For Transmission Provider to consider an Application complete, Transmission Provider must receive from the Applicant the required Study Deposit by wire transfer, the amount of which is based on the size of the project as described below. Applicant's wire transfer must specify the Application reference number to which the Study Deposit corresponds, or Transmission Provider will not review or process the Application.
  - i. Ten percent of the Study Deposit is non-refundable. If Applicant withdraws its New Service Request, or the New Service Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:
    - (a) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request;
    - (b) Any restudies required as a result of the rejection, termination, and/or withdrawal of such New Service Request; and/or

(c) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.

ii. Ninety percent of the Study Deposit is refundable, and Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:

(a) The cost of the Application review;

(b) The dollar amount of Applicant's cost responsibility for the System Impact Study; and

(c) If the New Service Request is modified, rejected, terminated, and/or withdrawn, refundable deposit money shall be applied to cover all of the costs incurred by Transmission Provider up to the point of the New Service Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

(i) The costs of any restudies required as a result of the modification, rejection, termination, and/or withdrawal of the New Service Request;

(ii) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request; and/or

(iii) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.

(d) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to Applicant in accordance with the PJM Manuals.

iii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.

(a) Applicant is responsible for, and must pay, all actual study costs.



(b) If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

iv. The Study Deposit shall be calculated as follows, based on the number of MW energy (e.g., Maximum Facility Output) or MW capacity (e.g., Capacity Interconnection Rights), whichever is greater:

(a) Up to 20 MW: \$75,000;

(b) Over 20 MW up to 50 MW: \$200,000;

(c) Over 50 MW up to 100 MW: \$250,000;

(d) Over 100 MW up to 250 MW: \$300,000;

(e) Over 250 MW up to 750 MW: \$350,000; and

(f) Over 750 MW: \$400,000.

b. Readiness Deposit: For Transmission Provider to consider an Application complete, Applicant must submit to Transmission Provider the required Readiness Deposit by wire transfer or letter of credit. Applicant's wire transfer or letter of credit must specify the Application reference number to which the Readiness Deposit corresponds, or Transmission Provider will not review or process the Application. Readiness Deposit No. 1 shall be an amount equal to \$4,000 per MW energy (e.g., Maximum Facility Output) or per MW capacity (e.g., Capacity Interconnection Rights), whichever is greater, as specified in the Application.

## B. Application Review Phase

1. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Project Developers for completeness and then establishes the validity of such submitted Applications, beginning with a deficiency review, as follows:

- a. Transmission Provider will exercise Reasonable Efforts to inform Applicant of Application deficiencies within 15 Business Days after the Application Deadline.
  - b. Applicant then has 10 Business Days to respond to Transmission Provider's deficiency determination.
  - c. Transmission Provider then will exercise Reasonable Efforts to review Applicant's response within 15 Business Days, and then will either validate or reject the Application.
2. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Eligible Customers for completeness and then establishes the validity of such submitted Applications.
3. Transmission Provider will only review an Application during the Application Review Phase following the Application Deadline for which the Application was submitted and deemed complete, which will extend for 90 days or the amount of time it takes to complete all Application review activities for the relevant Cycle, whichever is greater.
4. During the Application Review Phase, and at least 30 days prior to initiating Phase I of the Cycle, Transmission Provider will post the Phase I Base Case data for review, subject to CEII protocols.
5. In the case of an Application for a Generating Facility, the Application Review Phase will include a Site Control review for the Generating Facility. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VIII, Subpart A, section 402, for at least a one-year term beginning from the Application Deadline, for 100 percent of the Generating Facility Site including the location of the high-voltage side of the Generating Facility's main power transformer(s). In addition, Applicant shall provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings. The Site Control requirement in the Application includes an acreage requirement for the Generating Facility, as set forth in the PJM Manuals.
6. In the case of an Application for Merchant Transmission, the Application Review Phase will include a Site Control review for the Site of the HVDC converter station(s), phase angle regulator (PAR), and/or variable frequency transformer, as applicable. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VIII, Subpart A, section 402 for at least a one-year term beginning from the Application Deadline, for 100 percent of the Site. In addition, Applicant shall provide a certification, executed by an officer or authorized representative of

Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings.

C. Scoping Meetings

1. During the Application Review Phase, Transmission Provider may hold a single, or several, scoping meetings for projects in each Transmission Owner zone, which are optional and may be waived by Applicants or Transmission Owner.
2. Scoping meetings may include discussion of potential Affected System needs, whereby Transmission Provider may coordinate with Affected System Operators the conduct of required studies.

D. Other Requirements

1. Applicant must submit any claim for Capacity Interconnection Rights from deactivating generation units with the Application, and it must be received by Transmission Provider prior to the Application Deadline.
2. When an Application results in a valid New Service Request, Transmission Provider shall confirm the assigned Project Identifier to the New Service Request, in accordance with Tariff, Part VIII, Subpart E, section 412. Applicant and Transmission Provider shall reference the Project Identifier in all correspondence, submissions, wire transfers, documents, and other materials relating to the New Service Request.

Tariff, Part VIII, Subpart C  
PHASES AND DECISION POINTS

**Tariff, Part VIII, Subpart C, section 404**  
**Introduction**

**A. Phase I, Phase II and Phase III System Impact Studies**

**1. Introduction**

Tariff, Part VIII, Subpart C sets forth the procedures and other terms governing the Transmission Provider's administration of the studies and procedures required under the Cycle process, and the nature and timing of such studies. The Cycle process set forth in Tariff, Part VIII includes three study Phases and the three Decision Points:

- a. Phase I: Phase I System Impact Study and Decision Point I
- b. Phase II: Phase II System Impact Study and Decision Point II; and
- c. Phase III: Phase III System Impact Study and Decision Point III.

Procedures and other terms relative to the three study Phases are set forth separately below in Tariff, Part VIII, Subpart C, sections 405, 407, and 409.

**2. Overview of System Impact Studies**

- a. The Phase I, Phase II and Phase III System Impact Studies are a regional analysis of the effect of adding to the Transmission System the new facilities and services proposed by valid New Service Requests and an evaluation of their impact on deliverability to the aggregate of PJM Network Load.
  - i. These studies identify the system constraints, identified with specificity by transmission element or flowgate, relating to the New Service Requests included therein and any resulting Interconnection Facilities, Network Upgrades, and/or Contingent Facilities required to accommodate such New Service Requests.
  - ii. These studies provide estimates of cost responsibility and construction lead times for new facilities required to interconnect the project and system upgrades.
  - iii. Transmission Provider, in its sole discretion, can aggregate multiple New Service Requests at the same Point of Interconnection for purposes of Phase I, Phase II and Phase III System Impact Studies.
  - iv. The scope of the studies may include (a) an assessment of sub-area import deliverability, (b) an assessment of sub-area export

deliverability, (c) an assessment of project related system stability issues (only occurs in Phase II and Phase III); (d) an assessment of project-related short circuit duty issues (only occurs in Phase II and Phase III), (e) a contingency analysis consistent with NERC's and each Applicable Regional Entity's reliability criteria and the transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity, (f) an assessment of regional transmission upgrades that most effectively meet identified needs, and (g) an analysis to determine cost allocation responsibility for required facilities and upgrades.

- v. For purposes of determining necessary Interconnection Facilities and Network Upgrades, these studies shall consider the level of service requested in the New Service Request unless otherwise required to study the full electrical capability of the New Service Request due to safety or reliability concerns.
- vi. The studies' results shall include the list and facility loading of all reliability criteria violations specific to the New Service Requests.
- vii. If applicable, the studies for a Transmission Project Developer New Service Request shall also include a preliminary estimate of the Incremental Deliverability Rights associated with the Transmission Project Developer's proposed Merchant Transmission Facilities.

### 3. Contingent Facilities

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Interconnection Facilities and/or Network Upgrades, upon which the New Service Request's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the New Service Request or reassessment of the Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies) and Generator Interconnection Agreement, including why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall also provide, upon request of the Project Developer or Eligible Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

- a. Minimum Thresholds to Identify Contingent Facilities

i. Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least five percent distribution factor (DFAX) or contributing at least five percent of the facility rating in the applicable model.

ii. Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

iii. Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

4. Additional System Impact Study Procedures for Eligible Customers

The following provisions apply to System Impact Studies conducted for Eligible Customers:

- a. The Transmission Provider will notify Eligible Customers of the need to conduct a System Impact Study whenever the Transmission Provider determines that available transmission capability may not be sufficient to provide the requested firm service(s). The purpose of the System Impact Study will be to determine the effect the requested service(s) will have on system operations, identify any system constraints, redispatch options and whether system expansion will be required to provide the requested service(s).
- b. The Commission's comparability standard will be applied in evaluating the impact of all requests. Specifically, the Transmission Provider will use the same due diligence in completing System Impact Studies for Eligible Customers that it uses when completing studies for any Transmission Owner that requests service from the Transmission Provider.
- c. Requests for long-term firm transmission service will be evaluated, to the extent possible, as a part of the on-going planning process for Bulk Transmission Supply in the PJM Region. Appropriate planning studies will be conducted annually to assess the capability of the PJM Region Transmission System to deliver the planned Network Resources to the Forecasted Network Loads of the existing load serving entities and any prior committed Firm Point-to-Point Service transmission customers. The loads and resources of Eligible Customers requesting new or additional service

during the normal planning cycle will be incorporated into this aggregate planning process along with the loads and resources of all other Firm Point-to-Point and load serving entities for which prior commitments to provide service have been made. Requests for long-term firm service made at times that will not permit the evaluation of impacts as part of the normal planning process, and requests for short-term firm service, will require that special impact studies be completed.

d. The Transmission Provider plans and evaluates the PJM Region Transmission System in strict compliance with the following:

i. North American Electric Reliability Council ("NERC") Reliability Principles and Guides

ii. Applicable Standards

iii. Transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity.

e. In evaluating the impact of any request for new or additional service(s), the Transmission Provider will first determine the capability of the system to reliably provide prior committed Network and Point-to-Point service for the term of the requested new or additional service(s), or the normal planning horizon (generally 10 years), whichever is shorter. Requests for new or additional service(s) will then be incorporated into the system representation data and the appropriate system analyses will be completed to evaluate the impacts of the requested services.

## 5. Cost Allocation for Network Upgrades

a. General: Each Project Developer and Eligible Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.



b. Cost Responsibility for Accelerating Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of Network Upgrades that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Project Developer or Eligible Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

c. The Transmission Provider shall determine the minimum amount of Network Upgrades required to resolve each reliability criteria violation in each Cycle, by studying the impact of the projects the Cycle in their entirety, and not incrementally. Interconnection Facilities and Network Upgrades shall be studied in their entirety and according to the following process:

The Transmission Provider shall identify the New Service Requests in the Cycle contributing to the need for the required Network Upgrades within the Cycle. All New Service Requests that contribute to the need for a Network Upgrade will receive cost allocation for that upgrade pursuant to each New Service Request' s contribution to the reliability violation identified on the transmission system in accordance with PJM Manuals.

There will be no inter-Cycle cost allocation for Interconnection Facilities or Network Upgrades identified in the System Impact Study; all such costs shall be allocated to New Service Requests in that Cycle.

#### 6. Interconnection Facilities

A Project Developer shall be obligated to pay 100 percent of the costs of the Interconnection Facilities necessary to accommodate its Interconnection Request.

#### 7. Facilities Study Procedures

The Facilities Studies will include good faith estimates of the cost, determined in accordance with Tariff, Part VIII, Subpart C, section 404(A)(5), (a) to be charged to each affected New Service Customer for the Interconnection Facilities and Network Upgrades that are necessary to accommodate each New Service Request evaluated in the study; (b) the time required to complete detailed design and construction of the facilities and upgrades; (c) a description of any site-specific

environmental issues or requirements that could reasonably be anticipated to affect the cost or time required to complete construction of such facilities and upgrades.

The Facilities Study will document the engineering design work necessary to begin construction of any required transmission facilities, including estimating the costs of the equipment, engineering, procurement and construction work needed to implement the conclusions of the System Impact Study in accordance with Good Utility Practice and, when applicable, identifying the electrical switching configuration of the connection equipment, including without limitation: the transformer, switchgear, meters, and other station equipment; and the nature and estimated costs of Interconnection Facilities and Network Upgrades necessary to accommodate the New Service Request.

For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Facilities Study shall consider the level of Interconnection Service requested by the Project Developer unless otherwise required to study the full electrical capability of the Generating Facility or Merchant Transmission Facility due to safety or reliability concerns. The Facilities Study will also identify any potential control equipment for requests for Interconnection Service that are lower than the full electrical capability of the Generating Facility or Merchant Transmission Facility.

**Tariff, Part VIII, Subpart C, section 405**  
**Phase I**

**A. Phase I Rules**

1. This Tariff, Part VIII, Subpart C, section 405 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase I of the Cycle process. After the Application Phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase I of a Cycle will commence. During Phase I of a Cycle, the Transmission Provider shall conduct a Phase I System Impact Study.
- a. The Phase I System Impact Study is conducted on an aggregate basis within a New Services Request's Cycle, and results are provided in a single Cycle format. The Phase I System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers must obtain the results from the website.
- b. Start and Duration of Phase I
  - i. Phase I shall start on the first Business Day immediately following the end of the Application Review phase, but no earlier than 30 days following the distribution of the Phase I Base Case Data. Transmission Provider shall use Reasonable Efforts to complete Phase I within 120 calendar days from the date such phase commenced. If the 120th day does not fall on a Business Day, Phase I shall be extended to the end of the next Business Day. If Transmission Provider is unable to complete Phase I within 120 calendar days, Transmission Provider shall notify all impacted Project Developers and Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase I.
  - ii. During Phase I, and at least 30 days prior to initiating Decision Point I of the Cycle, Transmission Provider will post an estimated start date for Decision Point I in order for Project developers and Eligible Customers to prepare to meet their Decision Point I requirements.

**Tariff, Part VIII, Subpart C, section 406**  
**Decision Point I**

A. Requirements

The Decision Point I shall commence on the first Business Day immediately following the end of Phase I. New Service Requests that are studied in Phase I will enter Decision Point I. Before the close of the Decision Point I, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such New Service Request must meet the requirements set forth below in Tariff, Part VIII, Subpart C, section 406(A)(2).

a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point I:

i. The applicable Readiness Deposit No. 2

(a) The Decision Point I Readiness Deposit No. 2 is to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase. The Decision Point I Readiness Deposit No. 2 will be calculated by the Transmission Provider during Phase I, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.

(b) At Decision Point I, the Readiness Deposit No. 2 required shall be an amount equal to:

- (i) the greater of (i) 10 percent of the cost allocation for the Network Upgrades as calculated in Phase I or (ii) the Readiness Deposit No. 1 paid by the Project Developer with its New Service Request during the Application Phase; minus
- (ii) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase

- (c) The Readiness Deposit No. 2 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 2).
  - b. Project Developers must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:
    - i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional one-year term beginning from last day of the relevant Cycle, Phase I.
      - (a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
      - (b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
        - (i) Such Site Control evidence shall cover 50 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
      - (c) If applicable, Interconnection Switchyard Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
        - (i) Such Site Control evidence shall cover 50 percent of the acreage required for the identified required Interconnection Switchyard facilities associated with a New Service Request.
  - c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such

adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.

- d. Evidence of air and water permits (if applicable)
- e. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
- f. Submission of New Service Request data for Phase II System Impact Study.
- g. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 406(A)(1)(a) through (f) above, before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- h. If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 406(A)(1)(a) through (f) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 406(A)(1)(b) through (e) above, as follows:
  - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase II.
  - iv. Transmission Provider's review of the above required elements may run co-extensively with Phase II.

2. Acceleration at Decision Point I. Upon completion of the Phase I System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.

a. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements before the close of Decision Point I:

i. Security

(a) Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.

ii. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request

iii. Project Developer must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:

(a) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase I.

(i) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

(b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.

(i) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required

### Interconnection Facilities associated with a New Service Request.

- (c) If applicable, Interconnection Switchyard Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.
- (i) Such Site Control evidence shall cover 100 percent of the acreage required identified required Interconnection Switchyard associated with a New Service Request.
- iv. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 406(A)(2)(a)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 406(A)(2)(a)(i), (ii) and (iii) above.
- (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 406(A)(2)(a)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
- (1) Such condition precedent shall not be extended under any circumstances for any reason.
- b. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.



- c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.
- d. For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- e. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 406(A)(2)(a) through (d) above (noting the exception provided for Site Control), before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- f. If Project Developer or Eligible Customer subject to Acceleration at Decision Point I submits all elements in Tariff, Part VIII, Subpart C, section 406(A)(2)(a) through (d) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 406(A)(2)(a) through (d) above, as follows:
  - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related

agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

3. For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point I to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:

a. Security. Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.

b. Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request

c. Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402 and is also in accordance with the following additional specifications:

i. Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

(a) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

- (a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
- iii. If applicable, Interconnection Switchyard Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
- (a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- iv. PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase I through a date that extends three years beyond the full execution date of the relevant state level interconnection agreement with the applicable entity
- v. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, section 406(A)(3)(c)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, section 406(A)(3)(c)(i), (ii) and (iii) above.
  - (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, section 406(A)(3)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

- (i) Such condition precedent shall not be extended under any circumstances for any reason.
- d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle
- e. Evidence of a fully executed state level Interconnection Agreement with the applicable entity
- f. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- g. If Project Developer fails to submit all of the criteria in Tariff, Part VIII, section 406(A)(3)(a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's New Service Request shall be deemed terminated and withdrawn.
- h. When Project Developer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in Tariff, Part VIII, section 406(A)(3)(a) through (f) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, section 406(A)(3)(a) through (f) above, as follows:

- i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer of deficiencies within 10 Business Days after the close of Decision Point I.
- ii. Project Developer then has five Business Days to respond to Transmission Provider's deficiency determination.
- iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

#### 4. New Service Request Withdraw or Termination at Decision Point I

- a. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point I. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point I, the Transmission Provider must receive before the close of the Decision Point I Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
- b. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point I requirements, as set forth in this Tariff, Part VIII, Subpart C, section 406.
- c. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - i. For Readiness Deposits:
    - (a) At the conclusion of Transmission Provider's deficiency review for Decision Point I or upon voluntary withdrawal of a New Service Request, refund to the Project Developer or Eligible Customer 50 percent of Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase, and 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during this Decision Point I; and

(b) At the conclusion of the Cycle, refund to Project Developer or Eligible Customer up to 50 percent of Readiness Deposit No. 1 pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).

ii. At the conclusion of Transmission Provider's deficiency review for Decision Point I, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.

B. New Service Request Modification Requests at Decision Point I

1. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.

2. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 100 percent of the requested amount

3. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.

4. Point of Interconnection.

a. The Point of Interconnection must be finalized before the close of the Decision Point I Phase.

i. Project Developer may only move the location of the Point of Interconnection 1) along the same segment of transmission line, as defined by the two electrical nodes located on the transmission line as modeled in the Phase I Base Case Data, or 2) move the location of the Point of Interconnection to a different breaker position within the same substation, subject to Transmission Owner review and approval. Project Developer may not modify its Point of Interconnection to/from a transmission line from/to a direct connection into a substation.

(a) Project Developer must notify Transmission Provider in writing of any changes to its Point of Interconnection prior

to the close of Decision Point I. No modifications to the Point of Interconnection will be accepted for any reason after the close of Decision Point I.

5. Generating Facility or Merchant Transmission Facility Site Changes

Project Developer may specify a change to the project Site only if:

- a. the Project Developer satisfied the requirements for Site Control for both the initial Site proposed in the New Service Request Application and the newly proposed Site; and
- b. the initial Site and the proposed Site are adjacent parcels.
- c. Such Site Control is subject to the verification procedures set forth in Tariff, Subpart C, sections 406(A)(1) and 406(A)(3).

6. Equipment Changes

- a. During Decision Point I, Project Developer may modify its Interconnection Request for updated equipment data. Project Developer shall submit machine modeling data as specified in the PJM Manuals before the close of Decision Point I.

**Tariff, Part VIII, Subpart C, section 407**  
**Phase II**

**A. Phase II Rules**

- 1. This Tariff, Part VIII, Subpart C, section 407 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase II of the Cycle process. After the Decision Point I phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase II of a Cycle will commence. During Phase II of a Cycle, the Transmission Provider shall conduct the Phase II System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VIII, Subpart C, section 406, Decision Point I phase, will be included in the Phase II System Impact Study.**
  - a. The Phase II System Impact Study analysis will retool load flow results based on decisions made during Decision Point I, and perform short circuit and stability analyses as required.**
  - b. The Phase II System Impact Study will identify Affected Systems, if applicable.**
    - i. If an Affected System Study Agreement is required, the Transmission Provider shall notify the Project Developer or Eligible Customer prior to the end of Phase II by posting on the Transmission Provider's website of the need for Project Developer or Eligible Customer to enter into an Affected System Study Agreement.**
  - c. The Phase II System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.**
  - d. Facilities Study. During the Phase II System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VIII, Subpart C, section 404(A)(7).**
  - e. Start and Duration of Phase II**
    - i. Phase II shall start on the first Business Day immediately following the end of the Decision Point I unless the Decision Point III of the immediately preceding Cycle is still open. In no event shall Phase II of a Cycle commence before the conclusion of the Decision Point III Phase of the immediately preceding Cycle.**
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase II within 180 days from the date such Phase II commenced. If the 180th day does not fall on a Business Day, Phase II shall be**



extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase II within 180 days, the Transmission Provider shall notify all impacted Project Developers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase II.

**Tariff, Part VIII, Subpart C, section 408**  
**Decision Point II**

**A. Requirements**

Decision Point II shall commence on the first Business Day immediately following the end of Phase II. New Service Requests that are studied in Phase II will enter Decision Point II. Before the close of Decision Point II, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such new Service Request must meet the requirements set forth below in Tariff, Part VIII, Subpart C, section 408(A)(2)(d).

a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:

b. The applicable Readiness Deposit No. 3

i. The Decision Point II Readiness Deposit No. 3 to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase, and the Readiness Deposit No. 2 that was submitted at Decision Point I. The Decision Point II Readiness Deposit No. 3 will be calculated by the Transmission Provider during Phase II, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.

ii. The Decision Point II Readiness Deposit No. 3 required amount shall be an amount equal to the greater of:

(a) (i) 20 percent of the cost allocation for the Network Upgrades as calculated in Phase II or (ii) the Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase plus the Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I; minus

- (b) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase, plus the Readiness Deposit No. 2 amount paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I.
- iii. The Readiness Deposit No. 3 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 3).
- c. Notification in writing that Project Developer or Eligible Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its New Service Request.
- d. Evidence of Site Control. There are no Site Control evidentiary requirements at Decision Point II.
- e. Evidence of air and water permits (if applicable).
- f. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
- g. Submission of New Service Request Data for Phase III System Impact Study data.
- h. Evidence that Project Developer or Eligible Customer entered into a fully executed Affected System Study Agreement, if applicable to its New Service Request by the later of Decision Point II or 60 days after notification from Transmission Provider that an Affected System Study Agreement is required.
- i. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

- j. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 408(A)(1)(a) through (i) above, before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- 2. If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 408(A)(1)(a) through (i) above, then, at the close of the Decision Point II, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 408(A)(1)(a) through (i) above, as follows:
  - a. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point II.
  - b. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - c. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase III.
    - i. Transmission Provider's review of the above required elements may run co-extensively with Phase III.
  - d. Acceleration at Decision Point II. Upon completion of the Phase II System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.
    - i. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:
      - (a) Security
        - (i) Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.

(b) Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request

(c) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:

(i) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase II.

(1) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

(ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.

(1) Such Site Control evidence shall cover 100 percent of the linear distance for identified required Interconnection Facilities associated with a New Service Request.

(iii) If applicable, Interconnection Switchyard Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.

(1) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.

e. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart

A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(d)(i)(c)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(d)(i)(c)(i), (ii) and (iii) above.

i. If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(d)(i)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

(a) Such condition precedent shall not be extended under any circumstances for any reason.

(b) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.

(c) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM

Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.

- (d) For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- (e) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 408(A)(2)(e)(i)(a) through (d) above (noting the exception provided for Site Control), before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (f) If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 408(A)(2)(e)(i)(a) through (d) above, then, at the close of the Decision Point II, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 408(A)(2)(e)(i)(a) through (d) above, as follows:

  - (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

- (g) For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point II to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:
- (h) Security. Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.
- (i) Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request
- (j) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:

  - (i) Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase II that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

    - (1) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
  - (ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of



the relevant Cycle, Phase II that extends through the full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

(1) Such Site Control evidence shall cover 100% percent of linear distance for the identified required Interconnection Facilities associated with a New Service Request.

(iii) If applicable, Interconnection Switchyard Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase II that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

(1) Such Site Control evidence shall cover 100 percent of acreage required for the identified required Interconnection Switchyard associated with a New Service Request.

(iv) PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase II through a date that extends three years beyond the full execution date of the relevant state level interconnection agreement with the applicable entity

(v) If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(j)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(j)(i), (ii) and (iii) above.

(1) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(j)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

(1.a) Such condition precedent shall not be extended under any circumstances for any reason.

(k) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle

(l) Evidence of a fully executed state level Interconnection Agreement with the applicable entity

- (m) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- (n) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 408(A)(2)(a) through (m) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (o) When Project Developer or Eligible Customer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in Tariff, Part VIII, Subpart C, section 408(A)(2)(a) through (m) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 408(A)(2)(a) through (m) above, as follows:

  - (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

B. New Service Request Withdraw or Termination at Decision Point II

1. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point II. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point II, the Transmission Provider must receive before the close of the Decision Point II Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
2. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point II requirements, as set forth in this Tariff, Part VIII, Subpart C, section 408.
3. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - a. For Readiness Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to Project Developer or Eligible Customer 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during Decision Point I;
    - ii. At the conclusion of the Cycle, refund to Project Developer or Eligible Customer up to 100 percent of Readiness Deposit No. 1 pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).
  - b. For Study Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
    - ii. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VIII, Subpart C, section 408(B)(3)(a) and (b)(i), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer at the Application Phase and at the Decision Point I Phase if the Project Developer's Network Upgrade cost from Phase I to Phase II:
      - (a) increases overall by 25 percent or more; and

(b) increases by more than \$10,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

4. New Service Request Modification Requests at Decision Point II

- a. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.
- b. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 10 percent of the values studied in Phase II.
- c. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.
- d. Point of Interconnection. The Point of Interconnection may not be changed or modified in any way for any reason at this point in the Cycle process.
- e. Generating Facility or Merchant Transmission Facility Site Changes. Project Developer may specify a change to the project Site only if the Project Developer satisfied the requirements for Site Control for both (i) the initial Site proposed in the New Service Request Application and the newly proposed Site; and (ii) the initial Site and the proposed Site are adjacent parcels. Such Site Control is subject to the verification procedures set forth in Tariff, Part VIII, Subpart C, section 410(A)(1)(c).
- f. Equipment Changes

During Decision Point II, Project Developer is limited to modifying its New Service Request to Permissible Technological Advancement changes only. Project Developer shall submit machine modeling data as specified in the PJM Manuals associated with the Permissible Technological Advancement before the close of Decision Point II.

**Tariff, Part VIII, Subpart C, section 409**  
**Phase III**

**A. Phase III Rules**

- 1. This Tariff, Part VIII, Subpart C, section 409 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase III of the Cycle process. After Decision Point II of a Cycle is completed and a group of valid New Service Requests is established therein, Phase III of a Cycle will commence. During Phase III of a Cycle, the Transmission Provider shall conduct a Phase III System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VIII, Subpart C, section 408, Decision Point II, will be included in the Phase III System Impact Study.**
  - a. The Phase III System Impact Study analysis will retool load flow, short circuit, and stability results based on decisions made in Decision Point II.**
  - b. The Phase III System Impact Study will include a final Affected System study, if applicable.**
  - c. Phase III System Impact Study results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.**
  - d. Facilities Study. During the Phase III System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VIII, Subpart C, section 404(A)(7).**
  - e. Start and Duration of Phase III**
    - i. Phase III shall start on the first Business Day immediately following the end of Decision Point II unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle.**
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase III within 180 days from the date such Phase III commenced. If the 180th day does not fall on a Business Day, Phase III shall be extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase III within 180 days, the Transmission Provider shall notify all impacted Project Developers or Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with**

an explanation of the reasons why additional time is required to complete Phase III.

f. Draft Agreement

Prior to the Final Agreement Negotiation Phase, Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX, as applicable to the Project Developer's or Eligible Customer's New Service Request, along with any applicable draft schedules, to the parties to such interconnection related agreement.

**Tariff, Part VIII, Subpart C, section 410**  
**Decision Point III**

A. Decision Point III shall commence on the first Business Day immediately following the end of Phase II, and shall run concurrently with the Final Agreement Negotiation Phase. New Service Requests that are studied in Phase II will enter Decision Point III. Before the close of Decision Point III, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point III for a New Service Request to remain in the Cycle and proceed through the Final Agreement Negotiation Phase as set forth below:

a. Security

i. Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results.

b. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request

c. Project Developers must present evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:

i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase III.

(a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence for an additional three-year term beginning from the last day of the relevant Cycle, Phase III.



- (a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
    - iii. Interconnection Switchyard, if applicable, Site Control evidence for an additional three-year term beginning from the last day of the relevant Cycle, Phase III.
      - (a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
    - iv. If Project Developer or Eligible Customer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 410(A)(1)(c)(i), (ii) and (iii) above, then Project Developer or Eligible Customer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer or Eligible Customer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 410(A)(1)(c)(i), (ii) and (iii) above.
      - (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 410(A)(1)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
        - (i) Such condition precedent shall not be extended under any circumstances for any reason.
  - d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s)

with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

- e. Project Developer or Eligible Customer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment. If Project Developer or Eligible Customer does not satisfy these requirements, these requirements can be addressed through a milestone in the applicable interconnection-related service agreement entered into pursuant to Tariff, Part IX.
- f. For state-level, non-jurisdictional interconnection projects, evidence of a fully executed Interconnection Agreement with the applicable entity.
- g. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 410(A)(1)(d)(a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.

B. If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 410(A)(1)(d)(a) through (f) above, then, at the close of the Decision Point III, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 410(A)(1)(d)(a) through (e) above, as follows:

- 1. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point III.
- 2. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
- 3. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to the Final Agreement Negotiation Phase.

Transmission Provider's review of the above required elements may run co-extensively with the Final Agreement Negotiation Phase.

4. If the New Service Request is deemed terminated and withdrawn by the Transmission Provider, then Transmission Provider shall:
  - a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;
  - b. Readiness Deposits will be treated pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).
  - c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
5. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point III. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point III, the Transmission Provider must receive before the close of Decision Point III written notification from the Project Developer or Eligible Customer of its decision to withdraw its New Service Request. Following receipt of such written notification from the Project Developer or Eligible Customer, the Transmission Provider shall:
  - a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;
  - b. Readiness Deposits will be treated pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).
  - c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
  - d. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VIII, Subpart C, section 410(B)(4)(b) and (c), and 410(B)(5)(b), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer if the Project Developer's or Eligible Customer's Network Upgrade cost from Phase II to Phase III:
    - i. increases overall by 35 percent or more; and
    - ii. increased by more than \$25,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

C. New Service Request Modification Requests at Decision Point III

New Service Requests may not be changed or modified in any way for any reason during Decision Point III. A New Service Request must be withdrawn and resubmitted in a subsequent Cycle to the extent a Project Developer or Eligible Customer wants to make any changes to such New Service Request at this point in the Cycle process.

Tariff, Part VIII, Subpart D  
FINAL AGREEMENT NEGOTIATION PHASE

**Tariff, Part VIII, Subpart D, section 411**  
**Final Agreement Negotiation Phase**

- A. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the end of Phase III, and shall run concurrently with Decision Point III. New Service Requests that enter Decision Point III will also enter the Final Agreement Negotiation Phase. The purpose of the Final Agreement Phase is to negotiate, execute and enter into a final interconnection related service agreement found in Tariff, Part IX, as applicable to a New Service Request; adjust the Security obligation based on New Service Requests withdrawn during Decision Point III and/or during the Final Agreement Negotiation Phase; and conduct any remaining analyses or updated analyses based on New Service Requests withdrawn during Decision Point III. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
1. If a New Service Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the New Service Request from the Cycle, and adjust the Security obligations of other New Service Requests based on the withdrawal.
- B. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:
1. Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX (as applicable to the Project Developer's or Eligible Customer's New Service Request), along with any applicable draft schedules, to the parties to such interconnection related agreement prior to the start of the Final Agreement Negotiation Phase.
- a. Subject to any withdrawn New Service Requests during Decision Point III that require Transmission Provider to update study results, the draft interconnection related agreement shall be prepared using the study results available from Phase III or the most-recently completed studies conducted during the Final Agreement Negotiation Phase.
- i. If a different New Service Request is withdrawn during Decision Point III after a draft agreement has been tendered to Project Developer or Eligible Customer, and that withdrawn New Service Request impacts the Project Developer's or Eligible Customer tendered draft, Transmission Provider shall use Reasonable Efforts to update and reissue the tendered draft within 15 Business Days.

## 2. Negotiation

Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60th day is not a Business Day, negotiations shall conclude on the next Business Day. Upon receipt of the draft agreements, Project Developer or Eligible Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

## 3. Impasse

If the Project Developer or Eligible Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

## 4. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final interconnection related agreement, along with any applicable schedules, to the parties in electronic form.

a. Not later than 15 Business Days after receipt of the final interconnection related agreement, Project Developer or Eligible Customer shall either:

- i. execute the final interconnection related service agreement in electronic form and return it to Transmission Provider electronically;
- ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
- iii. request in writing that Transmission Provider file with FERC the final interconnection related service agreement in unexecuted form

(a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.

iv. and provide any required adjustments to Security.

b. If Project Developer or Eligible Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:

i. execute the final interconnection related agreement in electronic form and return it to Transmission Provider electronically;

ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

iii. request in writing that Transmission Provider file with FERC the final interconnection related serviced agreement in unexecuted form.

(a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.

5. Parties may not proceed under such interconnection related service agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.



Tariff, Part VIII, Subpart E  
MISCELLANEOUS

**Tariff, Part VIII, Subpart E, section 412**  
**Assignment of Project Identifier**

- A. When an Application from a Project Developer or an Eligible Customer results in a valid New Service Request, in accordance with Tariff, Part VIII, Subpart B, section 403, Transmission Provider shall confirm the assigned Project Identifier to such request. For Project Developers and Eligible Customers, the Project Identifier will indicate the applicable Cycle, and will denote a number that represents the project within the Cycle. The Project Identifier is strictly for identification purposes, and does not indicate priority within a Cycle.
- B. When an Application from an Upgrade Customer results in a valid Upgrade Request, in accordance with Tariff, Part VIII, Subpart H, section 435, Transmission Provider shall confirm the assigned Request Number to such request. The Request Number will indicate the serial position and priority.
- C. When an Application from a Surplus Interconnection Service Customer results in a valid Surplus Interconnection Service Request, in accordance with Tariff, Part VIII, Subpart E, section 414, Transmission Provider shall confirm the assigned Surplus Service Request Number to such request. The Request Number will indicate the serial position and priority.

**Tariff, Part VIII, Subpart E, section 413**  
**Service Below Generating Capability**

The Transmission Provider shall consider requests for Interconnection Service below the full electrical generating capability of the Generating Facility. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of determining Interconnection Facilities, Network Upgrades, and associated costs, but may be subject to other studies at the full electrical generating capability of the Generating Facility to ensure the safety and reliability of the system, with the study costs borne by the Project Developer. If after additional studies are complete, Transmission Provider determines that additional Network Upgrades are necessary, then Transmission Provider must: (i) specify which additional Network Upgrade costs are based on which studies; and (ii) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrades costs required for safety and reliability also will be borne by the Project Developer. Project Developers may be subject to additional control technologies as well as testing and validation of these technologies as set forth in the GIA. The necessary control technologies and protection systems shall be established in Tariff, Part IX, Subpart B, Schedule K (Requirements for Interconnection Service Below Full Electrical Generating Capability) of the executed, or requested to be filed unexecuted, GIA.

**Tariff, Part VIII, Subpart E, section 414**  
**Surplus Interconnection Service**

**A Surplus Interconnection Service Request**

Requests for Surplus Interconnection Service may be made by the existing Project Developer whose Generating Facility is already interconnected, or one of its affiliates, or by an unaffiliated Project Developer. The existing Project Developer or one of its affiliates has priority to use this service; however, if they do not exercise this priority, Surplus Interconnection Requests also may be made available to an unaffiliated Surplus Project Developer. Surplus Interconnection Service is limited to utilizing or transferring an existing Generating Facility's Surplus Interconnection Service at the pre-existing Point of Interconnection of the existing Generating Facility and cannot exceed the existing Generating Facility's total amount of Interconnection Service, i.e., the total amount of Interconnection Service used by the Generating Facility requesting Surplus Interconnection Service and the existing Generating Facility shall not exceed the lesser of the Maximum Facility Output stated in the existing Generating Facility's Interconnection Service Agreement or Generator Interconnection Agreement, or the total "as-built capability" of the existing Generating Facility. If the Generating Facility requests Surplus Interconnection Service associated with an existing Generating Facility that is an Energy Resource, the Generating Facility requesting the Surplus Interconnection Service shall be an Energy Resource; and if the existing Generating Facility is a Capacity Resource, the Generating Facility requesting Surplus Interconnection Service associated with the Generating Facility may be an Energy Resource or a Capacity Resource (but only up to the amount of Capacity Interconnection Rights granted the existing Generating Facility). Surplus Interconnection Service cannot be granted if doing so would require new Network Upgrades or would have additional impacts affecting the determination of what Network Upgrades would be necessary to New Service Customers already in the New Services Queue or that have a material impact on short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response.

1. Surplus Interconnection Request Requirements. A Surplus Project Developer seeking Surplus Interconnection Service must submit a complete and fully executed Surplus Interconnection Study Agreement, which form is located at Tariff, Part IX. To be considered complete at the time of submission, the Surplus Project Developer's Surplus Interconnection Study Agreement must include, at a minimum, each of the following:
  - a. Specification of the location of the proposed surplus generating unit Site or existing surplus generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit Site); and
  - b. Evidence of an ownership interest in, or right to acquire or control the surplus generating unit Site for a minimum of three years, such as a deed, option agreement, lease or other similar document acceptable to the Transmission Provider; and

- c. The MW size of the proposed surplus generating unit or the amount of increase in MW capability of an existing surplus generating unit; and
- d. Identification of the fuel type of the proposed surplus generating unit or upgrade thereto; and
- e. Identification of the fuel type of the proposed surplus generating unit or upgrade thereto; and
- f. A description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the surplus generating unit is wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator; and
- g. The planned date the proposed surplus generating unit or increase in MW capability of an existing surplus generating unit will be in service; and
- h. Any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; and
- i. A description of the circumstances under which Surplus Interconnection Service will be available at the existing Generating Facility's Point of Interconnection; and
- j. A deposit in the amount of \$10,000 plus \$100 for each MW requested provided that the maximum total deposit amount for a Surplus Interconnection Request shall not exceed \$110,000. If any deposit monies remain after the Surplus Interconnection Study is complete and any outstanding monies owed by the Surplus Project Developer in connection with outstanding invoices related to prior New Service Requests and/or Surplus Interconnection Requests by the Surplus Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Surplus Project Developer; and
- k. Identification of the specific, existing Generating Facility already interconnected to the PJM Transmission System providing Surplus Interconnection Service, including whether the Surplus Project Developer requesting Surplus Interconnection Service is the owner or affiliate of the existing Generating Facility; and
- l. If the Surplus Project Developer is an unaffiliated third party, the Surplus Project Developer must submit with its Surplus Interconnection Study Agreement the following information and documentation acceptable to the Transmission Provider:

- i. Written evidence from the owner of the existing Generating Facility granting Surplus Project Developer permission to utilize the existing Generating Facility's unused portion of Interconnection Service established in the existing Generating Facility's Interconnection Service Agreement or Generation Interconnection Agreement; and
  - ii. Written documentation stating that the owner of the surplus generating unit and the owner of the existing Generating Facility will have entered into, prior to the owner of the existing Generating Facility executing a revised Interconnection Service Agreement or Generation Interconnection Agreement, a shared facilities agreement between the owner of the existing Generating Facility and the owner of the surplus generating unit detailing their respective roles and responsibilities relative to the Surplus Interconnection Service.
- m. If an Energy Storage Resource, Surplus Project Developer must submit primary frequency response operating range for the surplus generating unit.
- 2. Deficiency Review. Following the receipt of the Surplus Interconnection Study Agreement and requisite information and/or monies listed above, Transmission Provider shall determine whether the listed requirements were submitted as valid or deficient. If deemed deficient by Transmission Provider, Surplus Project Developer must submit the requisite information and/or monies acceptable to the Transmission Provider within 10 Business Days of receipt of the Transmission Provider's notice of deficiency. Failure of the Project Developer to timely provide information and/or monies identified in the deficiency notice shall result in the Surplus Interconnection Request being terminated and withdrawn. The Surplus Interconnection Service Request shall be considered valid as of the date and time the Transmission Provider receives from the Project Developer the last piece of required information and/or monies deemed acceptable by the Transmission Provider to clear such deficiency notice.

## B Surplus Interconnection Study

After receiving a valid Surplus Interconnection Study Agreement seeking Surplus Interconnection Service and the requisite deposit set forth in Tariff, Part VIII, Subpart E, section 414(A)(1)(j) from the Surplus Project Developer, the Transmission Provider shall conduct a Surplus Interconnection Study.

- 1. Scope of Surplus Interconnection Study. A Surplus Interconnection Study shall consist of reactive power, short circuit/fault duty, stability analysis and any other appropriate analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection

Service. The Transmission Provider shall use Reasonable Efforts to complete the Surplus Interconnection Study within one hundred eighty (180) days of determination of a valid Surplus Interconnection Service Request. If the Transmission Provider is unable to complete the Surplus Interconnection Study within such time period, Transmission Provider shall notify the Surplus Project Developer and provide an estimated completion date and an explanation of the reasons why the additional time is required.

2. Once the Surplus Interconnection Study is completed and Transmission Provider confirms that (i) no new Network Upgrades are required, (ii) there are no impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, and (iii) there are no material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, the Transmission Provider shall issue the Surplus Interconnection Study to the Surplus Project Developer. If the Surplus Project Developer is an unaffiliated third party, PJM shall issue a Surplus Interconnection Study to the owner of the existing Generating Facility. A revised Interconnection Service Agreement or Generation Interconnection Agreement will be prepared and issued to the owner of the existing Generating Facility within sixty days of issuance of the Surplus Interconnection Study including the terms and conditions for Surplus Interconnection Service. Within sixty days of receipt by the owner of the existing Generating Facility of the revised Interconnection Service Agreement or Generation Interconnection Agreement, the owner of the existing Generating Facility will execute the revised Interconnection Service Agreement or Generation Interconnection Agreement, request dispute resolution or request that the Interconnection Service Agreement or Generator Interconnection Agreement be filed unexecuted in accordance.
3. If the Transmission Provider determines from the Surplus Interconnection Study that Network Upgrades may be required or there may be impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, or there may be material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.
4. Deactivation of Existing Generating Facility

  - a. Surplus Interconnection Service cannot be offered if the existing Generating Facility from which Surplus Interconnection is provided is deactivated or has submitted a Notice to Deactivate to Transmission Provider consistent with Tariff, Part V, before the surplus generating unit has commenced commercial operation.
  - b. Limited Operation. A Generating Facility receiving Surplus Interconnection Service may continue to receive Surplus Interconnection

Service for a period not to exceed one year after the existing Generating Facility's Deactivation Date under the following conditions:

- i. The surplus generating unit must have been studied by the Transmission Provider for the sole operation at the Point of Interconnection; and
  - ii. The owner of the existing Generating Facility must agree in writing that the Surplus Project Developer may continue to operate at either its limited share of the existing Generating Facility's capability under its Interconnection Service Agreement or Generator Interconnection Agreement, or any level below such capability upon the deactivation of the existing Generating Facility.
- c. If the Surplus Project Developer cannot satisfy the conditions of this Tariff, Part VIII, Subpart E, section 414(B)(4)(b) above, the revised Interconnection Service Agreement or Generator Interconnection Agreement for the existing Generating Facility shall terminate consistent with the Interconnection Service Agreement or Generator Interconnection Agreement terms of termination for a deactivated Generating Facility.



**Tariff, Part VIII, Subpart E, section 415**  
**Behind The Meter Generation**

The following provisions shall apply with respect to Behind The Meter Generation:

A. New Service Requests

A Project Developer that desires to designate any Behind The Meter Generation, in whole or in part, as a Capacity Resource or Energy Resource must submit a New Service Request Application, a form of which is located in Tariff, Part IX, Subpart A.

B. Information Required in New Service Requests

The Project Developer must provide the information set forth in Tariff, Part VIII, Subpart B, section 403.

C. Transmission Provider Determination

During the Application Review Phase of a Cycle, Transmission Provider shall determine, based on the information included in the New Service Request Application, whether the proposed project meets the definition in Tariff, Part VIII, Subpart A, section 400 for Behind The Meter Generation. In the event that Transmission Provider finds that the subject project does not meet the definition of Behind The Meter Generation, it shall so notify the Project Developer during the deficiency review process pursuant to Tariff, Part VIII, Subpart B, section 403(B).

D. Treatment as Energy Resource

Any portion of the capacity of Behind The Meter Generation that a Project Developer identifies in its Application as capacity that it seeks to utilize, directly or indirectly, in Wholesale Transactions, but for which the customer does not seek Capacity Resource status, shall be deemed to be an Energy Resource.

E. Operation as Capacity Resource

To the extent that a Project Developer that owns or operates generation facilities that otherwise would be classified as Behind The Meter Generation elects to operate such facilities as a Capacity Resource, the provisions of the Tariff regarding Behind The Meter Generation shall not apply to such generation facilities for the period such election is in effect.

F. Other Requirements

Behind The Meter Generation for which a New Service Request is not required under Tariff, Part VIII may be subject to other interconnection-related requirements of a Transmission Owner or Electric Distributor with which the generation facility will be interconnected.

**Tariff, Part VIII, Subpart E, section 416**  
**Base Case Data**

Transmission Provider shall maintain base case power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on a password-protected website, subject to the confidentiality provisions of Tariff, Part VIII, Subpart E, section 425. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent Cycle. Transmission Provider may require Project Developers or Eligible Customers and password-protected website users to sign any required confidentiality agreement(s) before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

**Tariff, Part VIII, Subpart E, section 417**  
**Service on Merchant Transmission Facilities**

A. A Transmission Project Developer that will be a Merchant Transmission Provider shall:

1. At least 90 days prior to the anticipated date of commencement of Interconnection Service under its Generator Interconnection Agreement, provide the Transmission Provider with terms and conditions for reservation, interruption and curtailment priorities for firm and non-firm transmission service on the Merchant Transmission Provider's Merchant Transmission Facilities. Such terms and conditions shall be non-discriminatory and shall be consistent with the terms of the Commission's approval of the Merchant Transmission Provider's right to charge negotiated (market-based) rates for service on its Merchant Transmission Facilities. Transmission Provider shall post such terms and conditions applicable to service on the Merchant Transmission Facilities on its OASIS and shall file them with the Commission as a separate service schedule under the Tariff, with a proposed effective date on or before the anticipated date of commencement of Interconnection Service for the affected Transmission Project Developer; and (2) at least 15 days prior to the anticipated date of commencement of Interconnection Service for Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, provide the Transmission Provider with the results of a Commission-approved process for allocation of Transmission Injection Rights and Transmission Withdrawal Rights associated with such Merchant Transmission Provider's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, and with a listing of any Transmission Injection Rights and/or Transmission Withdrawal Rights not allocated in such process. Transmission Provider shall post such information on its OASIS.
2. Should the Merchant Transmission Provider fail to provide the Transmission Provider with the terms and conditions for service on the Merchant Transmission Provider's Merchant Transmission Facilities required under subsection (A)(1) of this section, firm and non-firm transmission service on such Merchant Transmission Facilities shall be subject to the terms and conditions regarding reservation, interruption and curtailment priorities applicable to Firm or Non-Firm Point-to-Point Transmission Service on the Transmission System.
3. Except as otherwise provided under this Tariff, Part VIII, Subpart E, section 417, transmission service on, and operation of, Merchant Transmission Facilities shall be subject to the terms and conditions (including in particular, but not limited to, those relating to Transmission Provider's authority in the event of an emergency) applicable to Transmission Service under the Tariff and the Operating Agreement.

**Tariff, Part VIII, Subpart E, section 418**  
**Local Furnishing Bonds**

**A. Transmission Owners That Own Facilities Financed by Local Furnishing Bonds**

This provision is applicable only to a Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in section 142(f) of the Internal Revenue Code (“local furnishing bonds”). Notwithstanding any other provision of Part IV or Part VI, Transmission Provider shall not be required to provide Interconnection Service to Project Developer pursuant to Part IV or Part VI if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner’s facilities that would be used in providing such Interconnection Service.

**B. Alternative Procedures for Requesting Interconnection Service**

A Transmission Owner that believes the provision of Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner’s facilities that would be used in providing such Interconnection Service, it shall so notify Transmission Provider within 30 days after the Transmission Owner receives a copy of the Project Developer’s Interconnection Request. If Transmission Provider determines that the provision of Interconnection Service requested by Project Developer would jeopardize the tax-exempt status of the Transmission Owner’s local furnishing bonds, it shall so advise the Project Developer within 30 days after receipt of notice of such jeopardy from the affected Transmission Owner. Project Developer thereafter may renew its request for interconnection using the process specified in Tariff, Part I, section 5.2(ii).

**Tariff, Part VIII, Subpart E, section 419**  
**Internal Dispute Resolution Procedures**

Any dispute between a Transmission Customer or New Service Customer, an affected Transmission Owner, or the Transmission Provider involving transmission or interconnection service under the Tariff (excluding applications for rate changes or other changes to the Tariff which shall be presented directly to the Commission for resolution) shall be referred to a designated senior representative of each of the parties to the dispute for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within 30 days (or such other period as the parties to the dispute may agree upon) by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

A. To the extent these Internal Dispute Resolution Procedures are invoked with regard to an unpaid invoice, any additional related subsequent unpaid invoices shall be considered to be a part of the initial internal dispute invoked under this section in order to avoid multiple internal dispute claims involving the same matter.

1. If the additional related subsequent unpaid invoices arise after the determination of the initial internal dispute but no new material claims are raised, then these Internal Dispute Resolution Procedures shall not be available with regard to such additional related subsequent unpaid invoices, and the matter shall either be submitted directly to arbitration and resolved in accordance with the arbitration procedures set forth below.

2. To the extent a party repeatedly fails to pay invoices related to the same matter and subsequently invokes these Internal Dispute Resolution Procedures multiple times concerning the same matter, the Transmission Provider may refer the matter to the Federal Energy Regulatory Commission Office of Enforcement.

B. Non-Binding Dispute Resolution Procedures

If a party has submitted a notice of dispute pursuant to Tariff, Part I, section 8.1 and the parties are unable to resolve the dispute through unassisted or assisted negotiation within the 30 days (or such other period as the parties to the dispute may agree upon) provided in that section, and the parties cannot reach mutual agreement to pursue Tariff, Part I, section 8.2 arbitration process, a party may request that Transmission Provider engage in non-binding dispute resolution pursuant to this Tariff, Part VIII, Subpart E, section 419 by providing written notice to Transmission Provider. Conversely, either party may file a request for non-binding dispute resolution pursuant to this section without first seeking mutual agreement to pursue Tariff, Part I, section 8.2 arbitration process. The process in this section shall serve as an alternative to, and not a replacement of, the Tariff, Part I, section 12.2 arbitration process. Pursuant to this process, the Transmission Provider must within 30 days of receipt of the request for this non-binding dispute resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with either party. Unless otherwise

agreed to by the parties, the decision-maker shall render a decision within sixty days of appointment and shall notify the parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of the Tariff and relevant service agreement and shall have no power to modify or change any provision of the Tariff or relevant service agreement in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Tariff, Part I, section 12.2 arbitration, or in a Federal Power Act, section 206 complaint. Each party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each party to the dispute.

**Tariff, Part VIII, Subpart E, section 420**  
**Responsibilities of Transmission Provider and Transmission Owners**

Transmission Provider shall be responsible for the preparation of all studies required by the Tariff. Transmission Provider may contract with consultants, including the affected Transmission Owner(s), to obtain services or expertise with respect to any such study, including but not limited to (1) the need for Interconnection Facilities, Network Upgrades, and Merchant Transmission Upgrades, (2) estimates of costs and construction times required by all such studies, and (3) information regarding distribution facilities. Transmission Owner(s) shall supply such information and data reasonably required by Transmission Provider to perform its obligations under this Part VIII.

**Tariff, Part VIII, Subpart E, section 421**  
**Additional Upgrades**

In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a New Service Request or Upgrade Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the New Service Request or Upgrade Request, a New Service Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its New Service Request or Upgrade Request. The remaining costs shall be borne by the Transmission Owners in accordance with Operating Agreement, Schedule 6 and, subject to FERC approval, may be included in the revenue requirements of the Transmission Owners.



**Tariff, Part VIII, Subpart E, section 422**  
**IDR Transfer Agreement**

**A. Effect of IDR Transfer Agreement**

A Project Developer may modify its cost responsibility for Network Upgrades and/or Distribution Upgrades as determined under this Tariff, Part VIII, Subpart C, section 404(A)(5) by submitting an IDR Transfer Agreement in accordance with Tariff, Part VIII, Subpart E, section 422(B) that transfers to the Project Developer Incremental Deliverability Rights associated with Merchant Transmission Facilities. As provided in Tariff, Part VIII, Subpart E, section 422(B), the Project Developer's cost responsibility shall be modified only if it elects to terminate, and Transmission Provider confirms termination of, its participation in and cost responsibility for any Network Upgrade or Distribution Upgrade.

**B. IDR Transfer Agreements**

**1. Purpose**

A Project Developer (hereafter in this Tariff, Part VIII, Subpart E, section 422(B) the "Buyer Customer") may acquire Incremental Deliverability Rights assigned to another Project Developer (hereafter in this Tariff, Part VIII, Subpart E, section 422(B), the "Seller Customer") by entering into an IDR Transfer Agreement with the Seller Customer. Subject to the terms of this Tariff, Part VIII, Subpart E, section 422(B), the Buyer Customer may rely upon such Incremental Deliverability Rights to satisfy, in whole or in part, its responsibility for Network Upgrades and/or Distribution Upgrades otherwise necessary to accommodate the Buyer Customer's Interconnection Request.

**2. Requirements**

A Buyer Customer may rely upon Incremental Deliverability Rights to satisfy, in whole or in part, the deliverability requirements applicable to its Interconnection Request only if it submits to Transmission Provider an IDR Transfer Agreement executed by both the Buyer Customer and the Seller Customer and only if such agreement meets all of the following requirements:

**a. Required Elements**

Any IDR Transfer Agreement submitted to Transmission Provider under this section:

- i. shall identify the Buyer Customer and the Seller Customer by full legal name, including the name of a contact person, with address and telephone number, for each party;**

- ii. shall identify the System Impact Study in which the Transmission Provider determined and assigned the Incremental Deliverability Rights transferred under the agreement;
- iii. if the Seller Customer acquired the Incremental Deliverability Rights to be transferred under the proffered agreement from another party, shall describe the chain of title of such Incremental Deliverability Rights from their original holder to the Seller Customer;
- iv. shall provide for the unconditional and irrevocable transfer of the subject Incremental Deliverability Rights to the Buyer Customer;
- v. shall include a warranty of the Seller Customer to the Buyer Customer and to the Transmission Provider that the Seller Customer holds, or has a legal right to acquire, the Incremental Deliverability Rights to be transferred under the proffered agreement;
- vi. shall identify the location and shall state unequivocally the quantity of Incremental Deliverability Rights transferred under the agreement, provided that the transferred quantity may not exceed the total quantity of Incremental Deliverability Rights that the Seller Customer holds or has legal rights to acquire at the relevant location; and
- vii. shall identify any IDR Transfer Agreement under which the Seller Customer previously transferred any Incremental Deliverability Rights associated with the same location.

b. Optional Election

When it submits the IDR Transfer Agreement to Transmission Provider, the Buyer Customer also (a) may identify any Network Upgrade or Distribution Upgrade for which the Buyer Customer has been assigned cost responsibility in association with a then-pending Interconnection Request submitted by it and for which it believes the Incremental Deliverability Rights transferred to it under the proffered IDR Transfer Agreement would satisfy the deliverability requirement applicable to such Interconnection Request; and (b) shall state whether it chooses to terminate its participation in (and cost responsibility for) any such Network Upgrade or Distribution Upgrade.

3. Subsequent Election

A Buyer Customer that has submitted a valid IDR Transfer Agreement may elect to terminate its participation in any Network Upgrade or Distribution Upgrade for

which it has not previously made such an election, at any time prior to its execution of a Generation Interconnection Agreement related to the Interconnection Request with respect to which it was assigned responsibility for the affected facility or upgrade. The Buyer Customer must notify Transmission Provider in writing of such an election and its election shall be subject to Transmission Provider's determination and confirmation under Tariff, Part VIII, Subpart E, section 422(B)(4).

#### 4. Confirmation by Transmission Provider

- a. Transmission Provider shall determine whether and to what extent the Incremental Deliverability Rights transferred under an IDR Transfer Agreement would satisfy the deliverability requirements applicable to the Buyer Customer's Interconnection Request. Transmission Provider shall notify the parties to the IDR Transfer Agreement of its determination within 30 days after receipt of the agreement. If the Transmission Provider determines that the IDRs transferred under the proffered agreement would not satisfy, in whole or in part, the deliverability requirement applicable to the Buyer Customer's Interconnection Request, its notice to the parties shall explain the reasons for its determination and, to the extent of Transmission Provider's negative determination, the parties' IDR Transfer Agreement shall not be queued as an Interconnection Request pursuant to Tariff, Part VIII, Subpart E, section 422(B)(6). Any dispute regarding Transmission Provider's determination may be submitted to dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5.
- b. To the extent that an election of the Buyer Customer under Tariff, Part VIII, Subpart E, section 422(B)(2)(b) or section 422(B)(3) to terminate participation in any Network Upgrade or Distribution Upgrade is consistent with Transmission Provider's determination, Transmission Provider shall confirm Buyer's termination election and shall recalculate accordingly the Buyer Customer's cost responsibility under Tariff, Part VIII, Subpart C, section 404(A)(5), as applicable. Transmission Provider shall provide its confirmation, along with any recalculation of cost responsibility, under this section in writing to the Buyer Customer within 30 days after receipt of notice of the Buyer Customer's election to terminate participation.

#### 5. Effect of Election on Interconnection Request

In the event that the Buyer Customer, pursuant to a confirmed election under this Tariff, Part VIII, Subpart E, section 422(B), terminates its participation in any Network Upgrade or Distribution Upgrade and the Interconnection Request underlying the Incremental Deliverability Rights acquired by the Buyer Customer under its IDR Transfer Agreement subsequently is terminated and withdrawn, or

deemed to be so, then the Buyer Customer's New Service Request also shall be deemed to be concurrently terminated and withdrawn.

6. Effect on Interconnection Studies

Each IDR Transfer Agreement shall be deemed to be a New Service Request and shall be queued, and shall be reflected as appropriate in subsequent System Impact Studies, with other New Service Requests received under the Tariff. The Buyer Customer shall be the Project Developer for purposes of application of the provisions of Tariff, Part VIII, including, in the event that Transmission Provider determines that further analysis of the relevant IDRs is necessary, provisions relating to responsibility for the costs of Interconnection Studies.

**Tariff, Part VIII, Subpart E, section 423**  
**Regional Transmission Expansion Plan**

- A. Any Interconnection Facilities, Direct Assignment Facilities, Distribution Upgrades, or Network Upgrades constructed to accommodate a New Service Request or an Affected System facility shall be included in the Regional Transmission Expansion Plan upon their identification in an interconnection-related agreement in the form set forth in Tariff, Part IX. For purposes of this Part VIII, Subpart E, section 423, an Affected System facility is a facility, that in the event that interconnection of a new or expanded generation or transmission facility with an Affected System, requires Distribution Upgrades or Network Upgrades to the Transmission Provider's Transmission System.
- B. In the event that termination of a New Service Customer's participation in a previously identified Network Upgrade or Distribution Upgrade pursuant to Tariff, Part VIII, Subpart E, section 422, eliminates the need for such upgrade, Transmission Provider shall offer all New Service Customers whose New Service Requests preceded the IDR Transfer Agreement that facilitated such termination an opportunity to pursue and pay for (in whole or in part) such upgrade.
- C. Transmission Provider shall remove from the Regional Transmission Expansion Plan any Network Upgrade or Distribution Upgrade in the event that the need for such upgrade is eliminated due to termination of a New Service Customer's participation in such upgrade and other New Service Customers do not pursue and pay for the upgrade pursuant to Tariff, Part VIII, Subpart E, section 422.

**Tariff, Part VIII, Subpart E, section 424**  
**Transmission Owner Construction Obligation for Necessary Facilities and Upgrades**

**A. Construction Obligation**

The determination of the Transmission Owners' obligations to build the necessary facilities and upgrades to accommodate New Service Requests, or interconnections with Affected Systems in accordance with Tariff, Part VIII, Subpart G, section 434, shall be made in the same manner as such responsibilities are determined under Operating Agreement, Schedule 6. Except to the extent otherwise provided in a Generation Interconnection Agreement or Construction Service Agreement entered into pursuant to this Part VIII, the Transmission Owners shall own all Interconnection Facilities and Network Upgrades constructed to accommodate New Service Requests.

**B. Alternative Facilities and Upgrades**

Upon completion of the studies of a New Service Request or Upgrade Request prescribed in the Tariff, the Transmission Provider shall recommend the necessary facilities and upgrades to accommodate the New Service Request or Upgrade Request, and the Transmission Owner's construction obligation to build such facilities and upgrades. The Transmission Owner(s), or the Project Developer, Eligible Customer or Upgrade Customer, may offer alternatives to the Transmission Provider's recommendation. If, based upon its review of the relative costs and benefits, the ability of the alternative(s) to accommodate the New Service Request or Upgrade Request, and the alternative's(s') impact on the reliability of the Transmission System, the Transmission Provider does not adopt such alternative(s), the Transmission Owner(s), or the Project Developer, Eligible Customer, or Upgrade Customer, may require that the alternative(s) be submitted to Dispute Resolution in accordance with Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. The affected Project Developer, Eligible Customer, Upgrade Customer may participate in any such Dispute Resolution process.

**Tariff, Part VIII, Subpart E, section 425**  
**Confidentiality**

Except as otherwise provided in this Tariff, Part VIII, Subpart E, section 425, all information provided to Transmission Provider by Project Developers, Eligible Customers, or Upgrade Customers relating to any study of a New Service Request or Upgrade Request, required under the Tariff shall be deemed Confidential Information under Tariff, Part VIII, Subpart E, section 425. Upon completion of each study, the study will be listed on Transmission Provider's website and, to the extent required by Commission regulations, will be made publicly available upon request. To the extent that Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of any of the studies required under the Tariff, the consultants and/or Transmission Owner(s) shall keep all information provided by Project Developers confidential, and shall use such information solely for the purpose of the study for which it was provided and for no other purpose.

A. Confidential Information

For purposes of this Tariff, Part VIII, Subpart E, section 425, the term "party" refers to Project Developer, Eligible Customer, Upgrade Customer, Transmission Provider, or a Transmission Owner, as applicable, and the term "parties" refers to all such entities collectively, or to any two or more of them, as the context indicates. Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the party providing the information orally informs the party receiving the information that the information is confidential. If requested by any party, the disclosing party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting party may disclose such writing to an appropriate Governmental Authority. Any party shall be responsible for the costs associated with affording confidential treatment to its information.

1. Term

During the longest of the terms of (as and to the extent applicable) interconnection-related service agreement set forth in Tariff, Part IX and for a period of three years after the expiration or termination thereof, and except as otherwise provided in this Tariff, Part VIII, Subpart E, section 425, each party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other party.

2. Scope

Confidential Information shall not include information that the receiving party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving party; (ii) was in the lawful possession of the receiving party on a non-confidential basis before receiving it from the disclosing party; (iii) was supplied to the receiving party without restriction by a third party, who, to the

knowledge of the receiving party, after due inquiry, was under no obligation to the disclosing party to keep such information confidential; (iv) was independently developed by the receiving party without reference to Confidential Information of the disclosing party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving party or breach of the requirements of this Tariff, Part VIII, Subpart E, section 425; or (vi) is required, in accordance with Tariff, Part VIII, Subpart E, section 425(A)(7) below, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Tariff or any agreement entered into pursuant thereto. Information designated as Confidential Information shall no longer be deemed confidential if the party that designated the information as confidential notifies the other parties that it no longer is confidential.

### 3. Release of Confidential Information

No party shall disclose Confidential Information to any other person, except to its Affiliates (limited by the Commission's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be, or may be considering, providing financing to or equity participation in Project Developer, Eligible Customer, or Upgrade Customer, or to potential purchasers or assignees of Project Developer, Eligible Customer, or Upgrade Customer, on a need-to-know basis in connection with the interconnected-related service agreement, unless such person has first been advised of the confidentiality provisions of this Tariff, Part VIII, Subpart E, section 425(A) and has agreed to comply with such provisions. Notwithstanding the foregoing, a party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Tariff, Part VIII, Subpart E, section 425(A).

### 4. Rights

Each party retains all rights, title, and interest in the Confidential Information that it discloses to any other party. A party's disclosure to another party of Confidential Information shall not be deemed a waiver by any party or any other person or entity of the right to protect the Confidential Information from public disclosure.

### 5. No Warranties

By providing Confidential Information, no party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no party obligates itself to provide any particular information or Confidential Information to any other party nor to enter into any further agreements or proceed with any other relationship or joint venture.

### 6. Standard of Care



Each party shall use at least the same standard of care to protect Confidential Information it receives as the party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each party may use Confidential Information solely to fulfill its obligations to the other parties under this Tariff, Part VIII or any agreement entered into pursuant to this Tariff, Part VIII.

7. Order of Disclosure

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that party shall provide the party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing party may seek an appropriate protective order or waive compliance with the terms of this Tariff, Part VIII or any applicable agreement entered into pursuant to this Tariff, Part VIII. Notwithstanding the absence of a protective order or agreement, or waiver, the party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the party is legally compelled to disclose. Each party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

8. Termination of Agreement(s)

Upon termination of any agreement entered into pursuant to this Tariff, Part VIII for any reason, each party shall, within 10 calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

9. Disclosure to FERC or its Staff

Notwithstanding anything in this Tariff, Part VIII, Subpart E, section 425(A) to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the parties that is otherwise required to be maintained in confidence pursuant to this Tariff, Part VIII or any agreement entered into pursuant to this Tariff, Part VIII, the party receiving such request shall provide the requested information to FERC or its staff within the time provided for in the request for information.

In providing the information to FERC or its staff, the party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other parties prior to the release of the Confidential Information to the Commission or its staff. A party shall

notify the other party(ies) to any agreement entered into pursuant to this Tariff, Part VIII when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

10. Other Disclosures

Subject to the exception in Tariff, Part VIII, Subpart E, section 425(A)(9), no party shall disclose Confidential Information of another party to any person not employed or retained by the disclosing party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing party to be required in connection with a dispute between or among the parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Tariff, Part VIII or any agreement entered into pursuant to this Tariff, Part VIII, or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another party's Confidential Information under this Tariff, Part VIII, Subpart E, section 425(A)(10), the disclosing party shall promptly notify the other parties in writing and shall assert confidentiality and cooperate with the other parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order, or other reasonable measures.

11. Information in Public Domain:

This confidentiality provision shall not apply to any information that was or is hereafter in the public domain, except as a result of a breach of this confidentiality provision.

12. Return or Destruction of Confidential Information

If a party provides any Confidential Information to another party in the course of an audit or inspection, the providing party may request the other party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other party that it has complied with such request.

**Tariff, Part VIII, Subpart E, section 426**  
**Capacity Interconnection Rights**

**A. Purpose**

Capacity Interconnection Rights shall entitle the holder to deliver the output of a Generation Capacity Resource at the bus where the Generation Capacity Resource interconnects to the Transmission System. The Transmission Provider shall plan the enhancement and expansion of the Transmission System in accordance with Operating Agreement, Schedule 6 such that the holder of Capacity Interconnection Rights can integrate its Capacity Resources in a manner comparable to that in which each Transmission Owner integrates its Capacity Resources to serve its Native Load Customers.

**B. Receipt of Capacity Interconnection Rights**

Generation accredited under the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA") as a Generation Capacity Resource prior to the original effective date of Tariff, Part IV shall have Capacity Interconnection Rights commensurate with the size in megawatts of the accredited generation. When a Generation Project Developer's generation is accredited as deliverable through the applicable procedures of the Tariff, the Generation Project Developer also shall receive Capacity Interconnection Rights commensurate with the size in megawatts of the generation as identified in the Generation Interconnection Agreement. Pursuant to the applicable terms of RAA, Schedule 10, a Transmission Project Developer may combine Incremental Deliverability Rights associated with Merchant Transmission Facilities with generation capacity that is not otherwise accredited as a Generation Capacity Resource for the purposes of obtaining accreditation of such generation as a Generation Capacity Resource and associated Capacity Interconnection Rights.

**C. Loss of Capacity Interconnection Rights**

**1. Operational Standards**

To retain Capacity Interconnection Rights, the Generation Capacity Resource associated with the rights must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with RAA, Schedule 9 and the PJM Manuals. Generation Capacity Resources that meet these operational standards shall retain their Capacity Interconnection Rights regardless of whether they are available as a Generation Capacity Resource or are making sales outside the PJM Region.

**2. Failure to Meet Operational Standards**

This Tariff, Part VIII, Subpart E, section 426(C)(2) shall apply only in circumstances other than Deactivation of a Generation Capacity Resource. In the event a Generation Capacity Resource fails to meet the operational standards set forth in Tariff, Part VIII, Subpart E, section 426(C)(1) for any consecutive three-

year period (with the first such period commencing on the date Generation Project Developer must demonstrate commercial operation of the generating unit(s) as specified in the Generation Interconnection Agreement), the holder of the Capacity Interconnection Rights associated with such Generation Capacity Resource will lose its Capacity Interconnection Rights in an amount commensurate with the loss of generating capability. Any period during which the Generation Capacity Resource fails to meet the standards set forth in Tariff, Part VIII, Subpart E, section 426(C)(1) as a result of an event that meets the standards of a Force Majeure event as defined in Tariff, Part I, section 1 shall be excluded from such consecutive three-year period, provided that the holder of the Capacity Interconnection Rights exercises due diligence to remedy the event. A Generation Capacity Resource that loses Capacity Interconnection Rights pursuant to this section may continue Interconnection Service, to the extent of such lost rights, as an Energy Resource in accordance with (and for the remaining term of) its Generation Interconnection Agreement and/or applicable terms of the Tariff.

### 3. Replacement of Generation

In the event of the Deactivation of a Generation Capacity Resource (in accordance with Tariff, Part V and any Applicable Standards), or removal of Capacity Resource status (in accordance with Tariff, Attachment DD, section 6.6 or Tariff, Attachment DD, section 6.6A), any Capacity Interconnection Rights associated with such Generating Facility shall terminate one year from the Deactivation Date, or one year from the date the Capacity Resource status change takes effect, unless the holder of such rights (including any holder that acquired the rights after Deactivation or removal of Capacity Resource status) has submitted a completed Generation Interconnection Request up to one year after the Deactivation Date, or up to one year from the date the Capacity Resource status changes take effect, which claims the same Capacity Interconnection Rights in accordance with Tariff, Part VIII, Subpart B, section 403(D). A Generation Project Developer must submit any claim for Capacity Interconnection Rights from deactivating units concurrently with its Application for Interconnection Service, and the claim must be received by Transmission Provider prior to the Application Deadline, or Transmission Provider will not process the claim. Such new Generation Interconnection Request may include a request to increase Capacity Interconnection Rights in addition to the replacement of the previously deactivated amount, or amount removed from Capacity Resource status, as a single Generation Interconnection Request. Transmission Provider may perform thermal, short circuit, and/or stability studies, as necessary and in accordance with the PJM Manuals, due to any changes in the electrical characteristics of any newly proposed equipment, or where there is a change in Point of Interconnection, which may result in the loss of a portion or all of the Capacity Interconnection Rights as determined by such studies.

Upon execution of a Generation Interconnection Agreement reflecting its new Generation Interconnection Request, the holder of the Capacity Interconnection Rights will retain only such rights that are commensurate with the size in megawatts

of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights associated with the facility upon Deactivation or removal of Capacity Resource status. Any desired increase in Capacity Interconnection Rights must be reflected in the new Generation Interconnection Request and be accredited through the applicable procedures in Tariff, Part IV and Tariff, Part VI. In the event the new Generation Interconnection Request to which this section refers is, or is deemed to be, terminated and/or withdrawn for any reason at any time, the pertinent Capacity Interconnection Rights shall not terminate until the end of the one-year period from the Deactivation Date, or the end of the one year period from the date the Capacity Resource status change takes effect.

#### 4. Transfer of Capacity Interconnection Rights

Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by Transmission Provider regarding such transfer and notice to Transmission Provider of any Generating Facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in Tariff, Part VIII, Subpart E, section 426(C)(2) regarding loss of Capacity Interconnection Rights.

**Tariff, Part VIII, Subpart E, section 427**  
**Incremental Rights**

**A. Incremental Auction Revenue Rights**

**1. Right of Transmission Project Developer or Upgrade Customer to Incremental Auction Revenue Rights**

A Transmission Project Developer or Upgrade Customer that (a) pursuant to this Tariff, Part VIII reimburses Transmission Provider for the costs of constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, shall be entitled to receive the Incremental Auction Revenue Rights as determined in accordance with this Tariff, Part VIII, Subpart E, section 427(A). However, a Transmission Project Developer that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System shall be entitled to Incremental Auction Revenue Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Transmission Project Developer has elected, pursuant to Tariff, Part VIII, Subpart E, section 428, to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

**2. Procedures for Assigning Incremental Auction Revenue Rights**

No less than 45 days prior to the in-service date, as determined by the Office of the Interconnection, of the applicable transmission facility or upgrade related to a New Service Request or Upgrade Request, the Office of the Interconnection shall notify the Transmission Project Developer or Upgrade Customer that has responsibility to reimburse the costs of, or responsibility for, constructing or completing the transmission facility or upgrade, that initial requests for Incremental Auction Revenue Rights associated with the transmission facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with Tariff, Part VIII, Subpart E, section 427(A)(3).

In round two, two-thirds of the Incremental Auction Revenue Rights available for each requested point-to-point combination in that round will be assigned in accordance with Tariff, Part VIII, Subpart E, section 427(A)(3). In round three, all

available Incremental Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with Tariff, Part VIII, Subpart E, section 427(A)(3). In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental Auction Revenue Rights assignment in rounds one and two will result in the Incremental Auction Revenue Rights being available for the next round. The Incremental Auction Revenue Rights assignments made in round three will be final and binding. For each round, a request for Incremental Auction Revenue Rights shall specify a single point-to-point combination for which the Transmission Project Developer or Upgrade Customer desires Incremental Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the upgrade.

3. Determination of Incremental Auction Revenue Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Auction Revenue Rights to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VIII, Subpart E, section 427(A)(2) using the tools described in Tariff, Attachment K, including an assessment of the simultaneous feasibility of any Incremental Auction Revenue Rights and all other outstanding Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system Auction Revenue Rights capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate New Service Requests or Upgrade Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the Auction Revenue Rights capability, including the impact of any new transmission facilities or upgrades. For each point-to-point combination, the Incremental Auction Revenue Rights capability shall be the difference between the Auction Revenue Rights capability in the base system analysis and the Auction Revenue Rights capability in the analysis including the impact of the new transmission facilities and upgrades. When multiple Transmission Project Developers or Upgrade Customers have cost responsibility for the same new transmission facility or upgrade, Incremental Auction Revenue Rights shall be assigned to each Transmission Project Developer or Upgrade Customer in proportion to the Transmission Project Developer's or Upgrade Customer's relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or



interfaces of the point-to-point combinations selected by the Transmission Project Developer or Upgrade Customer.

#### 4. Duration of Incremental Auction Revenue Rights

Incremental Auction Revenue Rights received by a Transmission Project Developer or Upgrade Customer pursuant to this Tariff, Part VIII, Subpart E, section 427(A) shall be available as of the first day of the first month that the Network Upgrades required to accommodate its New Service Request or Upgrade Request that are associated with the Incremental Auction Revenue Rights are included in the transmission system model for the monthly FTR auction and shall continue to be available for 30 years or for the life of the associated facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all Auction Revenue Rights (including Incremental Auction Revenue Rights) in accordance with Tariff, Attachment K - Appendix. At any time during this 30-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this 30-year Auction Revenue Right, the Transmission Project Developer, or Upgrade Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the Transmission Project Developer or Upgrade Customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to Tariff, Attachment K – Appendix, section 7.4.2) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to Tariff, Attachment K – Appendix, section 7.5. A Transmission Project Developer or Upgrade Customer may return Incremental Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding Auction Revenue Rights following the return of such Auction Revenue Rights. In the event a Transmission Project Developer or Upgrade Customer returns Incremental Auction Revenue Rights, the Transmission Project Developer or Upgrade Customer shall have no further rights regarding such Incremental Auction Revenue Rights.

#### 5. Value of Incremental Auction Revenue Rights

The value of Incremental Auction Revenue Right(s) to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VIII, Subpart E, section 427(A)(2) that become effective at the beginning of a Planning Period shall be determined in the same manner as annually allocated Auction Revenue Right(s) based on the nodal prices resulting from the annual Financial Transmission Rights auction. The value of such Incremental Auction Revenue Rights that become effective after the commencement of a Planning Period shall be determined on a monthly basis for each month in the Planning Period beginning with the month the Incremental Auction Revenue Right(s) becomes effective. The value of such Incremental Auction Revenue Right shall be equal to the megawatt amount of the Incremental Auction Revenue Rights multiplied by the LMP differential between



the source and sink nodes of the corresponding FTR obligations in each prompt-month FTR auction that occurs from the effective date of the Incremental Auction Revenue Rights through the end of the relevant Planning Period. For each Planning Period thereafter, the value of such Incremental Auction Revenue Rights shall be determined in the same manner as Incremental Auction Revenue Rights that became effective at the beginning of a Planning Period.

6. Rate-based Facilities

No Incremental Auction Revenue Rights shall be received by a Transmission Project Developer or Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

B. Incremental Capacity Transfer Rights

1. Right of Transmission Project Developer or Upgrade Customer to Incremental Capacity Transfer Rights

A Transmission Project Developer that interconnects Merchant Transmission Facilities with the Transmission System shall be entitled to receive any Incremental Capacity Transfer Rights that are associated with the interconnection of such Merchant Transmission Facilities as determined in accordance with this Tariff, Part VIII, Subpart E, section 427(B). In addition, an Upgrade Customer that (a) reimburses Transmission Provider for the costs of constructing or completing Customer-Funded Upgrades, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Customer-Funded Upgrades shall be entitled to receive any Incremental Capacity Transfer Rights associated with such required facilities and upgrades as determined in accordance with this Tariff, Part VIII, Subpart E, section 427(B).

a. Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities

A Transmission Project Developer (a) that interconnects Merchant D.C. transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Capacity Transfer Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under Tariff, Attachment C.

## 2. Procedures for Assigning Incremental Capacity Transfer Rights

After execution of a Study Agreement but prior to the issuance of an Interconnection Agreement or Upgrade Construction Service Agreement, a Transmission Project Developer or Upgrade Customer may request the Office of the Interconnection to determine the Incremental Capacity Transfer Rights as measured by the increase in Capacity Emergency Transfer Limit resulting from the interconnection or addition of Merchant Transmission Facilities or a Customer-Funded Upgrade identified in the System Impact Study for the related New Service Request. At the time of such request, the Transmission Project Developer or Upgrade Customer must also specify no more than three Locational Deliverability Areas in which to determine the Incremental Capacity Transfer Rights. Subject to the limitation of Tariff, Part VIII, Subpart E, section 427(B)(1)(a), the Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with Merchant Transmission Facilities to the Transmission Project Developer that is interconnecting such facilities. The Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with a Customer-Funded Upgrade to the Upgrade Customer(s) bearing cost responsibility for such facility or upgrade in proportion to each Upgrade Customer's cost responsibility for the facility or upgrade.

## 3. Determination of Incremental Capacity Transfer Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Capacity Transfer Rights to be provided to Transmission Project Developers or Upgrade Customers in accordance with the applicable terms of the Reliability Pricing Model, in Tariff, Attachment DD, and pursuant to the procedures specified in the PJM Manuals.

## 4. Duration of Incremental Capacity Transfer Rights

Incremental Capacity Transfer Rights received by a Transmission Project Developer or Upgrade Customer shall be effective for 30 years from, as applicable, commencement of Interconnection Service, Transmission Service, or Network Service for the affected Transmission Project Developer or Upgrade Customer or the life of the pertinent facility or upgrade, whichever is shorter, subject to any subsequent pro-rata reallocations of all Capacity Transfer Rights (including Incremental Capacity Transfer Rights) in accordance with the PJM Manuals.

## 5. Rate-based Facilities

No Incremental Capacity Transfer Rights shall be received by a Transmission Project Developer or Upgrade Customer with respect to transmission investment

that is included in the rate base of a public utility and on which a regulated return is earned.

### C. Incremental Deliverability Rights

#### 1. Right of Transmission Interconnection Customer to Incremental Deliverability Rights

A Transmission Project Developer shall be entitled to receive the Incremental Deliverability Rights associated with its Merchant Transmission Facilities as determined in accordance with this section, provided, however, that a Transmission Project Developer that proposes to interconnect Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area shall be entitled to Incremental Deliverability Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to Tariff, Part VIII, Subpart E, section 428, to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

#### 2. Procedures for Assigning Incremental Deliverability Rights

Transmission Provider shall include in the System Impact Study a determination of the Incremental Deliverability Rights associated with the Transmission Project Developer's Merchant Transmission Facilities. Transmission Provider shall post on its OASIS the Incremental Deliverability Rights that it assigns to the Transmission Project Developer under this section 427(C)(2).

#### 3. Determination of Incremental Deliverability Rights to be Provided to Transmission Project Developer

Transmission Provider shall determine the Incremental Deliverability Rights to be provided to a Transmission Project Developer associated with proposed Merchant Transmission Facilities under Tariff, Part VIII, Subpart E, section 427(C)(2) pursuant to procedures specified in the PJM Manuals.

#### 4. Duration of Incremental Deliverability Rights

Incremental Deliverability Rights assigned to a Transmission Project Developer shall be effective until the earlier of the date that is one year after the commencement of Interconnection Service for such customer or the date that such Transmission Project Developer's New Service Request is withdrawn and terminated, or deemed to be so, in accordance with the Tariff. Notwithstanding the preceding sentence, Incremental Deliverability Rights that are transferred pursuant to an IDR Transfer Agreement under the Tariff shall be deemed to be Capacity

Interconnection Rights of the generation owner that acquires them under such agreement upon commencement of Interconnection Service related to the generation owner's Generating Facility and shall remain effective for the life of such Generating Facility, or for the life of the Merchant Transmission Facilities associated with the transferred IDRs, whichever is shorter. The deemed conversion of IDRs to Capacity Interconnection Rights under this Tariff, Part VIII, Subpart E, section 427(C)(4) shall not affect application to such IDRs of the other provisions of this Tariff, Part VIII, Subpart E, section 427(C). A Transmission Project Developer may return Incremental Deliverability Rights that it no longer desires at any time. In the event that a Transmission Project developer returns Incremental Deliverability Rights, it shall have no further rights regarding such Incremental Deliverability Rights.

5. Transfer of Incremental Deliverability Rights

Incremental Deliverability Rights may be sold or otherwise transferred at any time after they are assigned pursuant to Tariff, Part VIII, Subpart E, section 427(C)(2), subject to execution and submission of an IDR Transfer Agreement in accordance with the Tariff. The transfer of Incremental Deliverability Rights shall not itself extend the periods set forth in Tariff, Part VIII, Subpart E, section 427(C)(7) regarding loss of Incremental Deliverability Rights.

6. Effectiveness of Incremental Deliverability Rights

Incremental Deliverability Rights shall not entitle the holder thereof to use the capability associated with such rights unless and until Transmission Provider commences Interconnection Service related to the Merchant Transmission Facilities associated with such rights.

7. Loss of Incremental Deliverability Rights

Incremental Deliverability Rights shall be extinguished (a) in the event that the New Service Request of the Transmission Project Developer to which the rights were assigned is withdrawn and terminated, or deemed to be so, as provided in the Tariff, without regard for whether the rights have been transferred pursuant to an IDR Transfer Agreement, or (b) such rights are not transferred pursuant to an IDR Transfer Agreement on or before the date that is one year after the commencement of Interconnection Service related to the Merchant Transmission Facilities with which the rights are associated.

8. Rate-based Facilities

No Incremental Deliverability Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

**Tariff, Part VIII, Subpart E, section 428**  
**Rights for Transmission Interconnections**

**A. Transmission Injection Rights and Transmission Withdrawal Rights**

**1. Purpose**

Transmission Injection Rights shall entitle the holder, as provided in this Tariff, Part VIII, Subpart E, section 428, to schedule energy transmitted on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities for injection into the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System. Transmission Withdrawal Rights shall entitle the holder, as provided in this Tariff, Part VIII, Subpart E, section 428, to schedule for transmission on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities energy to be withdrawn from the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System.

**2. Receipt of Transmission Injection Rights and Transmission Withdrawal Rights**

Subject to the terms of this Tariff, Part VIII, Subpart E, section 428, a Transmission Project Developer that constructs Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with the Transmission System and with another control area outside the PJM Region shall be entitled to receive Transmission Injection Rights and/or Transmission Withdrawal Rights at each terminal where such Transmission Project Developer's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. A Transmission Project Developer that is granted Firm Transmission Withdrawal Rights and/or transmission service customers that have a Point of Delivery at the border of the PJM Region where the Transmission System interconnects with the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, may be responsible for a reasonable allocation of transmission upgrade costs added to the Regional Transmission Expansion Plan, in accordance with Tariff, Part I, section 3E and Tariff, Schedule 12. Notwithstanding the foregoing, any Transmission Injection Rights and Transmission Withdrawal Rights awarded to a Transmission Project Developer that interconnects Controllable A.C. Merchant Transmission Facilities shall be, throughout the duration of the Service Agreement applicable to such interconnection, conditioned on such Transmission Project Developer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

**a. Total Capability**

A Transmission Project Developer or other party may hold Transmission Injection Rights and Transmission Withdrawal Rights simultaneously at the same terminal on the Transmission System. However, neither the aggregate Transmission Injection Rights nor the aggregate Transmission Withdrawal Rights held at a terminal may exceed the Nominal Rated Capability of the interconnected Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, as stated in the associated Service Agreement(s).

3. Determination of Transmission Injection Rights and Transmission Withdrawal Rights to be Provided to Transmission Project Developer

The Office of the Interconnection shall determine the Transmission Injection Rights and the Transmission Withdrawal Rights associated with Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities to be provided to eligible Transmission Project Developer(s) pursuant to the procedures specified in the PJM Manuals. The Office of the Interconnection shall state in the System Impact Studies the Transmission Injection Rights and Transmission Withdrawal Rights (including the quantity of each type of such rights) to be made available to the Transmission Project Developer at the terminal(s) where the pertinent Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. Such rights shall become available to the Transmission Project Developer pursuant to the Interconnection Agreement and upon commencement of Interconnection Service thereunder.

4. Duration of Transmission Injection Rights and Transmission Withdrawal Rights

Subject to the terms of Tariff, Part VIII, Subpart E, section 428(A)(7), Transmission Injection Rights and/or Transmission Withdrawal Rights received by a Transmission Project Developer shall be effective for the life of the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities.

5. Rate-based Facilities

No Transmission Injection Rights or Transmission Withdrawal Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

6. Transfer of Transmission Injection Rights and Transmission Withdrawal Rights

Transmission Injection Rights and/or Transmission Withdrawal Rights may be sold or otherwise transferred subject to compliance with such procedures as

Transmission Provider may establish, by publication in the PJM Manuals, regarding such transfer and required notice to Transmission Provider of use of such rights after the transfer. The transfer of Transmission Injection Rights or of Transmission Withdrawal Rights shall not itself extend the periods set forth in Tariff, Part VIII, Subpart E, section 428(A)(7) regarding loss of such rights.

7. Loss of Transmission Injection Rights and Transmission Withdrawal Rights

a. Operational Standards

To retain Transmission Injection Rights and Transmission Withdrawal Rights, the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with applicable criteria stated in the PJM Manuals. Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that meet these operational standards shall retain their Transmission Injection Rights and Transmission Withdrawal Rights regardless of whether they are used to transmit energy within or to points outside the PJM Region.

b. Failure to Meet Operational Standards

In the event that any Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities fail to meet the operational standards set forth in this Tariff, Part VIII, Subpart E, section 428(A)(7) for any consecutive three-year period, the holder(s) of the associated Transmission Injection Rights and Transmission Withdrawal Rights will lose such rights in an amount reflecting the loss of first contingency transfer capability. Any period during which the transmission facility fails to meet the standards set forth in this Tariff, Part VIII, Subpart E, section 428(A)(7) as a result of an event that meets the standards of a Force Majeure event shall be excluded from such consecutive three-year period, provided that the owner of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities exercises due diligence to remedy the event.

B. Interconnection Rights for Certain Transmission Interconnections

1. Qualification to Receive Certain Rights

In order to obtain the rights associated with Merchant Transmission Facilities (other than Merchant Network Upgrades) provided under the Tariff, prior to the commencement of Interconnection Service associated with such facilities, a Transmission Interconnection Customer that interconnects or adds Merchant Transmission Facilities (other than Merchant Network Upgrades) to the



Transmission System must become and remain a signatory to the Consolidated Transmission Owners Agreement.

2. Upgrades to Merchant Transmission Facilities

In the event that Transmission Provider determines in accordance with the Regional Transmission Expansion Planning Protocol of Operating Agreement, Schedule 6 that an addition or upgrade to Merchant A.C. Transmission Facilities is necessary, the owner of such Merchant A.C. Transmission Facilities shall undertake such addition or upgrade and shall operate and maintain all facilities so constructed or installed in accordance with Good Utility Practice and with applicable terms of the Operating Agreement and the Consolidated Transmission Owners Agreement, as applicable. Cost responsibility for each such addition or upgrade shall be assigned in accordance with Operating Agreement, Schedule 6. Each Transmission Owner to whom cost responsibility for such an upgrade is assigned shall further be responsible for all costs of operating and maintaining the addition or upgrade in proportion to its respective assigned cost responsibilities.

3. Limited Duration of Rights in Certain Cases

Notwithstanding any other provision of this Tariff, Part VIII, Subpart E, section 428, in the case of any Merchant Transmission Facilities that solely involves advancing the construction of a transmission enhancement or expansion other than a Merchant Transmission Facility that is included in the Regional Transmission Expansion Plan, any rights available to such facility under this Tariff, Part VIII, Subpart E, section 428 shall be limited in duration to the period from the inception of Interconnection Service for the affected Merchant Transmission Facilities until the time when the Regional Transmission Expansion Plan originally provided for the pertinent transmission enhancement or expansion to be completed.



**Tariff, Part VIII, Subpart E, section 429**  
**Milestones**

A. In order to proceed with Generation Interconnection Agreement, within 60 days after receipt of the Phase III System Impact Study (or, if no Phase III System Impact Study was required, then after the results of either the Phase I or Phase II System Impact Study were provided on Transmission Provider's website):

1. Project Developer must demonstrate that it has:

- a. entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; and
- b. obtained any necessary local, county, and state site permits; and
- c. signed a memorandum of understanding for the acquisition of major equipment; and
- d. if applicable, obtained any necessary local, county, and state siting permits or other required approvals for the construction of its proposed Merchant D.C. Transmission Facilities or Merchant Controllable A.C. Transmission Facilities.

B. The Transmission Provider may include any additional related milestone dates beyond those included in the Generation Interconnection Agreement for the construction of the project Developer's generation project that, if not met, shall relieve the Transmission Provider and the Transmission Owner(s) from the requirement to construct the necessary facilities and upgrades.

- 1. If the milestone dates in the Generation Interconnection Agreement are not met, such Generation Interconnection Agreement may be deemed to be terminated and Transmission Provider may cancel such agreement with the Federal Energy Regulatory Commission, and the New Service Agreement may simultaneously be deemed to be terminated and withdrawn.
- 2. Such milestones may include site acquisition, permitting, regulatory certifications (if required), acquisition of any necessary third-party financial commitments, commercial operation, and similar events.
- 3. The Transmission Provider may reasonably extend any such milestone dates (including those required in order to proceed with an Generation Interconnection Agreement) in the event of delays not caused by the Project Developer, such as unforeseen regulatory or construction delays that could not be remedied by the Project Developer through the exercise of due diligence.

4. The Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B, provides Project Developer shall also have a one-time option to extend any milestone (other than any milestone related to Site Control) for a total period of one year regardless of cause. Other milestone dates stated in the Generation Interconnection Agreement shall be deemed to be extended coextensively with Project Developer's use this provision.
5. Termination and withdrawal of a New Service Request for failure to meet a milestone shall not relieve the Project Developer from reimbursing the Transmission Provider (for the benefit of the affected Transmission Owner(s)) for the costs incurred prior to such termination and withdrawal. Applicable provisions of the Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the CSA or the applicable Generation Interconnection Agreement was in effect.

**Tariff, Part VIII, Subpart E, section 430**  
**Winter Capacity Interconnection Rights**

By August 31 of each calendar year, PJM shall solicit requests from Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD. Such additional Capacity Interconnection Rights would be for a one-year period as specified by PJM in the solicitation. Responses to such solicitation must be submitted by such interested Generation Owners by October 31 prior to the upcoming Base Residual Auction. Such requests shall be studied for deliverability similar to any Generation Project Developer that seeks to submit a New Service Request; however, such requests shall not be required to submit a New Service Request. PJM shall study such requests in a manner so as to prevent infringement on available system capabilities of any resource which is already in service, or which has an executed service agreement from Tariff, Part IX, or that has a valid New Service Request in a Cycle.

**Tariff, Part VIII, Subpart E, section 431**  
**Interconnection Studies Processing Time and Metrics**

**A. Phase I System Impact Studies Processing Time**

- 1. Number of New Service Requests that had Phase I System Impact Studies completed within the six month reporting period.**
- 2. Number of New Service Requests that had Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 120 days, as determined in conformance with Tariff, Part VIII, Subpart C, section 405(A)(1)(b)(i).**
- 3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase I System Impact Studies exceeding 120 days, as determined in conformance with Tariff, Part VIII, Subpart C, section 405(A)(1)(b)(i).**
- 4. Mean time (in days), for Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period, from the date when Transmission Provider initiated the performance of the System Impact Studies to the date when Transmission Provider provided the completed Phase I System Impact Study to Project Developers.**
- 5. Percentage of New Service Requests with Phase I System Impact Studies exceeding 120 days as determined in conformance with Tariff, Part VIII, Subpart C, section 405(A)(1)(b)(i) to complete this six month reporting period, calculated as the sum of section 431(A)(2) plus 431(A)(3) divided by the sum of section 431(A)(1) plus 431(A)(3).**

**B. Phase II System Impact Studies Processing Time**

- 1. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period.**
- 2. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 407(A)(1)(e)(i) after the date the end of Decision Point I.**
- 3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 407(A)(1)(e)(i) after the end of Decision Point I.**

4. Mean time (in days), for Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period from the day after the end of Decision Point to the date when Transmission Provider provided the completed Phase II Interconnection System Impact Study to Project Developers.
5. Percentage of New Service Requests with Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 407(A)(1)(e)(i), to complete this six month reporting period, calculated as the sum of section 431(B)(2) plus 431(B)(3) divided by the sum of section 431(B)(1) plus 431(B)(3)).

C. Phase III System Impact Studies Processing Time

1. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period.
2. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 409(A)(1)(e)(i) after the end of Decision Point II.
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase III System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 409(A)(1)(e)(i) after the end of Decision Point II.
4. Mean time (in days), for Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period, from the day after the end of Decision Point II to the date when Transmission Provider provided the completed Phase III Interconnection System Impact Study to the Project Developers.
5. Percentage of New Service Requests with Phase III System Impact Studies exceeding the sum of 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 409(A)(1)(e)(i) to complete this six month reporting period, calculated as the sum of section 431(C)(2) plus 431(C)(3) divided by the sum of section 431(C)(1) plus 431(C)(3)).

D. Withdrawn New Service Requests

1. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period.

2. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period before the start of Planning Phase I.
3. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period from start of Phase I, to at or before the end of Decision Point I.
4. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point to at or before the end of Decision Point II.
5. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point II to before execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
6. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue after execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
7. Mean time (in days), for all withdrawn New Service Requests, from the date when the request was determined to be valid to when Transmission Provider received the request to withdraw from the Cycle.

E. Posting Requirements

Transmission Provider is required to post on its website the measures in Tariff, Part VIII, Subpart E, sections 431(A) through 431(D) for each six-month reporting period within 30 days of the end of the reporting period; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day. Transmission Provider will keep the measures posted on its website for three calendar years with the first required reporting year to be 2020.

F. Additional Compliance Requirements

In the event that any of the values calculated in Tariff, Part VIII, Subpart E, section 431(A)(5); Tariff, Part VIII, Subpart E, section 431(B)(5); or Tariff, Part VIII, Subpart E, section 431(C)(5) exceeds 25 percent for two consecutive reporting periods, Transmission Provider will have to comply with the measures below for the next two six-month reporting periods and must continue reporting this information until Transmission Provider reports two consecutive six-month reporting periods without the values calculated in Tariff, Part VIII, Subpart E, section 431(A)(5); Tariff, Part VIII, Subpart E, section 431(B)(5); or Tariff, Part VIII, Subpart E, section 431(C)(5) exceeding 25 percent for two consecutive six-month reporting periods:

1. Transmission Provider must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an New Service Request that exceeded its deadline (i.e., 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the reporting period.
2. Transmission Provider shall aggregate the total number of employee hours and third party consultant hours expended towards interconnection studies within its coordinated region that reporting period and post on its website. This information is to be posted within 30 days of the end of the reporting period.

**Tariff, Part VIII, Subpart E, section 432**  
**Transmission Provider Website Postings**

Transmission Provider shall maintain, on Transmission Provider's website, with regard to Project Developers, Eligible Customers and Upgrade Customers, the following:

- A. the Project Identifier;
- B. the proposed or incremental Maximum Facility Output and Capacity Interconnection Rights;
- C. the location of the project by state;
- D. the station or transmission line or lines where the interconnection will be made;
- E. the project's projected in-service date;
- F. the project's status;
- G. the type of service requested;
- H. the availability of any related studies;
- I. the type of project to be constructed.



Tariff, Part VIII, Subpart F  
WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL  
AGREEMENTS

**Tariff, Part VIII, Subpart F, section 433**  
**Wholesale Market Participation Agreement/Non-Jurisdictional Agreements**

- A. In some instances, Generation Project Developer may physically connect its Generating Facility to non-jurisdictional distribution or sub-transmission facilities in order to access the electrical Point of Interconnection on the Transmission System (the “POI”), for the purpose of engaging in FERC-jurisdictional Wholesale Transactions. In those instances, Generation Project Developer must enter into both a (1) non-jurisdictional interconnection agreement with the owner or operator of the non-jurisdictional distribution or sub-transmission facilities, which governs the physical connection of the Generating Facility to those non-jurisdictional facilities; and (2) a three-party Wholesale Market Participation Agreement (“WMPA”) with PJM and the affected Transmission Owner in order to effectuate Wholesale Transactions in PJM’s markets.
- B. Generation Project Developer shall follow the Application Rules of Tariff, Part VIII, Subpart C, section 403 that apply to a Generating Facility, and shall complete the Form of Application and System Impact Studies Agreement set forth in Tariff, Part IX, Subpart A (the “Application”). In the Application, Generation Project Developer shall indicate its intent to physically connect its Generating Facility to distribution or sub-transmission facilities that currently are not subject to FERC jurisdiction, for the purpose of injecting energy at the POI and engaging in FERC-jurisdictional Wholesale Transactions.
- C. Generation Project Developer shall provide with the Application a copy of the executed interconnection agreement that governs the physical connection of the Generating Facility to the non-jurisdictional distribution or sub-transmission facilities, if the interconnection agreement is available. If the interconnection agreement is not yet available, Generation Project Developer shall provide with the Application all available documentation demonstrating that Generation Project Developer has requested or applied for interconnection through the relevant non-jurisdictional process, and Generation Project Developer shall provide a status report.
- D. In order to proceed to the execution of a WMPA, Generation Project Developer must demonstrate that it has executed the non-jurisdictional interconnection agreement by no later than Decision Point III in the applicable Cycle.

**Tariff, Part VIII, Subpart G**  
**AFFECTED SYSTEM RULES**

**Tariff, Part VIII, Subpart G, section 434**  
**Affected System Rules**

**A. New Service Request Affected System Rules Where Affected System is an Electric System other than Transmission Provider's Transmission System**

**1. The Transmission Provider will coordinate with Affected System Operators the conduct of any studies required to determine the impact of a New Service Request on any Affected System and will include those results in the Phase II System Impact Study, if available from the Affected System.**

**a. The Transmission Provider will invite such Affected System Operators to participate in meetings held with the Project Developer as necessary, as determined by the Transmission Provider.**

**b. The Project Developer or Eligible Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate the New Service Request.**

**c. Transmission Provider shall contact any potential Affected System Operators and provide or otherwise coordinate information regarding each relevant New Service Request as required for the Affected System Operator's studies of the effects of such request.**

**d. If an affected system study agreement is required by the Affected System Operator, in order to remain in the relevant Cycle, Project Developer or Eligible Customer shall enter into an affected system study agreement with the Affected System Operator the later of: (i) the conclusion of Decision Point II of the relevant Cycle, or (ii) 60 days of Transmission Provider sending notification to Project Developer or Eligible Customer of the need to enter into such Affected System Study Agreement. If Project Developer or Eligible Customer fails to comply with these requirements, its New Service Request at issue shall be deemed terminated and withdrawn.**

**e. Affected System Study results will be provided by Phase II of the relevant Cycle, if available. To the extent Affected System results are included in the Phase II System Impact Study, the Project Developer shall be provided the opportunity to review such study results consistent with Tariff, Part VIII, Subpart C, section 407(A)(1)(c), as applicable**

**f.**

**i. The Project Developer or Eligible Customer shall be responsible for the costs of any identified facilities commensurate with the Affected System Operator's tariff's allocation of responsibility for such costs to such Project Developer or Eligible Customer if their project**

request has been initiated pursuant to such Affected System Operator's tariff.

ii. Neither the Transmission Provider, the relevant Transmission Owner(s) associated with such New Service Request, nor the Affected System Operator shall be responsible for making arrangements for any necessary engineering, permitting, and/or construction of transmission or distribution facilities on any Affected System or for obtaining any regulatory approval for such facilities.

(a) The Transmission Provider and the relevant Transmission Owner(s) will undertake Reasonable Efforts to assist the Project Developer or Eligible Customer in obtaining such arrangements, including, without limitation, providing any information or data required by such other Affected System Operator pursuant to Good Utility Practice.

2. In no event shall the need for upgrades to an Affected System delay Initial Operation of a Project Developer's Generating Facility or Merchant Transmission Facility. Notwithstanding the start of Initial Operation, Transmission Provider reserves the right to limit Generating Facility injections in the event of potential Affected System impacts, in accordance with Good Utility Practice. Total injections may be limited pending coordination and completion of any necessary deliverability studies by the Affect System Operator.

B. Affected System Rules Where Transmission Provider's Transmission System is the Affected System

1. An Affected System Customer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider's Transmission System must contact Transmission Provider as set forth in the PJM Manuals. Upon contact by the Affected System Customer, Transmission Provider will provide Affected System Customer with an Affected System Customer Facility Study Agreement (a form of which is found in Tariff, Part IX). The Affected System Customer must electronically sign Affected System Customer Facility Study Agreement, and concurrently provide the required Study Deposit, by wire transfer, of \$100,000.

a. Affected System Customer shall include the project identification or reference number assigned to the Affected System Facility by the Affected System Operator and attach the relevant Affected System Operator Study that identified the need for such Facilities Study Agreement.

i. Transmission Provider shall assign to Affected System Customer's project the same project identification or reference number used by the Affected System Operator.

- b. Transmission Provider shall not start the review of the Affected System Customer Facility Study Agreement until such agreement is complete and the required Study Deposit is received by the Transmission Provider.
    - c. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
      - i. Affected System Customer is responsible for, and must pay, all actual study costs.
      - ii. If Transmission Provider sends Affected System Customer notification of additional study costs, then Affected System Customer must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Affected System Customer Facility Study Agreement. If Affected System Customer fails to complete either (i) or (ii), then Transmission Provider shall deem the Affected System Customer Facility Study Agreement to be terminated and withdrawn.
  - 2. Transmission Provider shall cooperate with the Affected System Operator in all matters related to the conduct of studies and the determination of modifications to Transmission Provider's Transmission System.
  - 3. Upon receipt of the Affected System Customer Facility Study report, Transmission Provider and the Affected System Customer shall enter into a stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades if a Construction Service Agreement is required, or for each set of Common Use Upgrades on the system of such Transmission Owner if a Network Upgrade Cost Responsibility Agreement is required. Transmission Provider shall provide in electronic form a draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form.
    - a. For purposes of applying the stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) to the construction of such upgrades, the developer of the Affected System Facility shall be deemed to be a Project Developer pursuant to Tariff, Part VIII.
    - b. Such stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) shall be negotiated and executed within 60 days of the Transmission Provider's issuance of a draft version thereof. If the 60th day does not fall

on a Business Day, the phase shall be extended to end on the next Business Day. The 60 days shall run concurrently with the relevant Cycle process.

i. Security is required within 30 days of the Transmission Provider's issuance of the draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX). The Security obligation may be adjusted based on additional factors, including, but not limited to, New Service Requests or Upgrade Requests being withdrawn in the relevant Cycle. If the 30th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.

ii. Parties may use not more than 60 days to conduct negotiations concerning the draft Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement. Upon receipt of the draft agreement(s), Affected System Customer and Transmission Owner(s), as applicable, shall have no more than 20 Business Days to return written comments on the draft agreement(s). Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised draft(s) of the agreement(s) in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

c. If the Affected System Customer or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted Construction Service Agreement with the FERC.

d. Not later than 15 Business Days after receipt of the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement, Project Developer or Affected System Customer shall either:

i. execute the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form and return it to Transmission Provider electronically;

- ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
    - iii. request in writing that Transmission Provider file with FERC the final Construction Service Agreement or Network Upgrade Cost Responsibility Agreement unexecuted, with the unexecuted Construction Service Agreement or Network Upgrade Cost Responsibility Agreement containing terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.
  - e. If Affected System Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:
    - i. execute the final Construction Service Agreement in electronic form and return it to Transmission Provider electronically;
    - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
    - iii. request in writing that Transmission Provider file with FERC the final Construction Service Agreement unexecuted, with the unexecuted Construction Service Agreement containing terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.
  - f. Parties may not proceed under such Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.



Tariff, Part VIII, Subpart H  
UPGRADE REQUESTS

**Tariff, Part VIII, Subpart H, section 435**  
**Upgrade Requests**

A. Applicability

Tariff, Part VIII, Subpart H, section 435 applies to valid Upgrade Requests submitted on or after October 1, 2020, and sets forth the procedures and other terms governing the Transmission Provider's administration of Upgrade Requests for Upgrade Customers; procedures and other terms regarding studies and other processing of Upgrade Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to Upgrade Customers.

1. The Upgrade Request process applies to:

- a. Incremental Auction Revenue Rights (IARRs) requested Pursuant to the Operating Agreement of the PJM Interconnection, L.L.C. (Operating Agreement), Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8; and
- b. Merchant Network Upgrades that either upgrade facilities or advance existing Network Upgrades

B. Overview

1. Upgrade Requests are initiated by submission of a complete and executed Upgrade Application and Studies Agreement (a form of which is located in Tariff, Part IX, Subpart K).

- a. Upgrade Requests are processed serially, in the order in which an Upgrade Request is received.
  - i. An Upgrade Request shall be assigned a Request Number.
  - ii. Priority for Upgrade Requests is determined by the Request Number assigned.
  - iii. If the Upgrade Request is withdrawn or deemed to be terminated, such Upgrade Request project shall concurrently lose its priority position and will not be included in any further studies.
- b. Transmission Provider will use Reasonable Efforts to process an Upgrade Request within 15 months of receiving a valid Upgrade Request.

- i. A valid Upgrade Request that completes the Upgrade Request process shall ultimately enter into an Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E)
- ii. If the Transmission Provider is unable to process an Upgrade Request within 15 months of receiving a valid Upgrade Request, the Transmission Provider shall notify the impacted Upgrade Customer by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete the Upgrade Request process.

2. Required Study Deposits and Readiness Deposits.

- a. Upgrade Customers must submit, by wire transfer, a \$150,000 Study Deposit together with a completed and fully executed Upgrade Request. Ten percent of the Study Deposit is non-refundable. Upgrade Customers are responsible for actual study costs, which may exceed the Study Deposit amount.
  - i. If a Study Deposit monies remain after the System Impact Study is completed and any outstanding monies owed by Upgrade Customer in connection with outstanding invoices related to the present or prior Upgrade Requests or other New Service Requests have been paid, such remaining deposit monies shall be either:
    - (a) If Upgrade Customer decides to remain in the Upgrade Request process, applied to the Facilities Study; or
    - (b) If Upgrade Customer decides to withdraw its Upgrade Request from the Upgrade Request process, such remaining monies shall be returned, less actual study costs incurred, to the Upgrade Customer at the conclusion of the required studies for the Upgrade Request.
  - ii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
    - (a) Upgrade Customer is responsible for, and must pay, all actual study costs.
    - (b) If Transmission Provider sends Upgrade Customer notification of additional study costs, then Upgrade Customer must either: (i) pay all additional study costs within 20 days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Upgrade Request. If Upgrade Customer fails to complete either (i) or (ii), then

Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn.

b. If, after receiving the System Impact Study report, Upgrade Customer decides to remain in the Upgrade Request process, then Upgrade Customer must submit by wire transfer a Readiness Deposit within 30 days from the date that Transmission Provider provides the System Impact Study Report. The Readiness Deposit shall equal 20 percent of the cost of the Network Upgrades identified in the Upgrade Customer's System Impact Study. If the 30<sup>th</sup> day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.

i. Readiness Deposit refunds will be handled as follows:

(a) If the Upgrade Request is withdrawn or terminated after the Readiness Deposit has been provided, the Readiness Deposit refund amount will be determined by point at which the Upgrade Request was withdrawn or terminated, and the need for any additional subsequent restudies as a result of the withdraw or termination.

(b) If the project proceeds to a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), the Readiness Deposit will be refunded upon Upgrade Customer fully executing such agreement.

c. Study Deposits and Readiness Deposits are non-transferrable. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific Upgrade Request be applied in whole or in part to a different Upgrade Request, a New Service Request, or any other type of request.

3. Upgrade Request scope cannot include upgrades that are already included in the Regional Transmission Expansion Plan (with the exception of advancements) or subject to an existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

4. No Incremental Auction Revenue Rights shall be received by an Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

5. An Upgrade Customer cannot transfer, combine, swap or exchange all or part of an Upgrade Request with any other Upgrade Request or any other New Service Request within the same cycle.

6. Tariff, Part VIII, Subpart E, section 416, Base Case Data, requirements shall apply to Upgrade Requests. Transmission Provider will coordinate with Affected Systems as needed as set forth in the PJM Manuals.
7. Prior to entering into a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), an Upgrade Customer may assign its Upgrade Request to another entity only if the acquiring entity accepts and acquires all rights and obligations as identified in the Upgrade Request for such project.
8. Cost Allocation: Each Upgrade Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its Upgrade Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such Upgrade Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the Upgrade Request; or the construction of Supplemental Projects.
9. Where the Upgrade Request calls for accelerating the construction of a Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Upgrade Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

#### C. Initiating an Upgrade Request

An Upgrade Customer must submit to Transmission Provider, electronically through Transmission Provider's website, a completed and signed Upgrade Application and Studies Agreement ("Application"), a form of which is provided in Tariff, Part IX, Subpart K, including the required Study Deposit.

1. A Request Number shall be assigned based upon the date and time a completed and executed Upgrade Application and Studies Agreement and deposit is received by the Transmission Provider.

2. A valid Upgrade Request shall be established when the Transmission Provider receives the last required agreement element, including the required deposits, from the Upgrade Customer, and the deficiency review for such Upgrade Request is complete.

a. Application Requirements for Upgrade Requests Pursuant to Operating Agreement, Schedule 1, section 7.8

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

i. The MW amount of requested Incremental Auction Revenue Rights (IARRs), including the source and sink locations and desired commencement date, and;

ii. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VIII, Subpart H, section 435(B) Overview, above.

b. Application Requirements for Merchant Network Upgrade Requests

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

i. the MVA or MW amount by which the normal or emergency rating of the identified facility is to be increased, together with the desired in-service date; or the Regional Transmission Expansion Plan project number and planned and requested advancement dates;

ii. the substation or transmission facility or facilities where the upgrade(s) will be made;

iii. the increase in capability (in MW or MVA) of the proposed Merchant Network Upgrade;

iv. if requesting Incremental Capacity Transfer Rights (ICTRs), identification of up to three Locational Deliverability Areas (LDAs) in which to determine the ICTRs;

v. the planned date the proposed Merchant Network Upgrade will be in service, such date to be no more than seven years from the date the request is received by the Transmission Provider, unless the Upgrade Customer demonstrates that engineering, permitting, and

construction of the Merchant Network Upgrade will take more than seven years; and

- vi. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VIII, Subpart H, section 435(B) Overview, above.

D. Deficiency Review

Upon receiving a completed and executed Application, together with the Study Deposit, Transmission Provider will review the Application and establish the validity of the request, beginning with a deficiency review, as follows:

1. Transmission Provider will exercise Reasonable Efforts to inform Upgrade Customer of Application deficiencies within 15 Business Days after Transmission Provider's receipt of the completed Application.
2. Upgrade Customer then has 10 Business Days to respond to Transmission Provider's deficiency determination.
3. Transmission Provider then will exercise Reasonable Efforts to review Upgrade Customer's response within 15 Business Days, and then will either validate or reject the Application.

E. System Impact Study

After receiving a valid Upgrade Request, the Transmission Provider, in collaboration with the Transmission Owner, shall conduct a System Impact Study. Prior to the commencement of the System Impact Study, the Transmission Provider may have a scoping meeting with the Upgrade Customer to discuss the Upgrade Request.

1. System Impact Study Requirements

The System Impact Study shall identify the system constraints, identified with specificity by transmission element or flowgate, relating to the Upgrade Request included therein and any resulting Network Upgrades or Contingent Facilities required to accommodate such Upgrade Request.

The System Impact Study shall also include:

- a. the list and facility loading of all reliability criteria violations specific to the Upgrade Request.
- b. estimates of cost responsibility and construction lead times for new facilities and system upgrades.

c. include the amount of incremental rights available, as applicable

## 2. Contingent Facilities.

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Network Upgrades, upon which the Upgrade Customer's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the Upgrade Request or reassessment of the unbuilt Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies), including why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall also provide, upon request of the Upgrade Customer, the Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

### a. Minimum Thresholds to Identify Contingent Facilities

#### i. Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least five percent distribution factor (DFAX) or contributing at least five percent of the facility rating in the applicable model.

#### ii. Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

#### iii. Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

## 3. System Impact Study Results

Transmission Provider shall conduct a System Impact Study, and provide the Upgrade Customer a System Impact report on Transmission Provider's website.

To proceed with the Upgrade Request process, within 30 days of Transmission Provider issuing the System Impact Study report, Transmission Provider must receive from the Upgrade Customer:



a. a Readiness Deposit, by wire transfer, equal to 20 percent of the cost allocation for the Network Upgrades as calculated in the System Impact Study report.

b. Notification in writing that Upgrade Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its Upgrade Request.

If the 30th day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.

c. If Transmission Provider does not receive the Readiness Deposit equal to 20 percent from the Upgrade Customer within 30 days of Transmission Provider issuing the System Impact Study report, then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn, and the Upgrade Request will be removed from all studies and will lose its priority position.

d. No modifications of any type for any reason are permitted to the Upgrade Request at this point in the Upgrade Request process.

e. Upgrade Customer may not elect Option to Build after such date.

4. If the Readiness Deposit is received by the Transmission Provider within 30 days of the Transmission Provider issuing the System Impact Study report, Transmission Provider will proceed with the Facilities Study for the Upgrade Request.

#### F. Facilities Study

The Facilities Study will provide the final details regarding the type, scope and construction schedule of Network Upgrades and any other facilities that may be required to accommodate the Upgrade Request, and will provide the Upgrade Customer with a final estimate of the Upgrade Customer's cost responsibility for the Upgrade Request. Upon completion of the Facilities Study the Transmission Provider will provide the Facilities Study report on Transmission Provider's website, and provide a draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E).

#### G. Upgrade Customer Final Agreement Negotiation Phase

1. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the tendering of the Facilities Study. The purpose of the Final Agreement Negotiation Phase is to negotiate and enter into a final Upgrade Construction Service Agreement found in Tariff, Part IX, Subpart E; conduct any remaining analyses or updated analyses and adjust the Security obligation based on

higher priority Upgrade Request(s) withdrawn during the Final Agreement Negotiation Phase. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.

a. If an Upgrade Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the Upgrade Request from the Cycle, and adjust the Security obligations of other Upgrade Requests based on the withdrawal.

2. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:

Transmission Provider shall provide in electronic form a draft Upgrade Construction Service Agreement to the parties to such agreement prior to the start of the Final Agreement Negotiation Phase.

a. Security is required within 30 days of the Transmission Provider's issuance of the draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E). If the 30th day does not fall on a Business Day, the security due date shall be extended to end on the next Business Day.

b. Negotiation  
Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60<sup>th</sup> day is not a Business Day, negotiations shall conclude on the next Business Day. Upon receipt of the draft agreements, Upgrade Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

c. Impasse  
If the Upgrade Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

d. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final Upgrade Construction Service Agreement, to the parties in electronic form.

i. Not later than 15 Business Days after receipt of the final interconnection related agreement, Upgrade Customer shall either:

(a) execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;

(b) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

(c) request in writing that Transmission Provider file with FERC the final interconnection related service agreement unexecuted, with the final interconnection related service agreement containing terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.

ii. If an Upgrade Customer executes the final Upgrade Construction Service Agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:

(a) execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;

(b) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

(c) request in writing that Transmission Provider file with FERC the final Upgrade Construction Service Agreement in unexecuted form.

The unexecuted Upgrade Construction Service Agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the Upgrade Request.

- iii. Parties may not proceed under such Upgrade Construction Service Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

## H. Upgrade Construction Service Agreement

In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Upgrade Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system.

### 1. Cost Reimbursement

Pursuant to the Upgrade Construction Service Agreement, a Upgrade Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owners) for the Costs, determined in accordance with Tariff, Part VIII, Subpart C, section 404(A)(5) of constructing Distribution Upgrades, and/or Network Upgrades necessary to accommodate its New Service Request to the extent that the Transmission Owner is responsible for building such facilities pursuant to Tariff, Part VIII and the applicable Upgrade Construction Service Agreement. The Upgrade Construction Service Agreement shall obligate the Upgrade Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the Transmission Owner's expenditures for the design, engineering, and construction of the facilities that it is responsible for building pursuant to the Upgrade Construction Service Agreement are made. The Transmission Provider shall distribute the revenues received under this Tariff, Part VIII, Subpart H, section 435 to the affected Transmission Owner(s).

### 2. Upgrade-Related Rights

The Upgrade Construction Service Agreement shall specify Upgrade-Related Rights to which the Upgrade Customer is entitled pursuant to Tariff, Part VIII, Subpart E, sections 426, 427, 428, and 430, except to the extent the applicable terms of Tariff, Part VIII, Subpart E, sections 426, 427, 428, and 430 provide otherwise.

### 3. Specification of Transmission Owners Responsible for Facilities and Upgrades

The Facilities Study (or the System Impact Study, if a Facilities Study is not required) shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Upgrade Construction Service Agreement, for the

construction of facilities and upgrades, determined in a manner consistent with Operating Agreement, Schedule 6.

I. Withdraw or Termination

1. If an Upgrade Customer decides to withdraw its Upgrade Request, Transmission Provider must receive written notification from the Upgrade Customer of Upgrade Customer's decision to withdraw its Upgrade Request.
2. Transmission Provider may deem an Upgrade Request terminated and withdrawn for failing to meet any of the requirements, as set forth in this Tariff, Part VIII, Subpart H.
3. If an Upgrade Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the Upgrade Request process and all relevant models, and, as applicable, the Readiness Deposits and Study Deposits will be disbursed as follows:
  - a. For Readiness Deposits: At the conclusion of Transmission Provider's Facility Study, refund to the Upgrade Customer 100 percent of Readiness Deposit paid by the Upgrade Customer.
  - b. For Study Deposits: At the point at which the Upgrade Customer requested to withdraw the Upgrade Request or the Transmission Provider terminated the Upgrade Request, refund to the Upgrade Customer up to 90 percent of its Study Deposit submitted with its Upgrade Request during the Application less any actual costs for studies conducted up to and including the point of withdraw or termination of such Upgrade Request.
  - c. Up to and including the point of withdraw or termination of such Upgrade Request.

J. Transmission Provider Website Postings

The Transmission Provider shall maintain on the Transmission Provider's website a list of all Upgrade Requests. The list will identify, as applicable:

1. the increase in capability in megawatts (MW) or megavolt-amperes (MVA);
2. the megawatt amount of requested Incremental Auction Revenue Rights (IARRs);
3. the station or transmission line or lines where the upgrade(s) will be made;
4. the requested source and sink locations
5. the proposed in-service or commencement date;

6. the status of the Upgrade Request, including its Request Number;
7. the availability of any studies related to the Upgrade Request;
8. the date of the Upgrade Request; and
9. for each Upgrade Request that has not resulted in a completed upgrade, an explanation of why it was not completed.

Tariff, Part VIII, sections 436 – 499  
[Reserved]

# Attachment B

Revisions to the  
PJM Open Access Transmission Tariff

(Identified by Additional Cover Pages)

(Clean Format)



Effective January 3, 2023

(Clean Format)

## **TABLE OF CONTENTS**

### **I. COMMON SERVICE PROVISIONS**

- 1 Definitions**
  - OATT Definitions – A – B**
  - OATT Definitions – C – D**
  - OATT Definitions – E – F**
  - OATT Definitions – G – H**
  - OATT Definitions – I – J – K**
  - OATT Definitions – L – M – N**
  - OATT Definitions – O – P – Q**
  - OATT Definitions – R – S**
  - OATT Definitions – T – U – V**
  - OATT Definitions – W – X – Y – Z**
- 2 Initial Allocation and Renewal Procedures**
- 3 Ancillary Services**
- 3B PJM Administrative Service**
- 3C Mid-Atlantic Area Council Charge**
- 3D Transitional Market Expansion Charge**
- 3E Transmission Enhancement Charges**
- 3F Transmission Losses**
- 4 Open Access Same-Time Information System (OASIS)**
- 5 Local Furnishing Bonds**
- 6 Reciprocity**
- 6A Counterparty**
- 7 Billing and Payment**
- 8 Accounting for a Transmission Owner's Use of the Tariff**
- 9 Regulatory Filings**
- 10 Force Majeure and Indemnification**
- 11 Creditworthiness**
- 12 Dispute Resolution Procedures**
- 12A PJM Compliance Review**

### **II. POINT-TO-POINT TRANSMISSION SERVICE**

#### **Preamble**

- 13 Nature of Firm Point-To-Point Transmission Service**
- 14 Nature of Non-Firm Point-To-Point Transmission Service**
- 15 Service Availability**
- 16 Transmission Customer Responsibilities**
- 17 Procedures for Arranging Firm Point-To-Point Transmission Service**
- 18 Procedures for Arranging Non-Firm Point-To-Point Transmission Service**
- 19 System Impact Feasibility Study Procedures For Long-Term Firm Point-To-Point Transmission Service Requests**
- 20 [Reserved]**

- 21 [Reserved]
- 22 Changes in Service Specifications
- 23 Sale or Assignment of Transmission Service
- 24 Metering and Power Factor Correction at Receipt and Delivery Points(s)
- 25 Compensation for Transmission Service
- 26 Stranded Cost Recovery
- 27 Compensation for New Facilities and Redispatch Costs
- 27A Distribution of Revenues from Non-Firm Point-to-Point Transmission Service

### **III. NETWORK INTEGRATION TRANSMISSION SERVICE**

#### **Preamble**

- 28 Nature of Network Integration Transmission Service
- 29 Initiating Service
- 30 Network Resources
- 31 Designation of Network Load
- 32 System Impact Study Procedures for Network Integration Transmission Service Requests
- 33 Load Shedding and Curtailments
- 34 Rates and Charges
- 35 Operating Arrangements

### **IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM**

#### **Preamble**

#### **Subpart A –INTERCONNECTION PROCEDURES**

- 36 Interconnection Requests
- 37 Additional Procedures
- 38 Service on Merchant Transmission Facilities
- 39 Local Furnishing Bonds
- 40 Non-Binding Dispute Resolution Procedures
- 41 Interconnection Study Statistics

42 – 108 [Reserved]

Subpart B – [Reserved]

Subpart C – [Reserved]

Subpart D – [Reserved]

Subpart E – [Reserved]

Subpart F – [Reserved]

#### **Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE**

#### **Preamble**

- 109 Pre-application Process
- 110 Permanent Capacity Resource Additions Of 20 MW Or Less
- 111 Permanent Energy Resource Additions of 20 MW or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)
- 112 Temporary Energy Resource Additions of 20 MW or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)

- 112A Permanent or Temporary Energy Resources of 2 MW or Less (Synchronous) or 5 MW or Less (Inverter-based)
- 112B Certified Inverter-Based Small Generating Facilities No Larger than 10 kW
- 112C [Reserved]

**V. GENERATION DEACTIVATION**

**Preamble**

- 113 Notices
- 114 Deactivation Avoidable Cost Credit
- 115 Deactivation Avoidable Cost Rate
- 116 Filing and Updating of Deactivation Avoidable Cost Rate
- 117 Excess Project Investment Required
- 118 Refund of Project Investment Reimbursement
- 118A Recovery of Project Investment
- 119 Cost of Service Recovery Rate
- 120 Cost Allocation
- 121 Performance Standards
- 122 Black Start Units
- 123-199 [Reserved]

**VI. ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; RIGHTS ASSOCIATED WITH CUSTOMER-FUNDED UPGRADES**

**Preamble**

- 200 Applicability
  - 201 Queue Position
- Subpart A – SYSTEM IMPACT STUDIES AND FACILITIES STUDIES FOR NEW SERVICE REQUESTS**

- 202 Coordination with Affected Systems
- 203 System Impact Study Agreement
- 204 Tender of System Impact Study Agreement
- 205 System Impact Study Procedures
- 206 Facilities Study Agreement
- 207 Facilities Study Procedures
- 208 Expedited Procedures for Part II Requests
- 209 Optional Interconnection Studies
- 210 Responsibilities of the Transmission Provider and Transmission Owners

**Subpart B– AGREEMENTS AND COST RESPONSIBILITY FOR CUSTOMER-FUNDED UPGRADES**

- 211 Interim Interconnection Service Agreement
- 212 Interconnection Service Agreement
- 213 Upgrade Construction Service Agreement
- 214 Filing/Reporting of Agreements
- 215 Transmission Service Agreements
- 216 Interconnection Requests Designated as Market Solutions
- 217 Cost Responsibility for Necessary Facilities and Upgrades

- 218 New Service Requests Involving Affected Systems
- 219 Inter-queue Allocation of Costs of Transmission Upgrades
- 220 Advance Construction of Certain Network Upgrades
- 221 Transmission Owner Construction Obligation for Necessary Facilities and Upgrades
- 222 Confidentiality
- 223 Confidential Information
- 224 – 229 [Reserved]
- Subpart C – RIGHTS RELATED TO CUSTOMER-FUNDED UPGRADES
- 230 Capacity Interconnection Rights
- 231 Incremental Auction Revenue Rights
- 232 Transmission Injection Rights and Transmission Withdrawal Rights
- 233 Incremental Available Transfer Capability Revenue Rights
- 234 Incremental Capacity Transfer Rights
- 235 Incremental Deliverability Rights
- 236 Interconnection Rights for Certain Transmission Interconnections
- 237 IDR Transfer Agreements
- 238 – 299 [Reserved]

## **VII. TRANSITION CYCLE, GENERATION INTERCONNECTION PROCEDURE**

### **Subpart A – INTRODUCTION**

- 300 Definitions
- 301 Transition Introduction
- 302 Site Control

### **Subpart B – AE1-AG1 TRANSITION CYCLE #1**

- 303 Transition Eligibility
- 304 AE1-AG1 Expedited Process Eligibility

### **Subpart C – AG2-AH1 TRANSITION CYCLE #2**

- 305 Introduction, Overview and Eligibility
- 306 Application Rules

### **Subpart D – PHASES AND DECISION POINTS**

- 307 Introduction
- 308 Phase I
- 309 Decision Point I
- 310 Phase II
- 311 Decision Point II
- 312 Phase III
- 313 Decision Point III

- 314 Final Agreement Negotiation Phase

### **Subpart E – MISCELLANEOUS**

- 315 Assignment of Project Identifier
- 316 Service Below The Meter Generator
- 317 Behind The Meter Generation
- 318 Base Case Data
- 319 Service on Merchant Transmission Facilities

- 320 Local Furnishing Bonds
- 321 Internal Dispute Resolution Procedures
- 322 Responsibilities of Transmission Provider and Transmission Owner
- 323 Additional Upgrades
- 324 IDR Transfer Agreement
- 325 Regional Transmission Expansion Plan
- 326 Transmission Owner Construction Obligation for Necessary Facilities and Upgrade
- 327 Confidentiality
- 328 Capacity Interconnection Rights
- 329 Incremental Rights
- 330 Rights for Transmission Interconnections
- 331 Milestones
- 332 Winter Capacity Interconnection Rights
- 333 Interconnection Studies Processing Time and Metrics
- 334 Transmission Provider Website Postings
- Subpart F – WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL AGREEMENTS
- 335 Wholesale Market Participation Agreement/Non-Jurisdictional Agreements
- Subpart G – AFFECTED SYSTEM RULES
- 336 Affected System Rules
- Subpart H – UPGRADE REQUESTS
- 337 Upgrade Requests
- 338 – 399 [Reserved]

**VIII. 400 – 499 [Reserved]**

**IX. FORMS OF INTERCONNECTION-RELATED AGREEMENTS**

- 500 Execution Deadlines
- Subpart A – FORM OF APPLICATION AND STUDIES AGREEMENT
- Subpart B – FORM OF GENERATION INTERCONNECTION AGREEMENT COMBINED WITH CONSTRUCTION SERVICE AGREEMENT
- Subpart C – FORM OF WHOLESALE MARKET PARTICIPATION AGREEMENT
- Subpart D – FORM OF ENGINEERING AND PROCUREMENT AGREEMENT
- Subpart E – FORM OF UPGRADE CONSTRUCTION SERVICE AGREEMENT
- Subpart F – FORM OF COST RESPONSIBILITY AGREEMENT
- Subpart G – FORM OF NECESSARY STUDIES AGREEMENT
- Subpart H – FORM OF NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT
- Subpart I – FORM OF SURPLUS INTERCONNECTION SERVICE STUDY AGREEMENT
- Subpart J – FORM OF CONSTRUCTION SERVICE AGREEMENT
- Subpart K – FORM OF UPGRADE APPLICATION AND STUDIES AGREEMENT

**Subpart L – FORM OF AFFECTED SYSTEM CUSTOMER FACILITIES STUDY  
APPLICATION AND AGREEMENT**

**SCHEDULE 1**

**Scheduling, System Control and Dispatch Service**

**SCHEDULE 1A**

**Transmission Owner Scheduling, System Control and Dispatch Service**

**SCHEDULE 2**

**Reactive Supply and Voltage Control from Generation Sources Service**

**SCHEDULE 3**

**Regulation and Frequency Response Service**

**SCHEDULE 4**

**Energy Imbalance Service**

**SCHEDULE 5**

**Operating Reserve – Synchronized Reserve Service**

**SCHEDULE 6**

**Operating Reserve - Supplemental Reserve Service**

**SCHEDULE 6A**

**Black Start Service**

**SCHEDULE 7**

**Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service**

**SCHEDULE 8**

**Non-Firm Point-To-Point Transmission Service**

**SCHEDULE 9**

**PJM Interconnection L.L.C. Administrative Services**

**SCHEDULE 9-1**

**Control Area Administration Service**

**SCHEDULE 9-2**

**Financial Transmission Rights Administration Service**

**SCHEDULE 9-3**

**Market Support Service**

**SCHEDULE 9-4**

**Regulation and Frequency Response Administration Service**

**SCHEDULE 9-5**

**Capacity Resource and Obligation Management Service**

**SCHEDULE 9-6**

**Management Service Cost**

**SCHEDULE 9-FERC**

**FERC Annual Charge Recovery**

**SCHEDULE 9-OPSI**

**OPSI Funding**

**SCHEDULE 9-CAPS**

**CAPS Funding**

**SCHEDULE 9-FINCON**

**Finance Committee Retained Outside Consultant**

**SCHEDULE 9-MMU**

**MMU Funding**  
**SCHEDULE 9 – PJM SETTLEMENT**  
**SCHEDULE 10 - [Reserved]**  
**SCHEDULE 10-NERC**  
**North American Electric Reliability Corporation Charge**  
**SCHEDULE 10-RFC**  
**Reliability First Corporation Charge**  
**SCHEDULE 11**  
**[Reserved for Future Use]**  
**SCHEDULE 11A**  
**Additional Secure Control Center Data Communication Links and Formula Rate**  
**SCHEDULE 12**  
**Transmission Enhancement Charges**  
**SCHEDULE 12 APPENDIX**  
**SCHEDULE 12-A**  
**SCHEDULE 13**  
**Expansion Cost Recovery Change (ECRC)**  
**SCHEDULE 14**  
**Transmission Service on the Neptune Line**  
**SCHEDULE 14 - Exhibit A**  
**SCHEDULE 15**  
**Non-Retail Behind The Meter Generation Maximum Generation Emergency Obligations**  
**SCHEDULE 16**  
**Transmission Service on the Linden VFT Facility**  
**SCHEDULE 16 Exhibit A**  
**SCHEDULE 16 – A**  
**Transmission Service for Imports on the Linden VFT Facility**  
**SCHEDULE 17**  
**Transmission Service on the Hudson Line**  
**SCHEDULE 17 - Exhibit A**  
**ATTACHMENT A**  
**Form of Service Agreement For Firm Point-To-Point Transmission Service**  
**ATTACHMENT A-1**  
**Form of Service Agreement For The Resale, Reassignment or Transfer of Point-to-Point Transmission Service**  
**ATTACHMENT B**  
**Form of Service Agreement For Non-Firm Point-To-Point Transmission Service**  
**ATTACHMENT C**  
**Methodology To Assess Available Transfer Capability**  
**ATTACHMENT C-1**  
**Conversion of Service in the Dominion and Duquesne Zones**  
**ATTACHMENT C-2**  
**Conversion of Service in the Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc, (“DEOK”) Zone**  
**ATTACHMENT C-4**



	Conversion of Service in the OVEC Zone
ATTACHMENT D	Methodology for Completing a System Impact Study
ATTACHMENT E	Index of Point-To-Point Transmission Service Customers
ATTACHMENT F	Service Agreement For Network Integration Transmission Service
ATTACHMENT F-1	Form of Umbrella Service Agreement for Network Integration Transmission Service Under State Required Retail Access Programs
ATTACHMENT G	Network Operating Agreement
ATTACHMENT H-1	Annual Transmission Rates -- Atlantic City Electric Company for Network Integration Transmission Service
ATTACHMENT H-1A	Atlantic City Electric Company Formula Rate Appendix A
ATTACHMENT H-1B	Atlantic City Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-2	Annual Transmission Rates -- Baltimore Gas and Electric Company for Network Integration Transmission Service
ATTACHMENT H-2A	Baltimore Gas and Electric Company Formula Rate
ATTACHMENT H-2B	Baltimore Gas and Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-3	Annual Transmission Rates -- Delmarva Power & Light Company for Network Integration Transmission Service
ATTACHMENT H-3A	Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3B	Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3C	Delmarva Power & Light Company Under-Frequency Load Shedding Charge
ATTACHMENT H-3D	Delmarva Power & Light Company Formula Rate – Appendix A
ATTACHMENT H-3E	Delmarva Power & Light Company Formula Rate Implementation Protocols
ATTACHMENT H-3F	Old Dominion Electric Cooperative Formula Rate – Appendix A
ATTACHMENT H-3G	Old Dominion Electric Cooperative Formula Rate Implementation Protocols
ATTACHMENT H-4	

**Annual Transmission Rates -- Jersey Central Power & Light Company for Network Integration Transmission Service**  
**ATTACHMENT H-4A**  
**Other Supporting Facilities - Jersey Central Power & Light Company**  
**ATTACHMENT H-4B**  
**Jersey Central Power & Light Company – [Reserved]**  
**ATTACHMENT H-5**  
**Annual Transmission Rates -- Metropolitan Edison Company for Network Integration Transmission Service**  
**ATTACHMENT H-5A**  
**Other Supporting Facilities -- Metropolitan Edison Company**  
**ATTACHMENT H-6**  
**Annual Transmission Rates -- Pennsylvania Electric Company for Network Integration Transmission Service**  
**ATTACHMENT H-6A**  
**Other Supporting Facilities Charges -- Pennsylvania Electric Company**  
**ATTACHMENT H-7**  
**Annual Transmission Rates -- PECO Energy Company for Network Integration Transmission Service**  
**ATTACHMENT H-7A**  
**PECO Energy Company Formula Rate Template**  
**ATTACHMENT H-7B**  
**PECO Energy Company Monthly Deferred Tax Adjustment Charge**  
**ATTACHMENT H-7C**  
**PECO Energy Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-8**  
**Annual Transmission Rates – PPL Group for Network Integration Transmission Service**  
**ATTACHMENT H-8A**  
**Other Supporting Facilities Charges -- PPL Electric Utilities Corporation**  
**ATTACHMENT 8C**  
**UGI Utilities, Inc. Formula Rate – Appendix A**  
**ATTACHMENT 8D**  
**UGI Utilities, Inc. Formula Rate Implementation Protocols**  
**ATTACHMENT 8E**  
**UGI Utilities, Inc. Formula Rate – Appendix A**  
**ATTACHMENT H-8G**  
**Annual Transmission Rates – PPL Electric Utilities Corp.**  
**ATTACHMENT H-8H**  
**Formula Rate Implementation Protocols – PPL Electric Utilities Corp.**  
**ATTACHMENT H-9**  
**Annual Transmission Rates -- Potomac Electric Power Company for Network Integration Transmission Service**  
**ATTACHMENT H-9A**  
**Potomac Electric Power Company Formula Rate – Appendix A**  
**ATTACHMENT H-9B**

**Potomac Electric Power Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-9C**  
**Annual Transmission Rate – Southern Maryland Electric Cooperative, Inc. for**  
**Network Integration Transmission Service**

**ATTACHMENT H-10**  
**Annual Transmission Rates -- Public Service Electric and Gas Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-10A**  
**Formula Rate -- Public Service Electric and Gas Company**

**ATTACHMENT H-10B**  
**Formula Rate Implementation Protocols – Public Service Electric and Gas Company**

**ATTACHMENT H-11**  
**Annual Transmission Rates -- Allegheny Power for Network Integration**  
**Transmission Service**

**ATTACHMENT 11A**  
**Other Supporting Facilities Charges - Allegheny Power**

**ATTACHMENT H-12**  
**Annual Transmission Rates -- Rockland Electric Company for Network Integration**  
**Transmission Service**

**ATTACHMENT H-13**  
**Annual Transmission Rates – Commonwealth Edison Company for Network**  
**Integration Transmission Service**

**ATTACHMENT H-13A**  
**Commonwealth Edison Company Formula Rate – Appendix A**

**ATTACHMENT H-13B**  
**Commonwealth Edison Company Formula Rate Implementation Protocols**

**ATTACHMENT H-14**  
**Annual Transmission Rates – AEP East Operating Companies for Network**  
**Integration Transmission Service**

**ATTACHMENT H-14A**  
**AEP East Operating Companies Formula Rate Implementation Protocols**

**ATTACHMENT H-14B Part 1**

**ATTACHMENT H-14B Part 2**

**ATTACHMENT H-15**  
**Annual Transmission Rates -- The Dayton Power and Light Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-16**  
**Annual Transmission Rates -- Virginia Electric and Power Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-16A**  
**Formula Rate - Virginia Electric and Power Company**

**ATTACHMENT H-16B**  
**Formula Rate Implementation Protocols - Virginia Electric and Power Company**

**ATTACHMENT H-16C**  
**Virginia Retail Administrative Fee Credit for Virginia Retail Load Serving**  
**Entities in the Dominion Zone**

**ATTACHMENT H-16D – [Reserved]**

**ATTACHMENT H-16E – [Reserved]**

**ATTACHMENT H-16AA**

**Virginia Electric and Power Company**

**ATTACHMENT H-17**

**Annual Transmission Rates -- Duquesne Light Company for Network Integration  
Transmission Service**

**ATTACHMENT H-17A**

**Duquesne Light Company Formula Rate – Appendix A**

**ATTACHMENT H-17B**

**Duquesne Light Company Formula Rate Implementation Protocols**

**ATTACHMENT H-17C**

**Duquesne Light Company Monthly Deferred Tax Adjustment Charge**

**ATTACHMENT H-18**

**Annual Transmission Rates – Trans-Allegheny Interstate Line Company**

**ATTACHMENT H-18A**

**Trans-Allegheny Interstate Line Company Formula Rate – Appendix A**

**ATTACHMENT H-18B**

**Trans-Allegheny Interstate Line Company Formula Rate Implementation Protocols**

**ATTACHMENT H-19**

**Annual Transmission Rates – Potomac-Appalachian Transmission Highline, L.L.C.**

**ATTACHMENT H-19A**

**Potomac-Appalachian Transmission Highline, L.L.C. Summary**

**ATTACHMENT H-19B**

**Potomac-Appalachian Transmission Highline, L.L.C. Formula Rate Implementation  
Protocols**

**ATTACHMENT H-20**

**Annual Transmission Rates – AEP Transmission Companies (AEPTCo) in the AEP  
Zone**

**ATTACHMENT H-20A**

**AEP Transmission Companies (AEPTCo) in the AEP Zone - Formula Rate  
Implementation Protocols**

**ATTACHMENT H-20A APPENDIX A**

**Transmission Formula Rate Settlement for AEPTCo**

**ATTACHMENT H-20B - Part I**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-20B - Part II**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-21**

**Annual Transmission Rates – American Transmission Systems, Inc. for Network  
Integration Transmission Service**

**ATTACHMENT H-21A - ATSI**

**ATTACHMENT H-21A Appendix A - ATSI**

**ATTACHMENT H-21A Appendix B - ATSI**

**ATTACHMENT H-21A Appendix C - ATSI**  
**ATTACHMENT H-21A Appendix C - ATSI [Reserved]**  
**ATTACHMENT H-21A Appendix D – ATSI**  
**ATTACHMENT H-21A Appendix E - ATSI**  
**ATTACHMENT H-21A Appendix F – ATSI [Reserved]**  
**ATTACHMENT H-21A Appendix G - ATSI**  
**ATTACHMENT H-21A Appendix G – ATSI (Credit Adj)**  
**ATTACHMENT H-21B ATSI Protocol**  
**ATTACHMENT H-22**  
    **Annual Transmission Rates – DEOK for Network Integration Transmission Service and Point-to-Point Transmission Service**  
**ATTACHMENT H-22A**  
    **Duke Energy Ohio and Duke Energy Kentucky (DEOK) Formula Rate Template**  
**ATTACHMENT H-22B**  
    **DEOK Formula Rate Implementation Protocols**  
**ATTACHMENT H-22C**  
    **Additional provisions re DEOK and Indiana**  
**ATTACHMENT H-23**  
    **EP Rock springs annual transmission Rate**  
**ATTACHMENT H-24**  
    **EKPC Annual Transmission Rates**  
**ATTACHMENT H-24A APPENDIX A**  
    **EKPC Schedule 1A**  
**ATTACHMENT H-24A APPENDIX B**  
    **EKPC RTEP**  
**ATTACHMENT H-24A APPENDIX C**  
    **EKPC True-up**  
**ATTACHMENT H-24A APPENDIX D**  
    **EKPC Depreciation Rates**  
**ATTACHMENT H-24-B**  
    **EKPC Implementation Protocols**  
**ATTACHMENT H-25 - [Reserved]**  
**ATTACHMENT H-25A - [Reserved]**  
**ATTACHMENT H-25B - [Reserved]**  
**ATTACHMENT H-26**  
    **Transource West Virginia, LLC Formula Rate Template**  
**ATTACHMENT H-26A**  
    **Transource West Virginia, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-27**  
    **Annual Transmission Rates – Silver Run Electric, LLC**  
**ATTACHMENT H-27A**  
    **Silver Run Electric, LLC Formula Rate Template**  
**ATTACHMENT H-27B**  
    **Silver Run Electric, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-28**

**Annual Transmission Rates – Mid-Atlantic Interstate Transmission, LLC for  
Network Integration Transmission Service**  
**ATTACHMENT H-28A**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Template**  
**ATTACHMENT H-28B**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-29**  
**Annual Transmission Rates – Transource Pennsylvania, LLC**  
**ATTACHMENT H-29A**  
**Transource Pennsylvania, LLC Formula Rate Template**  
**ATTACHMENT H-29B**  
**Transource Pennsylvania, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-30**  
**Annual Transmission Rates – Transource Maryland, LLC**  
**ATTACHMENT H-30A**  
**Transource Maryland, LLC Formula Rate Template**  
**ATTACHMENT H-30B**  
**Transource Maryland, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-31**  
**Annual Transmission Revenue Requirement – Ohio Valley Electric Corporation for  
Network Integration Transmission Service**  
**ATTACHMENT H-32**  
**Annual Transmission Revenue Requirements and Rates - AMP Transmission, LLC**  
**ATTACHMENT H-32A**  
**AMP Transmission, LLC - Formula Rate Template**  
**ATTACHMENT H-32B**  
**AMP Transmission, LLC - Formula Rate Implementation Protocols**  
**ATTACHMENT H-32C**  
**Annual Transmission Revenue Requirement and Rates - AMP Transmission, LLC  
for Network Integration Transmission Service**  
**ATTACHMENT H-33**  
**Annual Transmission Rates – NextEra Energy Transmission MidAtlantic Indiana,  
Inc.**  
**ATTACHMENT H-33A**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate  
Implementation Protocols**  
**ATTACHMENT H-33B**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate Template**  
**ATTACHMENT H-A**  
**Annual Transmission Rates -- Non-Zone Network Load for Network Integration  
Transmission Service**  
**ATTACHMENT I**  
**Index of Network Integration Transmission Service Customers**  
**ATTACHMENT J**  
**PJM Transmission Zones**  
**ATTACHMENT K**

# **Transmission Congestion Charges and Credits**

## **Preface**

### **ATTACHMENT K -- APPENDIX**

#### **Preface**

#### **1. MARKET OPERATIONS**

- 1.1 Introduction
- 1.2 Cost-Based Offers
- 1.2A Transmission Losses
- 1.3 [Reserved for Future Use]
- 1.4 Market Buyers
- 1.5 Market Sellers
- 1.5A Economic Load Response Participant
- 1.6 Office of the Interconnection
- 1.6A PJM Settlement
- 1.7 General
- 1.8 Selection, Scheduling and Dispatch Procedure Adjustment Process
- 1.9 Prescheduling
- 1.10 Scheduling
- 1.11 Dispatch
- 1.12 Dynamic Transfers

#### **2. CALCULATION OF LOCATIONAL MARGINAL PRICES**

- 2.1 Introduction
- 2.2 General
- 2.3 Determination of System Conditions Using the State Estimator
- 2.4 Determination of Energy Offers Used in Calculating
- 2.5 Calculation of Real-time Prices
- 2.6 Calculation of Day-ahead Prices
- 2.6A Interface Prices
- 2.7 Performance Evaluation

#### **3. ACCOUNTING AND BILLING**

- 3.1 Introduction
- 3.2 Market Buyers
- 3.3 Market Sellers
  - 3.3A Economic Load Response Participants
- 3.4 Transmission Customers
- 3.5 Other Control Areas
- 3.6 Metering Reconciliation
- 3.7 Inadvertent Interchange
- 3.8 Market-to-Market Coordination

#### **4. [Reserved For Future Use]**

#### **5. CALCULATION OF CHARGES AND CREDITS FOR TRANSMISSION CONGESTION AND LOSSES**

- 5.1 Transmission Congestion Charge Calculation
- 5.2 Transmission Congestion Credit Calculation
- 5.3 Unscheduled Transmission Service (Loop Flow)
- 5.4 Transmission Loss Charge Calculation
- 5.5 Distribution of Total Transmission Loss Charges

- 5.6 Transmission Constraint Penalty Factors
- 6. **“MUST-RUN” FOR RELIABILITY GENERATION**
  - 6.1 Introduction
  - 6.2 Identification of Facility Outages
  - 6.3 Dispatch for Local Reliability
  - 6.4 Offer Price Caps
  - 6.5 [Reserved]
  - 6.6 Minimum Generator Operating Parameters –  
Parameter-Limited Schedules
- 6A. **[Reserved]**
  - 6A.1 [Reserved]
  - 6A.2 [Reserved]
  - 6A.3 [Reserved]
- 7. **FINANCIAL TRANSMISSION RIGHTS AUCTIONS**
  - 7.1 Auctions of Financial Transmission Rights
  - 7.1A Long-Term Financial Transmission Rights Auctions
  - 7.2 Financial Transmission Rights Characteristics
  - 7.3 Auction Procedures
  - 7.4 Allocation of Auction Revenues
  - 7.5 Simultaneous Feasibility
  - 7.6 New Stage 1 Resources
  - 7.7 Alternate Stage 1 Resources
  - 7.8 Elective Upgrade Auction Revenue Rights
  - 7.9 Residual Auction Revenue Rights
  - 7.10 Financial Settlement
  - 7.11 PJM Settlement as Counterparty
- 8. **EMERGENCY AND PRE-EMERGENCY LOAD RESPONSE PROGRAM**
  - 8.1 Emergency Load Response and Pre-Emergency Load Response Program Options
  - 8.2 Participant Qualifications
  - 8.3 Metering Requirements
  - 8.4 Registration
  - 8.5 Pre-Emergency Operations
  - 8.6 Emergency Operations
  - 8.7 Verification
  - 8.8 Market Settlements
  - 8.9 Reporting and Compliance
  - 8.10 Non-Hourly Metered Customer Pilot
  - 8.11 Emergency Load Response and Pre-Emergency Load Response Participant  
Aggregation

## **ATTACHMENT L**

### **List of Transmission Owners**

## **ATTACHMENT M**

### **PJM Market Monitoring Plan**

## **ATTACHMENT M – APPENDIX**

### **PJM Market Monitor Plan Attachment M Appendix**

#### **I Confidentiality of Data and Information**



- II Development of Inputs for Prospective Mitigation
- III Black Start Service
- IV Deactivation Rates
- V Opportunity Cost Calculation
- VI FTR Forfeiture Rule
- VII Forced Outage Rule
- VIII Data Collection and Verification

**ATTACHMENT M-1 (FirstEnergy)**

**Energy Procedure Manual for Determining Supplier Total Hourly Energy Obligation**

**ATTACHMENT M-2 (First Energy)**

**Energy Procedure Manual for Determining Supplier Peak Load Share**

**Procedures for Load Determination**

**ATTACHMENT M-2 (ComEd)**

**Determination of Capacity Peak Load Contributions and Network Service Peak Load Contributions**

**ATTACHMENT M-2 (PSE&G)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Atlantic City Electric Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Duke Energy Ohio, Inc.)**

**Procedures for Determination of Peak Load Contributions, Network Service Peak Load and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-3**

**Additional Procedures for Planning of Supplemental Projects**

**ATTACHMENT N**

**Form of Generation Interconnection Feasibility Study Agreement**

**ATTACHMENT N-1**

**Form of System Impact Study Agreement**

**ATTACHMENT N-2**

**Form of Facilities Study Agreement**

**ATTACHMENT N-3**

**Form of Optional Interconnection Study Agreement**

**ATTACHMENT O**

**Form of Interconnection Service Agreement**

- 1.0 Parties
- 2.0 Authority
- 3.0 Customer Facility Specifications
- 4.0 Effective Date

- 5.0 Security
- 6.0 Project Specific Milestones
- 7.0 Provision of Interconnection Service
- 8.0 Assumption of Tariff Obligations
- 9.0 Facilities Study
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 11.0 Interconnection Specifications
- 12.0 Power Factor Requirement
- 12.0A RTU
- 13.0 Charges
- 14.0 Third Party Benefits
- 15.0 Waiver
- 16.0 Amendment
- 17.0 Construction With Other Parts Of The Tariff
- 18.0 Notices
- 19.0 Incorporation Of Other Documents
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 21.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 22.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 23.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

**Specifications for Interconnection Service Agreement**

- 1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the  
Customer Facility) to be Interconnected with the Transmission System in the PJM  
Region
- 2.0 Rights
- 3.0 Construction Responsibility and Ownership of Interconnection Facilities
- 4.0 Subject to Modification Pursuant to the Negotiated Contract Option
- 4.1 Attachment Facilities Charge
- 4.2 Network Upgrades Charge
- 4.3 Local Upgrades Charge
- 4.4 Other Charges
- 4.5 Cost breakdown
- 4.6 Security Amount Breakdown

**ATTACHMENT O APPENDIX 1: Definitions**

**ATTACHMENT O APPENDIX 2: Standard Terms and Conditions for Interconnections**

**1 Commencement, Term of and Conditions Precedent to  
Interconnection Service**

- 1.1 Commencement Date
- 1.2 Conditions Precedent
- 1.3 Term
- 1.4 Initial Operation
- 1.4A Other Interconnection Options
- 1.5 Survival

- 2 Interconnection Service**
  - 2.1 Scope of Service
  - 2.2 Non-Standard Terms
  - 2.3 No Transmission Services
  - 2.4 Use of Distribution Facilities
  - 2.5 Election by Behind The Meter Generation
- 3 Modification Of Facilities**
  - 3.1 General
  - 3.2 Interconnection Request
  - 3.3 Standards
  - 3.4 Modification Costs
- 4 Operations**
  - 4.1 General
  - 4.2 [Reserved]
  - 4.3 Interconnection Customer Obligations
  - 4.4 Transmission Interconnection Customer Obligations
  - 4.5 Permits and Rights-of-Way
  - 4.6 No Ancillary Services
  - 4.7 Reactive Power
  - 4.8 Under- and Over-Frequency and Under- and Over- Voltage Conditions
  - 4.9 System Protection and Power Quality
  - 4.10 Access Rights
  - 4.11 Switching and Tagging Rules
  - 4.12 Communications and Data Protocol
  - 4.13 Nuclear Generating Facilities
- 5 Maintenance**
  - 5.1 General
  - 5.2 [Reserved]
  - 5.3 Outage Authority and Coordination
  - 5.4 Inspections and Testing
  - 5.5 Right to Observe Testing
  - 5.6 Secondary Systems
  - 5.7 Access Rights
  - 5.8 Observation of Deficiencies
- 6 Emergency Operations**
  - 6.1 Obligations
  - 6.2 Notice
  - 6.3 Immediate Action
  - 6.4 Record-Keeping Obligations
- 7 Safety**
  - 7.1 General
  - 7.2 Environmental Releases
- 8 Metering**
  - 8.1 General
  - 8.2 Standards
  - 8.3 Testing of Metering Equipment

- 8.4 Metering Data
- 8.5 Communications
- 9 Force Majeure**
  - 9.1 Notice
  - 9.2 Duration of Force Majeure
  - 9.3 Obligation to Make Payments
  - 9.4 Definition of Force Majeure
- 10 Charges**
  - 10.1 Specified Charges
  - 10.2 FERC Filings
- 11 Security, Billing And Payments**
  - 11.1 Recurring Charges Pursuant to Section 10
  - 11.2 Costs for Transmission Owner Interconnection Facilities
  - 11.3 No Waiver
  - 11.4 Interest
- 12 Assignment**
  - 12.1 Assignment with Prior Consent
  - 12.2 Assignment Without Prior Consent
  - 12.3 Successors and Assigns
- 13 Insurance**
  - 13.1 Required Coverages for Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 13.1A Required Coverages for Generation Resources Of 20 Megawatts Or Less
  - 13.2 Additional Insureds
  - 13.3 Other Required Terms
  - 13.3A No Limitation of Liability
  - 13.4 Self-Insurance
  - 13.5 Notices; Certificates of Insurance
  - 13.6 Subcontractor Insurance
  - 13.7 Reporting Incidents
- 14 Indemnity**
  - 14.1 Indemnity
  - 14.2 Indemnity Procedures
  - 14.3 Indemnified Person
  - 14.4 Amount Owing
  - 14.5 Limitation on Damages
  - 14.6 Limitation of Liability in Event of Breach
  - 14.7 Limited Liability in Emergency Conditions
- 15 Breach, Cure And Default**
  - 15.1 Breach
  - 15.2 Continued Operation
  - 15.3 Notice of Breach
  - 15.4 Cure and Default
  - 15.5 Right to Compel Performance
  - 15.6 Remedies Cumulative

- 16 Termination**
  - 16.1 Termination
  - 16.2 Disposition of Facilities Upon Termination
  - 16.3 FERC Approval
  - 16.4 Survival of Rights
- 17 Confidentiality**
  - 17.1 Term
  - 17.2 Scope
  - 17.3 Release of Confidential Information
  - 17.4 Rights
  - 17.5 No Warranties
  - 17.6 Standard of Care
  - 17.7 Order of Disclosure
  - 17.8 Termination of Interconnection Service Agreement
  - 17.9 Remedies
  - 17.10 Disclosure to FERC or its Staff
  - 17.11 No Interconnection Party Shall Disclose Confidential Information
  - 17.12 Information that is Public Domain
  - 17.13 Return or Destruction of Confidential Information
- 18 Subcontractors**
  - 18.1 Use of Subcontractors
  - 18.2 Responsibility of Principal
  - 18.3 Indemnification by Subcontractors
  - 18.4 Subcontractors Not Beneficiaries
- 19 Information Access And Audit Rights**
  - 19.1 Information Access
  - 19.2 Reporting of Non-Force Majeure Events
  - 19.3 Audit Rights
- 20 Disputes**
  - 20.1 Submission
  - 20.2 Rights Under The Federal Power Act
  - 20.3 Equitable Remedies
- 21 Notices**
  - 21.1 General
  - 21.2 Emergency Notices
  - 21.3 Operational Contacts
- 22 Miscellaneous**
  - 22.1 Regulatory Filing
  - 22.2 Waiver
  - 22.3 Amendments and Rights Under the Federal Power Act
  - 22.4 Binding Effect
  - 22.5 Regulatory Requirements
- 23 Representations And Warranties**
  - 23.1 General
- 24 Tax Liability**
  - 24.1 Safe Harbor Provisions

- 24.2. Tax Indemnity
- 24.3 Taxes Other Than Income Taxes
- 24.4 Income Tax Gross-Up
- 24.5 Tax Status

**ATTACHMENT O - SCHEDULE A**

**Customer Facility Location/Site Plan**

**ATTACHMENT O - SCHEDULE B**

**Single-Line Diagram**

**ATTACHMENT O - SCHEDULE C**

**List of Metering Equipment**

**ATTACHMENT O - SCHEDULE D**

**Applicable Technical Requirements and Standards**

**ATTACHMENT O - SCHEDULE E**

**Schedule of Charges**

**ATTACHMENT O - SCHEDULE F**

**Schedule of Non-Standard Terms & Conditions**

**ATTACHMENT O - SCHEDULE G**

**Interconnection Customer's Agreement to Conform with IRS Safe Harbor**

**Provisions for Non-Taxable Status**

**ATTACHMENT O - SCHEDULE H**

**Interconnection Requirements for a Wind Generation Facility**

**ATTACHMENT O – SCHEDULE I**

**Interconnection Specifications for an Energy Storage Resource**

**ATTACHMENT O – SCHEDULE J**

**Schedule of Terms and Conditions for Surplus Interconnection Service**

**ATTACHMENT O – SCHEDULE K**

**Requirements for Interconnection Service Below Full Electrical Generating Capability**

**ATTACHMENT O-1**

**Form of Interim Interconnection Service Agreement**

**ATTACHMENT O-2**

**Form of Network Upgrade Funding Agreement**

**ATTACHMENT P**

**Form of Interconnection Construction Service Agreement**

- 1.0 Parties
- 2.0 Authority
- 3.0 Customer Facility
- 4.0 Effective Date and Term
  - 4.1 Effective Date
  - 4.2 Term
  - 4.3 Survival
- 5.0 Construction Responsibility
- 6.0 [Reserved.]
- 7.0 Scope of Work
- 8.0 Schedule of Work
- 9.0 [Reserved.]

- 10.0 Notices
- 11.0 Waiver
- 12.0 Amendment
- 13.0 Incorporation Of Other Documents
- 14.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 15.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 16.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 17.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

## **ATTACHMENT P - APPENDIX 1 – DEFINITIONS**

## **ATTACHMENT P - APPENDIX 2 – STANDARD CONSTRUCTION TERMS AND CONDITIONS**

### **Preamble**

### **1 Facilitation by Transmission Provider**

### **2 Construction Obligations**

- 2.1 Interconnection Customer Obligations
- 2.2 Transmission Owner Interconnection Facilities and Merchant  
Network Upgrades
- 2.2A Scope of Applicable Technical Requirements and Standards
- 2.3 Construction By Interconnection Customer
- 2.4 Tax Liability
- 2.5 Safety
- 2.6 Construction-Related Access Rights
- 2.7 Coordination Among Constructing Parties

### **3 Schedule of Work**

- 3.1 Construction by Interconnection Customer
- 3.2 Construction by Interconnected Transmission Owner
  - 3.2.1 Standard Option
  - 3.2.2 Negotiated Contract Option
- 3.2.3 Option to Build
- 3.3 Revisions to Schedule of Work
- 3.4 Suspension
  - 3.4.1 Costs
  - 3.4.2 Duration of Suspension
- 3.5 Right to Complete Transmission Owner Interconnection  
Facilities
- 3.6 Suspension of Work Upon Default
- 3.7 Construction Reports
- 3.8 Inspection and Testing of Completed Facilities
- 3.9 Energization of Completed Facilities
- 3.10 Interconnected Transmission Owner's Acceptance of  
Facilities Constructed by Interconnection Customer

### **4 Transmission Outages**

- 4.1 Outages; Coordination

- 5 Land Rights; Transfer of Title**
  - 5.1 Grant of Easements and Other Land Rights
  - 5.2 Construction of Facilities on Interconnection Customer Property
  - 5.3 Third Parties
  - 5.4 Documentation
  - 5.5 Transfer of Title to Certain Facilities Constructed By Interconnection Customer
  - 5.6 Liens
- 6 Warranties**
  - 6.1 Interconnection Customer Warranty
  - 6.2 Manufacturer Warranties
- 7 [Reserved.]**
- 8 [Reserved.]**
- 9 Security, Billing And Payments**
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10 Assignment**
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11 Insurance**
  - 11.1 Required Coverages For Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 11.1A Required Coverages For Generation Resources of 20 Megawatts Or Less
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.3A No Limitation of Liability
  - 11.4 Self-Insurance
  - 11.5 Notices; Certificates of Insurance
  - 11.6 Subcontractor Insurance
  - 11.7 Reporting Incidents
- 12 Indemnity**
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing
  - 12.5 Limitation on Damages
  - 12.6 Limitation of Liability in Event of Breach
  - 12.7 Limited Liability in Emergency Conditions
- 13 Breach, Cure And Default**
  - 13.1 Breach



	13.2	Notice of Breach
	13.3	Cure and Default
	13.3.1	Cure of Breach
	13.4	Right to Compel Performance
	13.5	Remedies Cumulative
<b>14</b>		<b>Termination</b>
	14.1	Termination
	14.2	[Reserved.]
	14.3	Cancellation By Interconnection Customer
	14.4	Survival of Rights
<b>15</b>		<b>Force Majeure</b>
	15.1	Notice
	15.2	Duration of Force Majeure
	15.3	Obligation to Make Payments
	15.4	Definition of Force Majeure
<b>16</b>		<b>Subcontractors</b>
	16.1	Use of Subcontractors
	16.2	Responsibility of Principal
	16.3	Indemnification by Subcontractors
	16.4	Subcontractors Not Beneficiaries
<b>17</b>		<b>Confidentiality</b>
	17.1	Term
	17.2	Scope
	17.3	Release of Confidential Information
	17.4	Rights
	17.5	No Warranties
	17.6	Standard of Care
	17.7	Order of Disclosure
	17.8	Termination of Construction Service Agreement
	17.9	Remedies
	17.10	Disclosure to FERC or its Staff
	17.11	No Construction Party Shall Disclose Confidential Information of Another Construction Party
	17.12	Information that is Public Domain
	17.13	Return or Destruction of Confidential Information
<b>18</b>		<b>Information Access And Audit Rights</b>
	18.1	Information Access
	18.2	Reporting of Non-Force Majeure Events
	18.3	Audit Rights
<b>19</b>		<b>Disputes</b>
	19.1	Submission
	19.2	Rights Under The Federal Power Act
	19.3	Equitable Remedies
<b>20</b>		<b>Notices</b>
	20.1	General
	20.2	Operational Contacts
<b>21</b>		<b>Miscellaneous</b>

21.1	Regulatory Filing
21.2	Waiver
21.3	Amendments and Rights under the Federal Power Act
21.4	Binding Effect
21.5	Regulatory Requirements
<b>22</b>	<b>Representations and Warranties</b>
22.1	General
<b>ATTACHMENT P - SCHEDULE A</b>	
	<b>Site Plan</b>
<b>ATTACHMENT P - SCHEDULE B</b>	
	<b>Single-Line Diagram of Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE C</b>	
	<b>Transmission Owner Interconnection Facilities to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE D</b>	
	<b>Transmission Owner Interconnection Facilities to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE E</b>	
	<b>Merchant Network Upgrades to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE F</b>	
	<b>Merchant Network Upgrades to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE G</b>	
	<b>Customer Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE H</b>	
	<b>Negotiated Contract Option Terms</b>
<b>ATTACHMENT P - SCHEDULE I</b>	
	<b>Scope of Work</b>
<b>ATTACHMENT P - SCHEDULE J</b>	
	<b>Schedule of Work</b>
<b>ATTACHMENT P - SCHEDULE K</b>	
	<b>Applicable Technical Requirements and Standards</b>
<b>ATTACHMENT P - SCHEDULE L</b>	
	<b>Interconnection Customer's Agreement to Confirm with IRS Safe Harbor Provisions For Non-Taxable Status</b>
<b>ATTACHMENT P - SCHEDULE M</b>	
	<b>Schedule of Non-Standard Terms and Conditions</b>
<b>ATTACHMENT P - SCHEDULE N</b>	
	<b>Interconnection Requirements for a Wind Generation Facility</b>
<b>ATTACHMENT Q</b>	
	<b>PJM Credit Policy</b>
<b>ATTACHMENT R</b>	
	<b>Lost Revenues Of PJM Transmission Owners And Distribution of Revenues Remitted By MISO, SECA Rates to Collect PJM Transmission Owner Lost Revenues Under Attachment X, And Revenues From PJM Existing Transactions</b>
<b>ATTACHMENT S</b>	

**Form of Transmission Interconnection Feasibility Study Agreement**  
**ATTACHMENT T**  
**Identification of Merchant Transmission Facilities**  
**ATTACHMENT U**  
**Independent Transmission Companies**  
**ATTACHMENT V**  
**Form of ITC Agreement**  
**ATTACHMENT W**  
**COMMONWEALTH EDISON COMPANY**  
**ATTACHMENT X**  
**Seams Elimination Cost Assignment Charges**  
**NOTICE OF ADOPTION OF NERC TRANSMISSION LOADING RELIEF**  
**PROCEDURES**  
**NOTICE OF ADOPTION OF LOCAL TRANSMISSION LOADING RELIEF**  
**PROCEDURES**  
**SCHEDULE OF PARTIES ADOPTING LOCAL TRANSMISSION LOADING**  
**RELIEF PROCEDURES**  
**ATTACHMENT Y**  
**Forms of Screens Process Interconnection Request (For Generation Facilities of 2**  
**MW or less)**  
**ATTACHMENT Z**  
**Certification Codes and Standards**  
**ATTACHMENT AA**  
**Certification of Small Generator Equipment Packages**  
**ATTACHMENT BB**  
**Form of Certified Inverter-Based Generating Facility No Larger Than 10 kW**  
**Interconnection Service Agreement**  
**ATTACHMENT CC**  
**Form of Certificate of Completion**  
**(Small Generating Inverter Facility No Larger Than 10 kW)**  
**ATTACHMENT DD**  
**Reliability Pricing Model**  
**ATTACHMENT EE**  
**Form of Upgrade Request**  
**ATTACHMENT FF**  
**[Reserved]**  
**ATTACHMENT GG**  
**Form of Upgrade Construction Service Agreement**  
**Article 1 – Definitions And Other Documents**  
    1.0     Defined Terms  
    1.1     Incorporation of Other Documents  
**Article 2 – Responsibility for Direct Assignment Facilities or Customer-Funded**  
**Upgrades**  
    2.0     New Service Customer Financial Responsibilities  
    2.1     Obligation to Provide Security  
    2.2     Failure to Provide Security

- 2.3 Costs
- 2.4 Transmission Owner Responsibilities
- Article 3 – Rights To Transmission Service
  - 3.0 No Transmission Service
- Article 4 – Early Termination
  - 4.0 Termination by New Service Customer
- Article 5 – Rights
  - 5.0 Rights
    - 5.1 Amount of Rights Granted
    - 5.2 Availability of Rights Granted
    - 5.3 Credits
- Article 6 – Miscellaneous
  - 6.0 Notices
  - 6.1 Waiver
  - 6.2 Amendment
  - 6.3 No Partnership
  - 6.4 Counterparts

**ATTACHMENT GG - APPENDIX I –**

**SCOPE AND SCHEDULE OF WORK FOR DIRECT ASSIGNMENT  
FACILITIES OR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY  
TRANSMISSION OWNER**

**ATTACHMENT GG - APPENDIX II - DEFINITIONS**

- 1 Definitions
  - 1.1 Affiliate
  - 1.2 Applicable Laws and Regulations
  - 1.3 Applicable Regional Reliability Council
  - 1.4 Applicable Standards
  - 1.5 Breach
  - 1.6 Breaching Party
  - 1.7 Cancellation Costs
  - 1.8 Commission
  - 1.9 Confidential Information
  - 1.10 Constructing Entity
  - 1.11 Control Area
  - 1.12 Costs
  - 1.13 Default
  - 1.14 Delivering Party
  - 1.15 Emergency Condition
  - 1.16 Environmental Laws
  - 1.17 Facilities Study
  - 1.18 Federal Power Act
  - 1.19 FERC
  - 1.20 Firm Point-To-Point
  - 1.21 Force Majeure
  - 1.22 Good Utility Practice
  - 1.23 Governmental Authority

- 1.24 Hazardous Substances
- 1.25 Incidental Expenses
- 1.26 Local Upgrades
- 1.27 Long-Term Firm Point-To-Point Transmission Service
- 1.28 MAAC
- 1.29 MAAC Control Zone
- 1.30 NERC
- 1.31 Network Upgrades
- 1.32 Office of the Interconnection
- 1.33 Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement
- 1.34 Part I
- 1.35 Part II
- 1.36 Part III
- 1.37 Part IV
- 1.38 Part VI
- 1.39 PJM Interchange Energy Market
- 1.40 PJM Manuals
- 1.41 PJM Region
- 1.42 PJM West Region
- 1.43 Point(s) of Delivery
- 1.44 Point(s) of Receipt
- 1.45 Project Financing
- 1.46 Project Finance Entity
- 1.47 Reasonable Efforts
- 1.48 Receiving Party
- 1.49 Regional Transmission Expansion Plan
- 1.50 Schedule and Scope of Work
- 1.51 Security
- 1.52 Service Agreement
- 1.53 State
- 1.54 Transmission System
- 1.55 VACAR

#### **ATTACHMENT GG - APPENDIX III – GENERAL TERMS AND CONDITIONS**

- 1.0 Effective Date and Term
  - 1.1 Effective Date
  - 1.2 Term
  - 1.3 Survival
- 2.0 Facilitation by Transmission Provider
- 3.0 Construction Obligations
  - 3.1 Direct Assignment Facilities or Customer-Funded Upgrades
  - 3.2 Scope of Applicable Technical Requirements and Standards
- 4.0 Tax Liability
  - 4.1 New Service Customer Payments Taxable
  - 4.2 Income Tax Gross-Up
  - 4.3 Private Letter Ruling

- 4.4 Refund
  - 4.5 Contests
  - 4.6 Taxes Other Than Income Taxes
  - 4.7 Tax Status
- 5.0 Safety
  - 5.1 General
  - 5.2 Environmental Releases
- 6.0 Schedule Of Work
  - 6.1 Standard Option
  - 6.2 Option to Build
  - 6.3 Revisions to Schedule and Scope of Work
  - 6.4 Suspension
- 7.0 Suspension of Work Upon Default
  - 7.1 Notification and Correction of Defects
- 8.0 Transmission Outages
  - 8.1 Outages; Coordination
- 9.0 Security, Billing and Payments
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10.0 Assignment
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11.0 Insurance
  - 11.1 Required Coverages
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.4 No Limitation of Liability
  - 11.5 Self-Insurance
  - 11.6 Notices: Certificates of Insurance
  - 11.7 Subcontractor Insurance
  - 11.8 Reporting Incidents
- 12.0 Indemnity
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing
  - 12.5 Limitation on Damages
  - 12.6 Limitation of Liability in Event of Breach
  - 12.7 Limited Liability in Emergency Conditions
- 13.0 Breach, Cure And Default
  - 13.1 Breach

- 13.2 Notice of Breach
- 13.3 Cure and Default
- 13.4 Right to Compel Performance
- 13.5 Remedies Cumulative
- 14.0 Termination
  - 14.1 Termination
  - 14.2 Cancellation By New Service Customer
  - 14.3 Survival of Rights
  - 14.4 Filing at FERC
- 15.0 Force Majeure
  - 15.1 Notice
  - 15.2 Duration of Force Majeure
  - 15.3 Obligation to Make Payments
- 16.0 Confidentiality
  - 16.1 Term
  - 16.2 Scope
  - 16.3 Release of Confidential Information
  - 16.4 Rights
  - 16.5 No Warranties
  - 16.6 Standard of Care
  - 16.7 Order of Disclosure
  - 16.8 Termination of Upgrade Construction Service Agreement
  - 16.9 Remedies
  - 16.10 Disclosure to FERC or its Staff
  - 16.11 No Party Shall Disclose Confidential Information of Party 16.12 Information that is Public Domain
  - 16.13 Return or Destruction of Confidential Information
- 17.0 Information Access And Audit Rights
  - 17.1 Information Access
  - 17.2 Reporting of Non-Force Majeure Events
  - 17.3 Audit Rights
  - 17.4 Waiver
  - 17.5 Amendments and Rights under the Federal Power Act
  - 17.6 Regulatory Requirements
- 18.0 Representation and Warranties
  - 18.1 General
- 19.0 Inspection and Testing of Completed Facilities
  - 19.1 Coordination
  - 19.2 Inspection and Testing
  - 19.3 Review of Inspection and Testing by Transmission Owner
  - 19.4 Notification and Correction of Defects
  - 19.5 Notification of Results
- 20.0 Energization of Completed Facilities
- 21.0 Transmission Owner's Acceptance of Facilities Constructed by New Service Customer
- 22.0 Transfer of Title to Certain Facilities Constructed By New Service Customer

23.0 Liens

**ATTACHMENT HH – RATES, TERMS, AND CONDITIONS OF SERVICE FOR PJMSETTLEMENT, INC.**

**ATTACHMENT II – MTEP PROJECT COST RECOVERY FOR ATSI ZONE**

**ATTACHMENT JJ – MTEP PROJECT COST RECOVERY FOR DEOK ZONE**

**ATTACHMENT KK - FORM OF DESIGNATED ENTITY AGREEMENT**

**ATTACHMENT LL - FORM OF INTERCONNECTION COORDINATION AGREEMENT**

**ATTACHMENT MM – FORM OF PSEUDO-TIE AGREEMENT – WITH NATIVE BA AS PARTY**

**ATTACHMENT MM-1 – FORM OF SYSTEM MODIFICATION COST REIMBURSEMENT AGREEMENT – PSEUDO-TIE INTO PJM**

**ATTACHMENT NN – FORM OF PSEUDO-TIE AGREEMENT WITHOUT NATIVE BA AS PARTY**

**ATTACHMENT OO – FORM OF DYNAMIC SCHEDULE AGREEMENT INTO THE PJM REGION**

**ATTACHMENT PP – FORM OF FIRM TRANSMISSION FEASIBILITY STUDY AGREEMENT**



### 13.7

#### **Classification of Firm Transmission Service:**

- (a) The Transmission Customer taking Firm Point-To-Point Transmission Service may (1) change its Receipt and Delivery Points to obtain service on a non-firm basis consistent with the terms of Tariff, Part II, section 22.1 or (2) request a modification of the Points of Receipt or Delivery on a firm basis pursuant to the terms of Tariff, Part II, section 22.2.
- (b) The Transmission Customer may purchase transmission service to make sales of capacity and energy from multiple generating units that are on the Transmission Provider's Transmission System. For such a purchase of transmission service, the resources will be designated as multiple Points of Receipt, unless the multiple generating units are at the same generating plant in which case the units would be treated as a single Point of Receipt.
- (c) The Transmission Provider shall provide firm deliveries of capacity and energy from the Point(s) of Receipt to the Point(s) of Delivery. Each Point of Receipt at which firm transmission capacity is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Receipt. Points of Receipt and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. Each Point of Delivery at which firm transfer capability is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Delivery. Points of Delivery and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. The greater of either (1) the sum of the capacity reservations at the Point(s) of Receipt, or (2) the sum of the capacity reservations at the Point(s) of Delivery shall be the Transmission Customer's Reserved Capacity. The Transmission Customer will be billed for its Reserved Capacity under the terms of Tariff, Schedule 7. The Transmission Customer may not exceed its firm capacity reserved at each Point of Receipt and each Point of Delivery except as otherwise specified in Tariff, Part II, section 22. In the event the Transmission Customer (including Third Party Sales by a Transmission Owner) exceeds its firm capacity reserved at any Point of Receipt or Point of Delivery or uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved, except as otherwise specified in Tariff, Part II, section 22, the Transmission Customer shall pay a penalty equal to twice the rate set forth in Tariff, Schedule 7 as follows:

The unreserved use penalty for a single hour of unreserved use shall be based on the rate for daily Firm Point-To-Point Transmission Service. If there is more than one assessment for a given duration (e.g., daily) for the Transmission Customer, the penalty shall be based on the next longest duration (e.g., weekly). The unreserved penalty charge for multiple instances of unreserved use (i.e., more than one hour) within a day shall be based on the daily rate Firm Point-To-Point Transmission Service. The unreserved penalty charge for multiple instances of unreserved use isolated to one calendar week shall be based on the charge for weekly Firm Point-To-Point Transmission Service. The unreserved use penalty charge for multiple instances of unreserved use during more than one week during a

calendar month shall be based on the charge for monthly Firm Point-To-Point Transmission Service.

The Transmission Provider shall distribute all unreserved use penalties incurred under this section in a given hour to the Transmission Customers that: (1) were using transmission service in the same hour in which the unreserved use penalty was incurred; and (2) did not incur unreserved use penalties under this section during the hour in which the penalties were incurred. The Transmission Provider shall distribute the unreserved use penalties to each such Transmission Customer pro-rata based on the total Tariff, Schedule 1A charges for all such Transmission Customers for all the hours of the day in which the penalty was incurred.

## **15.2 Determination of Available Transfer Capability:**

A description of the Transmission Provider's specific methodology for assessing available transfer capability posted on the Transmission Provider's OASIS (Tariff, section 4) is contained in Tariff, Attachment C. The Transmission Provider will not provide Short-Term Firm Point-To-Point Transmission Service in excess of the transfer capability posted on OASIS pursuant to Tariff, Part II, section 17.9. In the event sufficient transfer capability may not exist to accommodate a request for Long-Term Firm Point-To-Point Transmission Service, and such request does not commence and terminate within the 18 month ATC horizon, the Transmission Provider will respond by performing (in coordination with the affected Transmission Owner or Transmission Owners to the extent necessary) a Phase I System Impact Study as described in Tariff, Part II, section 19. If a request for Long-Term Firm Point-to-Point Transmission Service falls entirely within the ATC horizon, the request will be evaluated based on the posted ATC.

## **17.1 Application:**

A request for Firm Point-To-Point Transmission Service for periods of one year or longer must contain an Application submitted on the OASIS, at least sixty (60) days in advance of the calendar month in which service is to commence. Requests for firm service for periods of less than one year shall be subject to the expedited procedures set forth in Tariff, Part II, section 17.8. All Firm Point-To-Point Transmission Service requests should be submitted by entering the information listed below on the Transmission Provider's OASIS. Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line. A Completed Application for service that terminates within the 18-month ATC horizon will receive a timestamp establishing priority in accordance with Tariff, section 13.2. Requests for service for periods of one year or longer that terminate after the 18-month ATC horizon will receive a time-stamped record for establishing the Project Identifier of the Completed Application. For Transmission Service requests that require a Phase I System Impact Study, a Completed Application must be submitted and received by the Transmission Provider by the cycle Application Deadline in order to be assigned a Project Identifier in such cycle.

## **17.2 Completed Application:**

If requested by the Transmission Provider, a Completed Application shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The location of the Point(s) of Receipt and Point(s) of Delivery and the identities of the Delivering Parties and the Receiving Parties;
- (iv) The location of the generating facility(ies) supplying the capacity and energy and the location of the load ultimately served by the capacity and energy transmitted. The Transmission Provider will treat this information as confidential except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice or pursuant to Applicable Regional Entity transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations;
- (v) A description of the supply characteristics of the capacity and energy to be delivered;
- (vi) An estimate of the capacity and energy expected to be delivered to the Receiving Party;
- (vii) The Service Commencement Date and the term of the requested Transmission Service;
- (viii) The transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission Provider's Transmission System; customers may combine their requests for service in order to satisfy the minimum transmission capacity requirement;
- (ix) A statement indicating that, if the Eligible Customer submits a Pre-Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that Transmission Provider can provide the requested Transmission Service; and
- (x) Any additional information required by the Transmission Provider's planning process established in Operating Agreement, Schedule 6.

The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

#### **17.4 Notice of Deficient Application:**

If an Application fails to meet the requirements of the Tariff, the Transmission Provider shall notify the entity requesting service within fifteen (15) days of receipt of the reasons for such failure. The Transmission Provider will attempt to remedy minor deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application, along with any deposit, with interest. Upon receipt of a new or revised Application that fully complies with the requirements of Tariff, Part II, the Eligible Customer shall be assigned a new queued time on the OASIS and/or Project Identifier, as applicable, consistent with the date of the new or revised Application.

## **17.5 Response to a Completed Application:**

Following receipt of a Completed Application for Firm Point-To-Point Transmission Service, the Transmission Provider shall make a determination of available transfer capability as required in Tariff, Part II, section 15.2. With respect to Short-Term Firm Point-To-Point Transmission Service, the Transmission Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application, whether it will be able to provide service. With respect to Long-Term Firm Point-To-Point Transmission Service, the Transmission Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application either (i) if it will be able to provide service without performing a Phase I System Impact Study or (ii) if such a study is needed to evaluate the impact of the Application pursuant to Tariff, Part II, section 19.1; provided that, if, in connection with the request, Transmission Provider must provide notification to an existing customer pursuant to Tariff, Part I, section 2.3, the foregoing deadline shall be extended to forty-five (45) days after the date of receipt of a Completed Application. Responses by the Transmission Provider must be made as soon as practicable to all completed applications and the timing of such responses must be made on a non-discriminatory basis.



## **17.6 Execution of Service Agreement:**

Whenever the Transmission Provider determines that a Phase I System Impact Study is not required and that the service can be provided, it shall notify the Eligible Customer as soon as practicable but no later than thirty (30) days after receipt of the Completed Application. Where a Phase I System Impact Study is required, the provisions of Tariff, Part II, section 19 will govern the execution of a Service Agreement. Failure of an Eligible Customer to execute and return the Service Agreement or request the filing of an unexecuted service agreement pursuant to Tariff, Part II, section 15.3, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded with interest. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

## **19      System Impact Study Procedures for Long-Term Firm Point-To-Point Transmission Service Requests**

## **19.1 Notice of Need for Phase I System Impact Study:**

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a Phase I System Impact Study is needed. The purpose of the Phase I System Impact Study shall be to assess whether the Transmission System has sufficient available capability to provide the requested service. If the Transmission Provider determines that a Phase I System Impact Study is necessary to evaluate the requested service, it shall so inform the Eligible Customer, as soon as practicable. In such cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender an Application and Studies Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required Phase I System Impact Study(ies). For a service request to remain a Completed Application, the Eligible Customer shall execute the Application and Studies Agreement and return it to the Transmission Provider within fifteen (15) days and provide the Study Deposit and Readiness Deposit required pursuant to Tariff, Part VII, Subpart C, section 306(A)(5) or Tariff, Part VIII, Subpart B, section 403(A)(5), as applicable. If the Eligible Customer elects not to execute the Application and Studies Agreement, its application shall be deemed withdrawn and its deposit, pursuant to Tariff, Part II, section 17.3, shall be returned with interest.

**19.2                    Application and Studies Agreement and Study Deposit and Readiness  
Deposit:**

A request for service for which a Phase I System Impact Study is required is subject to an Application and Studies Agreement along with a Study Deposit and Readiness Deposit(s), as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

### **19.3                   Phase I System Impact Study Procedures:**

A request for service for which a Phase I System Impact Study is required is subject to the System Impact Study Procedures, as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

### 19.3.1 [Reserved]







## **22.2                    Modification On a Firm Basis:**

Any request by a Transmission Customer to modify Receipt and Delivery Points of confirmed service on a firm basis shall be treated as a new request for service in accordance with Tariff, Part II, section 17 hereof and Tariff, Part II, section 19 hereof, as applicable.

### **23.1 Procedures for Assignment or Transfer of Service:**

A Transmission Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible Customer (the Assignee). The Transmission Customer that sells, assigns or transfers its rights under its Service Agreement is hereafter referred to as the Reseller. Compensation to Resellers shall be at rates established by agreement between the Reseller and the Assignee.

The Assignee must execute a service agreement with the Transmission Provider and PJMSettlement governing reassignments of transmission service prior to the date on which the reassigned service commences. PJMSettlement shall charge the Reseller, as appropriate, at the rate stated in the Reseller's Service Agreement with the Transmission Provider and PJMSettlement or the associated OASIS schedule and credit the Reseller with the price reflected in the Assignee's Service Agreement with the Transmission Provider and PJMSettlement or the associated OASIS schedule; provided that, such credit shall be reversed in the event of non-payment by the Assignee. The Assignee cannot request any change to any term or condition set forth in the original Service Agreement, except for a change to commencement of service or reduction of the capacity, to the extent explicitly permitted by this Tariff. The Assignee will receive the same services as did the Reseller and the priority of service for the Assignee will be the same as that of the Reseller. The Assignee will be subject to all terms and conditions of this Tariff.

## **23.2 Limitations on Assignment or Transfer of Service:**

If the Assignee requests a change in the Point(s) of Receipt or Point(s) of Delivery, or a change in any other specifications set forth in the original Service Agreement, the Transmission Provider will consent to such change subject to the provisions of the Tariff, provided that the change will not impair the operation and reliability of the Transmission Provider's Transmission System or a Transmission Owner's generation, transmission, or distribution systems. The Assignee shall compensate the Transmission Provider for performing any System Impact Study(ies) needed to evaluate the capability of the Transmission System to accommodate the proposed change and any additional costs resulting from such change. The Reseller shall remain liable for the performance of all obligations under the Service Agreement, except as specifically agreed to by the Transmission Provider and the Reseller through an amendment to the Service Agreement.

## **27.2 Redispatch Using Locational Marginal Prices:**

Whenever in the operation of the PJM Region the Transmission Provider identifies transmission constraints, the provisions of Tariff, Attachment K shall apply to all Transmission Customers (including Native Load Customers and a Transmission Owner making a Third-Party Sale); provided, however, that a Transmission Customer receiving Non-Firm Point-To-Point Transmission Service may elect not to pay the costs of redispatch determined pursuant to Tariff, Attachment K when those costs would be imposed consistent with Commission policy and Transmission Service to such Transmission Customer may be interrupted.

## **29.2 Application Procedures:**

An Eligible Customer requesting service under Tariff, Part III must submit an Application to the Transmission Provider as far as possible in advance of the month in which service is to commence. Unless subject to the procedures in Tariff, Part I, section 2, Completed Applications for Network Integration Transmission Service will be assigned a Project Identifier according to the date and time the Application is received, with the earliest Application receiving the highest priority. For Transmission Service requests that require a Phase I System Impact Study, a Completed Application must be submitted and received by the Transmission Provider by the cycle Application Deadline in order to be assigned a Project Identifier in such cycle. If requested by Transmission Provider, Applications should be submitted by entering the information listed below (except for applications for Network Integration Transmission Service pursuant to state required retail access programs for which Transmission Customers shall provide the information required under the Service Agreement) on the Transmission Provider's OASIS. For applications pursuant to state required retail access programs, the information required under the Service Agreement should be submitted on the Transmission Provider's specified electronic information system established for such programs. Each of these methods will provide a time-stamped record for establishing the service priority of the Application. If requested by Transmission Provider, a Completed Application (other than applications for Network Integration Transmission Service pursuant to a state required retail access program, which shall be governed by Tariff, Attachment F-1 and the specifications thereto) shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the party requesting service;
- (ii) A statement that the party requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) A description of the Network Load at each delivery point. This description should separately identify and provide the Eligible Customer's best estimate of the total loads to be served at each transmission voltage level, and the loads to be served from each Transmission Provider substation at the same transmission voltage level. The description should include a ten (10) year forecast of summer and winter load and resource requirements beginning with the first year after the service is scheduled to commence;
- (iv) The amount and location of any interruptible loads included in the Network Load. This shall include the summer and winter capacity requirements for each interruptible load (had such load not been interruptible), that portion of the load subject to interruption, the conditions under which an interruption can be implemented and any limitations on the amount and frequency of interruptions. An Eligible Customer should identify the amount of interruptible customer load (if any) included in the 10 year load forecast provided in response to (iii) above;
- (v) A description of Network Resources (current and 10-year projection). For each on-system Network Resource, such description shall include:

- Unit size and amount of capacity from that unit to be designated as Network Resource
- VAR capability (both leading and lagging) of all generators
- Operating restrictions
  - Any periods of restricted operations throughout the year
  - Maintenance schedules
  - Minimum loading level of unit
  - Normal operating level of unit
  - Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations
- Arrangements governing sale and delivery of power to third parties from generating facilities located in the Transmission Provider Control Areas, where only a portion of unit output is designated as a Network Resource
- For each off-system Network Resource, such description shall include:
  - Identification of the Network Resource as an off-system resource
- Amount of power to which the customer has rights
  - Identification of the control area from which the power will originate
  - Delivery point(s) to the Transmission Provider's Transmission System
  - Transmission arrangements on the external transmission system(s)
- Operating restrictions, if any
  - Any periods of restricted operations throughout the year
  - Maintenance schedules
  - Minimum loading level of unit
  - Normal operating level of unit

- Any must-run unit designations required for system reliability or contract reasons
  - Approximate variable generating cost (\$/MWH) for redispatch computations;
- (vi) Description of Eligible Customer's transmission system:
- Load flow and stability data, such as real and reactive parts of the load, lines, transformers, reactive devices and load type, including normal and emergency ratings of all transmission equipment in a load flow format compatible with that used by the Transmission Provider
  - Operating restrictions needed for reliability
  - Operating guides employed by system operators
  - Contractual restrictions or committed uses of the Eligible Customer's transmission system, other than the Eligible Customer's Network Loads and Resources
  - Location of Network Resources described in subsection (v) above
  - 10 year projection of system expansions or upgrades
  - Transmission System maps that include any proposed expansions or upgrades
  - Thermal ratings of Eligible Customer's Control Area ties with other Control Areas;
- (vii) Service Commencement Date and the term of the requested Network Integration Transmission Service. The minimum term for Network Integration Transmission Service is one year except that, for service provided with respect to a state required retail access program, the minimum term is one day;
- (viii) A statement signed by an authorized officer from or agent of the Network Customer attesting that all of the network resources listed pursuant to Tariff, Part III, section 29.2(v) satisfy the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Tariff, Part III; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program; and

(ix) Any additional information required of the Transmission Customer as specified in the Transmission Provider's planning process established in Operating Agreement, Schedule 6.

In addition, a party requesting Transmission Service shall provide the information specified in, and otherwise comply with, the "PJM Credit Policy" set forth in Tariff, Attachment Q hereto. Unless the Parties agree to a different time frame, the Transmission Provider must acknowledge the request within ten (10) days of receipt. The acknowledgement must include a date by which a response, including a Service Agreement, will be sent to the Eligible Customer. If an Application fails to meet the requirements of this section, the Transmission Provider shall notify the Eligible Customer requesting service within fifteen (15) days of receipt and specify the reasons for such failure. Wherever possible, the Transmission Provider will attempt to remedy deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application without prejudice to the Eligible Customer filing a new or revised Application that fully complies with the requirements of this section. The Eligible Customer will be assigned a new Project Identifier consistent with the date of the new or revised Application. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.



**29.2A Determination of Available Transfer Capability:**

A description of the Transmission Provider's specific methodology for assessing available transfer capability posted on the Transmission Provider's OASIS (Tariff, Part I, section 4) is contained in Tariff, Attachment C. If a request for Long-Term Firm Network Integration Transmission Service falls entirely within the ATC horizon, the request will be evaluated based on the posted ATC. Requests that terminate beyond the 18-month ATC horizon require a Phase I System Impact Study and shall be subject to Tariff, Part VII or Tariff, Part VIII, as applicable.

### **29.3                    Technical Arrangements to be Completed Prior to Commencement of Service:**

Network Integration Transmission Service shall not commence until the Transmission Provider, the affected Transmission Owners, and the Network Customer, or a third party, have completed installation of all equipment specified under the Network Operating Agreement and, if applicable, the Construction Service Agreement, consistent with Good Utility Practice and any additional requirements reasonably and consistently imposed to ensure the reliable operation of the Transmission System. The Transmission Provider and the affected Transmission Owners shall exercise reasonable efforts, in coordination with the Network Customer, to complete such arrangements as soon as practicable taking into consideration the Service Commencement Date.

### **30.2                    Designation of New Network Resources:**

The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable (notwithstanding the requirements in this Tariff, Part III, section 30.2, the applicable requirements of Tariff, Attachment DD, the Reliability Assurance Agreement, and the PJM Manuals regarding the designation of Network Resources shall apply). A request for Transmission Service associated with designation of a new Network Resource must be made through the Transmission Provider's OASIS by a request for modification of service pursuant to an Application under Tariff, Part III, section 29. This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Tariff, Part III; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Tariff, Part III, section 29.2. In the event the Network Resource to be designated consists of new generation facilities in the PJM Region, the Network Customer or the owner of the generating facilities also must submit an Interconnection Request pursuant to Tariff, Part VII or Tariff, Part VIII, as applicable. In the event the Network Resource to be designated is Behind The Meter Generation, the designation must be made before the commencement of a Planning Period as that term is defined in the Operating Agreement and will remain in effect for the entire Planning Period. In the event the Network Resource to be designated will use interface capacity and is for a period of less than one year, the designation request must be submitted in accordance with the time requirements set forth in Tariff, Part II, section 17.8 and Tariff, Part II, section 17.9 and will be processed together with, and in the same manner as, requests for Short-Term Firm Point-To-Point Transmission Service.

### 31.7 Establishing and Changing Network Load Energy Settlement Area Definitions:

(a) Prior to the 2015/2016 Planning Period, the Energy Settlement Area for a Network Customer's Network Load in a given electric distribution company's fully metered franchise area(s) or service territory(ies) shall be the aggregate load buses in a Zone, as defined in subsection (c) below, or, with respect to Non-Zone Network Load, to the border of the PJM Region, unless the Network Customer defines a more specific Energy Settlement Area in accordance with the procedures set forth in the PJM Manuals. Commencing with the 2015/2016 Planning Period, the Energy Settlement Area for a Network Customer's Network Load in a given electric distribution company's fully metered franchise area(s) or service territory(ies) shall be the aggregate load buses specifying the Residual Metered Load distribution for that franchise area(s) or service territory(ies), as defined in subsection (c) below, or with respect to Non-Zone Network Load to the border of the PJM Region, unless the Network Customer defines a more specific nodal Energy Settlement Area in accordance with the procedures set forth in the PJM Manuals.

(b) A Network Customer may change the definition of its existing Network Load Energy Settlement Area in accordance with the procedures set forth in the PJM Manuals and the Network Customer's existing rights under the Tariff. Notwithstanding any other relevant provision(s) of this Tariff, advance notice of any such change described in the PJM Manuals must be provided to the Transmission Provider and the effective date of such change shall coincide with the first day of a Planning Period, as defined in the Operating Agreement. If system upgrades are required to affect a Network Load Energy Settlement Area change, all required upgrades shall be completed prior to the requested effective date of the change; if all required system upgrades are not completed prior to the requested effective date, the effective date shall be the first day of the Planning Period that immediately follows completion of all system upgrades. A Network Customer may not change the definition of its existing Network Load Energy Settlement Area to a less specific Energy Settlement Area, except in circumstances where there has been a physical change to the relevant transmission system infrastructure, as set forth in the PJM Manuals, such that settlement according to the previously defined Energy Settlement Area is no longer possible.

(c) The distribution of load buses in an Energy Settlement Area for the determination of a Transmission Loss Charge and Transmission Congestion Charge per Tariff, Part I, section 5.1 and Tariff, Part I, section 5.4 are determined as follows.

- (i) *Zonal aggregate determination.* The default distribution of load buses for a Zone for the Day-ahead Energy Market is the State Estimator distribution of load for that Zone at 8:00 a.m. one week prior to the Operating Day (i.e. if the Operating Day is Monday, the default distribution is from 8:00 a.m. on Monday of the previous week). Should the Office of the Interconnection experience technical limitations that would restrict the ability to obtain the State Estimator distribution of load for a Zone at 8:00 a.m. one week prior to the Operating Day or if the required data is not available, a State Estimator distribution of load from the most recently available day of the week that the Operating Day falls on will be used (i.e., if the Operating Day is Monday, the Office of the Interconnection will utilize

the State Estimator distribution of load from the most recent Monday for which data is available). If the default distribution does not accurately reflect the distribution of load for the Zone for the relevant electric distribution company for the Day-ahead Energy Market, it may specify another more accurate distribution of load buses for the Zone in the Office of the Interconnection's internet-based software application. The distribution of load buses for a Zone for the Real-time Energy Market is the State Estimator distribution of load for that Zone for each hour during the Operating Day.

- (ii) *Residual Metered Load aggregate determination.* The default distribution of load buses for a Residual Metered Load aggregate for the Day-ahead Energy Market is the distribution of the real-time Residual Metered Load at each bus within the Residual Metered Load aggregate at 8:00 a.m. one week prior to the Operating Day. Should the Office of the Interconnection experience technical limitations that would restrict the ability to obtain the bus distribution of the real-time Residual Metered Load aggregate at 8:00 a.m. one week prior to the Operating Day or if the required data is not available, a distribution of the real-time Residual Metered Load aggregate from the most recently available day of the week that the Operating Day falls on will be used (i.e., if the Operating Day is Monday, the Office of the Interconnection will utilize the bus distribution of the real-time Residual Metered Load aggregate from the most recent Monday for which data is available). The distribution of load buses for a Residual Metered Load aggregate for the Real-time Energy Market is the Residual Metered Load at each bus in the Residual Metered Load aggregate for each hour during the Operating Day. Residual Metered Load is determined by reducing the electric distribution company's revenue meter calculated load at each bus in its fully metered franchise area(s) or service territory(ies) as determined in Tariff, Part I, section 5.1.3(e)(i) and Tariff, Part I, section 5.4.3(e)(i) by the nodally priced load of other entities assigned to each load bus in the electric distribution company's fully metered franchise area(s) or service territory(ies) via hourly load contracts as specified in Tariff, Part I, section 5.1.3(e)(ii) and Tariff, Part I, section 5.4.3(e)(ii).
- (iii) *Nodal aggregate determination.* The distribution of load buses for nodal load in the Day-ahead Energy Market and Real-time Energy Market is determined by a fixed aggregate definition that represents the composition of the nodal load at a single identifiable bus or set of identifiable buses, as agreed upon by the Load Serving Entity responsible for the load and the electric distribution company in whose fully metered franchise area(s) or service territory(ies) the load is located, per the nodal pricing settlement rules defined in the PJM Manuals.

## **32      System Impact Study Procedures for Network Integration Transmission Service Requests**

### **32.1 Notice of Need for Phase I System Impact Study:**

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a Phase I System Impact Study is needed. The purpose of the Phase I System Impact Study shall be to assess whether the Transmission System has sufficient available capability to provide the requested service. If the Transmission Provider determines that a Phase I System Impact Study is necessary to evaluate the requested service, it shall so inform the Eligible Customer, as soon as practicable. In such Cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender an Application and Studies Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required Phase I System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Application and Studies Agreement and return it to the Transmission Provider within fifteen (15) days and provide the Study Deposit and Readiness Deposit required pursuant to Tariff, Part VII, Subpart C, section 306(A)(5) or Tariff, Part VIII, Subpart B, section 403(A)(5), as applicable. If the Eligible Customer elects not to execute the Application and Studies Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest.

### **32.2 Study Deposit and Readiness Deposit:**

A request for service for which a Phase I System Impact Study is required is subject to the Study Deposit and Readiness Deposit(s), as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.



### **32.3                   Phase I System Impact Study Procedures:**

A request for service for which a Phase I System Impact Study is required is subject to the System Impact Study Procedures, as set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

**32.3.1**      **[Reserved]**

**32.4**

**[Reserved]**

**32.5**

**[Reserved]**

#### **IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM**

References to section numbers in this Part IV refer to sections of this Part IV, unless otherwise specified.

##### **Preamble**

This Part IV shall apply to apply to: (a) any New Service Request received prior to April 1, 2018; and (b) any New Service Request for which, as of the Transition Date (defined in Tariff, Part VII), the Interconnection Customer has received for execution an Interconnection Service Agreement or wholesale market participation agreement or has directed the Transmission Provider to file an Interconnection Service Agreement or wholesale market participation agreement unexecuted. New Service Requests received on or after April 1, 2018 for which Interconnection Customers have not received for execution or directed to be filed unexecuted an Interconnection Service Agreement or wholesale market participation agreement will be subject to the Generation Interconnection Procedures set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

An Interconnection Customer that proposes to (i) interconnect a generating unit to the Transmission System in the PJM Region, (ii) increase the capacity of a generating unit in the PJM Region, (iii) interconnect Merchant Transmission Facilities with the Transmission System, (iv) increase the capacity of existing Merchant Transmission Facilities interconnected to the Transmission System, or (v) interconnect a generating unit to distribution facilities located in the PJM Region that are used for transmission of power in interstate commerce, and to make wholesale sales using the output of the generating unit shall request interconnection with the Transmission System pursuant to, and shall comply with, the terms, conditions, and procedures set forth in Tariff, Part IV. Tariff, Part IV, Subpart G and related portions of the PJM Manuals apply to Interconnection Requests involving new Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources over any consecutive 24-month period. Upgrade Customers that propose Upgrade Requests seeking Incremental Auction Revenue Rights shall also comply with the terms, conditions, and procedures set forth in Tariff, Part VI. Tariff, Part VI contains procedures, terms and conditions governing the Transmission Provider's administration of the New Services Queue, System Impact Studies and Facilities Studies of Interconnection Requests (as well as other New Service Requests), and agreements related to such studies and Interconnection Service. Each Interconnection Customer must pay for any Attachment Facilities, Local Upgrades, and Network Upgrades necessary to accommodate the requested interconnection. Notwithstanding the foregoing, by August 31 of each calendar year, PJM shall solicit requests from Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD. Such additional Capacity Interconnection Rights would be for a one-year period as specified by PJM in the solicitation. Responses to such solicitation must be submitted by such interested Generation Owners by October 31 prior to the upcoming Base Residual Auction. Such requests shall be studied for deliverability similar to any Generation Interconnection Customer seeking to enter the New Services Queue; however, such requests shall not be required to enter the New Services Queue. PJM shall study such requests in a manner so as to prevent infringement on available system capabilities of any resource which is already in

service, or which has an executed Interconnection Service Agreement, Transmission Service Agreement, Upgrade Construction Service Agreement, or has obtained a Queue Position in the New Services Queue.

### **36.1A Behind The Meter Generation:**

The following provisions shall apply with respect to Behind The Meter Generation:

#### **36.1A.1 Generation Interconnection Requests:**

Any Behind The Meter Generation that desires to be designated, in whole or in part, as a Capacity Resource or Energy Resource must submit a Generation Interconnection Request.

#### **36.1A.2 Information Required in Generation Interconnection Requests:**

In addition to the information described in Tariff, Part IV, Subpart A, section 36.1, a Generation Interconnection Request for Behind The Meter Generation shall include (1) the type and size of the load located (or to be located) at the site of such generation; (2) a description of the electrical connections between the generation facility and the load; and (3) the amount of the facility's generating capacity for which the customer seeks Capacity Interconnection Rights or that will be an Energy Resource. The amount of capacity included in the election pursuant to section (3) of the preceding sentence may be reduced, but shall not be increased, during the interconnection study process in accordance with any rules and procedures stated in the PJM Manuals.

#### **36.1A.3 Small Generation Classification:**

The amount of generating capacity of Behind The Meter Generation that the Generation Interconnection Customer identifies in its Generation Interconnection Request as the capacity that it wishes to be a Capacity Resource or Energy Resource shall determine whether Subpart A or Subpart G of Part IV will apply to such Generation Interconnection Request.

#### **36.1A.4 Transmission Provider Determination:**

Prior to commencing any Interconnection Studies related to a Generation Interconnection Request involving facilities described as Behind The Meter Generation, Transmission Provider shall determine, based on the information included in the Generation Interconnection Request and any other information requested and obtained from the Generation Interconnection Customer, whether the Generating Facility or expansion involved in the Generation Interconnection Request appears to meet the definition of Behind The Meter Generation in the Tariff. In the event that Transmission Provider finds that the subject project does not meet the definition of Behind The Meter Generation, it shall so notify the Generation Interconnection Customer and, for all purposes of Tariff, Part IV and Tariff, Part VI, shall thereafter deem the customer's Generation Interconnection Request to include the full generating capacity of the facility or expansion to which the request relates.

#### **36.1A.5 Treatment As Energy Resource:**

Any portion of the capacity of Behind The Meter Generation that a Generation Interconnection Customer identifies in its Generation Interconnection Request as capacity that it seeks to utilize,

directly or indirectly, in Wholesale Transactions, but for which the customer does not seek Capacity Resource status, shall be deemed to be an Energy Resource.

**36.1A.6        Operation as Capacity Resource:**

To the extent that a Generation Interconnection Customer that owns or operates generation facilities that otherwise would be classified as Behind The Meter Generation elects to operate such facilities as a Capacity Resource, the provisions of the Tariff regarding Behind The Meter Generation shall not apply to such generation facilities for the period such election is in effect.

**36.1A.7        Other Requirements:**

Behind The Meter Generation for which a Generation Interconnection Request is not required under Tariff, Part IV may be subject to other interconnection-related requirements of a Transmission Owner or Electric Distributor with which the generation facility will be interconnected.



## **36.2 Interconnection Feasibility Study:**

After receiving an Interconnection Request, a signed Generation Interconnection Feasibility Study Agreement or Transmission Interconnection Feasibility Study Agreement, as applicable, and the applicable deposit contained in Tariff, Part IV, Subpart A, sections 36.1.01 and 36.1.03, and Tariff, Part IV, Subpart G, sections 110.1, 111.1, and 112.1 from the Interconnection Customer, and, if applicable, subject to the terms of Tariff, Part IV, Subpart A, section 36.1A.5, the Transmission Provider shall conduct an Interconnection Feasibility Study to make a preliminary determination of the type and scope of Attachment Facilities, Local Upgrades, and Network Upgrades that will be necessary to accommodate the Interconnection Request and to provide the Interconnection Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Interconnection Customer's cost responsibility, estimated consistent with Tariff, Part VI, Subpart B, section 217. The Interconnection Feasibility Study assesses the practicality and cost of accommodating interconnection of the generating unit or increased generating capacity with the Transmission System. The analysis is limited to load-flow analysis of probable contingencies and, for Generation Interconnection Requests, short-circuit studies. This study also focuses on determining preliminary estimates of the type, scope, cost and lead time for construction of facilities required to interconnect the project. For a Generation Interconnection Customer, the Interconnection Feasibility Study may provide separate estimates of necessary facilities and upgrades and associated cost responsibility reflecting the Generating Facility being designated as either a Capacity Resource or an Energy Resource. Transmission Provider shall study the Interconnection Request at the level of service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. For purposes of determining necessary interconnection facilities and network upgrades, the Feasibility Study shall consider the level of Interconnection Service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. The study for the primary Point of Interconnection will be conducted as a cluster, within the project's New Services Queue. The study for the secondary Point of Interconnection will be conducted as a sensitivity analysis. The Transmission Provider shall provide a copy of the Interconnection Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, section 18.17, related work papers to the Interconnection Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall list the study and the date of the Interconnection Request to which it pertains on the Transmission Provider's website. To the extent required by Commission regulations, the Transmission Provider shall make the completed Interconnection Feasibility Study publicly available upon request, except that the identity of the Interconnection Customer shall remain confidential. The Transmission Provider shall conduct Interconnection Feasibility Studies two times each year.

The following applies to Interconnection Requests received on or before October 31, 2016:

For Interconnection Requests received during the six-month period ending October 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by the last day of February. For Interconnection Requests received during the six-month period

ending April 30 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by August 31. Following the closure of an interconnection queue on October 31 and April 30, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on December 1 and June 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

The following applies to Interconnection Requests received between November 1, 2016 and March 31, 2017:

For Interconnection Requests received during the five-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queue on March 31, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on May 1. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

The following applies to Interconnection Requests received on or after April 1, 2017:

For Interconnection Requests received during the six-month period ending September 30, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by January 31. For Interconnection Requests received during the six-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queues on September 30 and March 31, respectively, the Transmission Provider will utilize the following months of October and April, respectively, to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on November 1 and May 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

### **36.2.1 Substitute Point:**

If the Interconnection Feasibility Study reveals any result(s) not reasonably expected at the time of the Scoping Meeting, a substitute Point of Interconnection identified by the Interconnection Customer, Transmission Provider, or the Interconnected Transmission Owner, and acceptable to

the others, but which would not be a Material Modification, will be substituted for the Point of Interconnection identified in the Interconnection Feasibility Study Agreement. The substitute Point of Interconnection will be effected without loss of Queue Position and will be utilized in the ensuing System Impact Study.

#### **36.2.2 Meeting with Transmission Provider:**

At the Interconnection Customer's request, Transmission Provider, the Interconnection Customer and the Interconnected Transmission Owner shall meet at a mutually agreeable time to discuss the results of the Interconnection Feasibility Study. Such meeting may occur in person or by telephone or video conference.

#### **36.2.3 [Reserved]**

### **36.2A Modification of Interconnection Request:**

The Interconnection Customer shall submit to the Transmission Provider, in writing, any modification to its project that causes the project's capacity, location, configuration or technology to differ from any corresponding information provided in the Interconnection Request. The Interconnection Customer shall retain its Queue Position if the modification is in accordance with Tariff, Part IV, Subpart A, sections 36.2A.1, 36.2A.3, or 36.2A.6, or, if not in accordance with one of those sections, is determined not to be a Material Modification pursuant to Tariff, Part IV, Subpart A, section 36.2A.4 below. Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the Interconnected Transmission Owner, or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the project's Point of Interconnection, capacity, and/or configuration in accordance with such changes and shall proceed with any re-studies that Transmission Provider finds necessary in accordance with Tariff, Part VI, Subpart A, section 205.5 and/or Tariff, Part VI, Subpart A, section 207.2, as applicable, provided, however, that a change to the Point of Interconnection shall be permitted without loss of Queue Position only if it would not be a Material Modification.

The following language for these sections 36.2A.1 and 36.2A.3 below apply to Interconnection Requests which have entered the New Services Queue prior to May 1, 2012:

36.2A.1 Prior to return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce by up to 60 percent the electrical output (MW) (in the case of a Generation Interconnection Request) or by up to 60 percent of the transmission capability (in the case of a Transmission Interconnection Request) of the proposed project. For increases in generating capacity or transmission capability, the Interconnection Customer must submit a new Interconnection Request for the additional capability and shall be assigned a new Queue Position for the additional capability.

36.2A.2 After the System Impact Study Agreement is executed and prior to execution of the Interconnection Service Agreement, an Interconnection Customer may modify its project to reduce the electrical output (MW) (in the case of a Generation Interconnection Request) or the transmission capability (in the case of a Transmission Interconnection Request) of the proposed project by up to the larger of 20 percent of the capability considered in the System Impact Study or 50 MW.

The following language for these sections 36.2A.1 and 36.2A.3 below apply to Interconnection Requests which have entered the New Services Queue on or after May 1, 2012:

#### **36.2A.1 Modifications Prior to Executing A System Impact Study Agreement**

36.2A.1.1 Prior to the commencement of the Feasibility Study, an Interconnection Customer may request to reduce by up to 60 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or the capability (in the case of a Transmission Interconnection Request) without losing its current Queue Position. For Interconnection Requests received in months one through five of the New Services Queue the Interconnection Customer must identify this change prior to the close of business on the last day of the sixth month of the New Services Queue. For Interconnection Requests received during the sixth month of the New Services Queue the Interconnection Customer must identify this change no later than close of business on the day following the completion of the scoping meeting.

36.2A.1.2 After the start of the Feasibility Study, but prior to the return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce the size of the project as provided in this section 36.2A.1.2, subject to the limitation described in Tariff, Part IV, Subpart A, section 36.2A.7 below. The Interconnection Customer may reduce its project by up to 15 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than 15 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to 60 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new Interconnection Feasibility Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned. For increases in generating capacity or transmission capability, the Interconnection Customer must submit a new Interconnection Request for the additional capability and shall be assigned a new Queue Position for the additional capability.

### **36.2A.2 Modification of an Interconnection Request for Technological Changes**

36.2A.2.1 For a request to modify a project to include a technological advancement, no later than the return of the executed Facilities Study Agreement (or, if a Facilities Study is not required, prior the return of an executed Interconnection Service Agreement) to the Transmission Provider, an Interconnection Customer may request to modify its Interconnection Request to include a Permissible Technological Advancement without losing its current Queue Position provided Interconnection Customer submits the new machine modeling data associated with such Permissible Technological Advancements no later than the return of the executed Facilities Study Agreement (or, if a Facilities Study is not required, prior to return of an executed Interconnection Service Agreement). The machine modeling data as specified in the PJM Manuals associated with the requested technological change must be submitted via the PJM website.

36.2A.2.2 For a request to modify an Interconnection Request to include a technological advancement that does not qualify as a Permissible Technological Advancement, prior to returning an executed Facilities Study Agreement (or, if a Facilities Study is not required, prior to returning an executed Interconnection Service Agreement) to the Transmission Provider, an Interconnection Customer may request in writing to modify its Interconnection Request to add a technological advancement. Such requests must also include machine modeling data as specified in the PJM Manuals and submitted via the PJM website. If PJM determines the data submitted with such request is incomplete or incorrect, PJM will reject such technological change request and the Interconnection Customer may resubmit its technological change request with the complete and/or accurate data. All technological advancement requests not qualifying as a Permissible Technological Advancement will require a study and be evaluated by the Transmission Provider to determine whether such change would constitute a Material Modification. Such evaluation will include an analysis of the short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response on subsequent-queued Interconnection Requests. If the Transmission Provider determines that the technological advancement is not a Material Modification, the Interconnection Customer may modify its Interconnection Request to include such technological advancement. If the Transmission Provider determines the change is a Material Modification, the Interconnection Customer must withdraw its technological advancement change request to retain its Queue Position or proceed with a new Interconnection Request with such technological change. PJM shall determine whether a technological advancement is a Material Modification within thirty (30) calendar days of receipt of the technological advancement request.

### **36.2A.3 Modifications After the System Impact Study Agreement but Prior to Executing an Interconnection Service Agreement**

After the System Impact Study Agreement is executed and prior to execution of the Interconnection Service Agreement, an Interconnection Customer may modify its project to reduce the size of the project as provided in this section 36.2A.3, subject to the limitation described in Tariff, Part IV, Subpart A, section 36.2A.7 below. The Interconnection Customer may reduce its project by the greater of 10 MW or 5 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service

level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than the greater of 10 MW or 5 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to the greater of 50 MW or 20 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new System Impact Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned.

#### **36.2A.4**

Prior to making any modifications other than those specifically permitted by Tariff, Part IV, Subpart A, sections 36.2A.1, 36.2A.3 and 36.2A.6, the Interconnection Customer may first request that the Transmission Provider evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the Transmission Provider shall evaluate the proposed modifications prior to making them and shall inform the Interconnection Customer in writing of whether the modification(s) would constitute a Material Modification. For purposes of this section 36.2A.4, any change to the Point of Interconnection (other than a change deemed acceptable under Tariff, Part IV, Subpart A, sections 36.1.5, 36.2.1, or 36.2A.1) or increase in generating capacity shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

#### **36.2A.5**

Upon receipt of the Interconnection Customer's request for modification under Tariff, Part IV, Subpart A, section 36.2A.4, the Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but, except as otherwise provided in this Subpart A, the Transmission Provider shall commence such studies no later than thirty (30) calendar days after receiving notice of the Interconnection Customer's request. Any additional studies resulting from such modification shall be done at the Interconnection Customer's expense. Transmission Provider shall not require a separate deposit for any additional studies required as a result of Interconnection Customer's request for modification under Tariff, Part IV, Subpart A, section 36.2A.4 above. Instead, all such study costs shall be invoiced and paid as

work to be conducted under the Feasibility Study, System Impact Study, or Facilities Study, as applicable.

#### **36.2A.6**

Extensions of less than three (3) cumulative years in the projected date of Initial Operation of the Customer Facility are not material and shall be handled through construction sequencing.

The proposed Commencement Date can be extended (i) after the scoping meeting, once study timing is fully understood, not to exceed seven (7) years; (ii) due to study delays; or (iii) due to associated Network Upgrade construction timing.

The following language applies to Interconnection Requests which have entered the New Services Queue on or after May 1, 2012.

#### **36.2A.7**

An Interconnection Customer may be assigned a new queue position as provided for in Tariff, Part IV, Subpart A, sections 36.2A.1.2, or 36.2A.3 a total of two times for any single Interconnection Request. In the event that Interconnection Customer seeks to reduce the size of its project such that Transmission Provider determines the change is a material modification, and such change would result in the third assignment of a new queue position under Tariff, Part IV, Subpart A, sections 36.2A.1.2, or 36.2A.3, then the Interconnection Request shall be terminated and withdrawn if the Interconnection Customer proceeds with such change.



### **36.3 Upgrade Feasibility Study:**

After receiving a signed Upgrade Request, pursuant to Attachment EE of the PJM Tariff, seeking Incremental Auction Revenue Rights and the applicable deposit of \$20,000, the Transmission Provider shall conduct an Upgrade Feasibility Study to make a preliminary determination of the type and scope of any Local Upgrades or Network Upgrades that will be necessary to accommodate the Upgrade Request and provide the Upgrade Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Upgrade Customer's cost responsibility, estimated consistent with Tariff, Part VI, Subpart B, section 217. The Upgrade Feasibility Study assesses the practicality and cost of accommodating the requested service. The analysis is limited to load-flow analysis of probable contingencies. The Transmission Provider shall provide a copy of the Upgrade Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, section 18.17, related work papers to the Upgrade Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall make the completed Upgrade Feasibility Study publicly available. The Transmission Provider shall conduct Upgrade Feasibility Studies two times each year in conjunction with the Interconnection Feasibility Studies conducted under Tariff, Part IV, Subpart A, section 36.2.

### 36.4 Surplus Interconnection Study

After receiving a valid Surplus Interconnection Study Agreement seeking Surplus Interconnection Service and the requisite deposit set forth in Tariff, Part IV, Subpart A, section 36.1.1B.1.i from the Surplus Interconnection Customer, the Transmission Provider shall conduct a Surplus Interconnection Study.

- (1) **Scope of Surplus Interconnection Study.** A Surplus Interconnection Study shall consist of reactive power, short circuit/fault duty, stability analysis and any other appropriate analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. The Transmission Provider shall use Reasonable Efforts to complete the Surplus Interconnection Study within one hundred eighty (180) days of determination of a valid Surplus Interconnection Service Request pursuant to Tariff, Part IV, Subpart A, section 36.1.1B. If the Transmission Provider is unable to complete the Surplus Interconnection Study within such time period, Transmission Provider shall notify the Surplus Interconnection Customer and provide an estimated completion date and an explanation of the reasons why the additional time is required.
- (2) Once the Surplus Interconnection Study is completed and Transmission Provider confirms that (i) no new Network Upgrades are required, (ii) there are no impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, and (iii) there are no material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, the Transmission Provider shall issue the Surplus Interconnection Study to the Surplus Interconnection Customer. If the Surplus Interconnection Customer is an unaffiliated third party, PJM shall issue a Surplus Interconnection Study to the owner of the existing Generating Facility. A revised Interconnection Service Agreement will be prepared and issued to the owner of the existing Generating Facility within sixty (60) days of issuance of the Surplus Interconnection Study including the terms and conditions for Surplus Interconnection Service. Within sixty (60) days of receipt by the owner of the existing Generating Facility of the revised Interconnection Service Agreement, the owner of the existing Generating Facility will execute the revised Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part VI, Subpart A, section 212.4.
- (3) If the Transmission Provider determines from the Surplus Interconnection Study that Network Upgrades may be required or there may be impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, or there may be material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and

response, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.

(4) Deactivation of Existing Generating Facility

- a. Surplus Interconnection Service cannot be offered if the existing Generating Facility from which Surplus Interconnection is provided is deactivated or has submitted a Notice to Deactivate to Transmission Provider consistent with Tariff, Part V, before the surplus generating unit has commenced commercial operation.
- b. Limited Operation. A Generating Facility receiving Surplus Interconnection Service may continue to receive Surplus Interconnection Service for a period not to exceed one (1) year after the existing Generating Facility's Deactivation Date under the following conditions:
  - i. The surplus generating unit must have been studied by the Transmission Provider for the sole operation at the Point of Interconnection; and
  - ii. The owner of the existing Generating Facility must agree in writing that the Surplus Interconnection Customer may continue to operate at either its limited share of the existing Generating Facility's capability under its Interconnection Service Agreement or any level below such capability upon the deactivation of the existing Generating Facility.
- c. If the Surplus Interconnection Customer cannot satisfy the conditions of Tariff, Part IV, Subpart A, section 36.4.4(b) above, the revised Interconnection Service Agreement for the existing Generating Facility shall terminate consistent with the Interconnection Service Agreement terms of termination for a deactivated Generating Facility.

### **37 Additional Procedures:**

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender affected Interconnection Customers a System Impact Study Agreement pursuant to Tariff, Part VI. The procedures and other terms of Tariff, Part VI shall apply to the System Impact Study and subsequent analysis of Interconnection Requests.

### **38      Service on Merchant Transmission Facilities:**

(a) A Transmission Interconnection Customer that will be a Merchant Transmission Provider shall:

(1) at least 90 days prior to the anticipated date of commencement of Interconnection Service under its Interconnection Service Agreement, provide the Transmission Provider with terms and conditions for reservation, interruption and curtailment priorities for firm and non-firm transmission service on the Merchant Transmission Provider's Merchant Transmission Facilities. Such terms and conditions shall be non-discriminatory and shall be consistent with the terms of the Commission's approval of the Merchant Transmission Provider's right to charge negotiated (market-based) rates for service on its Merchant Transmission Facilities. Transmission Provider shall post such terms and conditions applicable to service on the Merchant Transmission Facilities on its OASIS and shall file them with the Commission as a separate service schedule under the Tariff, with a proposed effective date on or before the anticipated date of commencement of Interconnection Service for the affected Transmission Interconnection Customer; and (2) at least 15 days prior to the anticipated date of commencement of Interconnection Service for Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, provide the Transmission Provider with the results of a Commission-approved process for allocation of Transmission Injection Rights and Transmission Withdrawal Rights associated with such Merchant Transmission Provider's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, and with a listing of any Transmission Injection Rights and/or Transmission Withdrawal Rights not allocated in such process. Transmission Provider shall post such information on its OASIS.

(b) Should the Merchant Transmission Provider fail to provide the Transmission Provider with the terms and conditions for service on the Merchant Transmission Provider's Merchant Transmission Facilities required under subsection (a)(1) of this section, firm and non-firm transmission service on such Merchant Transmission Facilities shall be subject to the terms and conditions regarding reservation, interruption and curtailment priorities applicable to Firm or Non-Firm Point-to-Point Transmission Service on the Transmission System.

(c) Except as otherwise provided under this section 38, transmission service on, and operation of, Merchant Transmission Facilities shall be subject to the terms and conditions (including in particular, but not limited to, those relating to Transmission Provider's authority in the event of an emergency) applicable to Transmission Service under the Tariff and the Operating Agreement.

### **39.1 Transmission Owners That Own Facilities Financed by Local Furnishing Bonds:**

This provision is applicable only to an Interconnected Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code (“local furnishing bonds”). Notwithstanding any other provision of Tariff, Part IV or Tariff, Part VI, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to Tariff, Part IV or Tariff, Part VI if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnected Transmission Owner’s facilities that would be used in providing such Interconnection Service.

### **39.2 Alternative Procedures for Requesting Interconnection Service:**

An Interconnected Transmission Owner that believes the provision of Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnected Transmission Owner's facilities that would be used in providing such Interconnection Service, it shall so notify Transmission Provider within 30 days after the Transmission Owner receives a copy of the Interconnection Customer's Interconnection Request. If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer would jeopardize the tax-exempt status of the Interconnected Transmission Owner's local furnishing bonds, it shall so advise the Interconnection Customer within thirty (30) days after receipt of notice of such jeopardy from the affected Interconnected Transmission Owner. Interconnection Customer thereafter may renew its request for interconnection using the process specified in Tariff, Part I, section 5.2(ii).

#### **41.6 Additional Compliance Requirements**

In the event that any of the values calculated in Tariff, Part IV, Subpart A, section 41.1(e), Tariff, Part IV, Subpart A, section 41.2(e) or Tariff, Part IV, Subpart A, section 41.3(e) exceeds 25 percent for two consecutive reporting periods, Transmission Provider will have to comply with the measures below for the next two (2) six-month reporting periods and must continue reporting this information until Transmission Provider reports two (2) consecutive six-month reporting periods without the values calculated in Tariff, Part IV, Subpart A, section 41.1(e), Tariff, Part IV, Subpart A, section 41.2(e) or Tariff, Part IV, Subpart A, section 41.3(e) exceeding 25 percent for two (2) consecutive six-month reporting periods:

- (a) Transmission Provider must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline (i.e., 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the reporting period.
- (b) Transmission Provider shall aggregate the total number of employee hours and third party consultant hours expended towards interconnection studies within its coordinated region that reporting period and post on its website. This information is to be posted within thirty (30) days of the end of the reporting period.



## **Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE**

References to section numbers in this Subpart G refer to sections of this Subpart G, unless otherwise specified.

### **Preamble**

Requests for the interconnection of new Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources may be processed, pursuant to the applicable provisions of Section 36 of the PJM Tariff, and through the expedited procedures set forth in this Subpart G. This Subpart G describes procedures for the following categories of “small resource” additions: permanent Capacity Resource additions of 20 MW or less, permanent Energy Resource additions of 20 MW or less but greater than 2 MW (synchronous) or greater than 5 MW (inverter-based), temporary Energy Resource additions of 20 MW or less but greater than 2 MW (synchronous) or 5 MW (inverter-based), permanent and temporary Energy Resource additions of 2 MW or less (synchronous) or 5 MW or less (inverter-based), and certified small inverter-based facility additions no larger than 10 kW. Tariff, Part VI contains the procedures, terms and conditions that govern, in general, the Transmission Provider’s administration of the New Services Queue, System Impact Studies and Facilities Studies of Interconnection Requests, and agreements related to such studies and Interconnection Service, except as otherwise provided in this Tariff, Part IV, Subpart G.

Interconnection Requests submitted pursuant to this Subpart G shall be evaluated using the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider’s electric system. However, if the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider’s electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the Transmission Provider’s agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Transmission Provider’s system. If the Transmission Provider does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider’s electricity system without such limitations. Furthermore, nothing in the foregoing shall prevent a Transmission Provider from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

## **109 Pre-application Process**

### **109.1 Eligibility**

A pre-application report request submitted pursuant to this section will only be furnished to prospective Interconnection Customers seeking to interconnect Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources which, when combined, does not exceed 20 MW in aggregated maximum facility output

### **109.2 Informal Request**

The Transmission Provider shall designate an employee or office from which information on the pre-application process and on the Transmission Provider's system can be obtained through informal requests from a prospective Interconnection Customer presenting a proposed project for a specific site. The name, telephone number and e-mail address of such contact employee or office shall be made available on the Transmission Provider's Internet web site. Electric system information provided to the prospective Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to provide an understanding of an interconnection at a particular point on the Transmission Provider's system, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The Transmission Provider shall comply with reasonable requests for such information.

### **109.3 Pre-application Request**

In addition to the information described in section 109.2 above, which may be provided in response to an informal request, a prospective Interconnection Customer may submit a formal written request form, which form shall be made available on the Transmission Provider's Internet web site, requesting a pre-application report on a proposed project at a specific site. The written pre-application report request from shall include the information in sections 109.3.1 through 109.3.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

109.3.1 Project contact information, including name, address, phone number and email address.

109.3.2 Project location (street address with nearby cross streets and town).

109.3.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

109.3.4 Generator type (e.g., solar, wind, combined heat and power, etc.).

109.3.5 Size (alternating current kW).

109.3.6 Single or three phase generator configuration.

109.3.7 Stand-alone generator (no onsite load, not including station service – Yes or No?).

109.3.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.

#### **109.4 Jurisdictional Review**

Within five (5) Business Days following the receipt of a completed formal written request, submitted along with a \$300 deposit paid by the prospective Interconnection Customer, the Transmission Provider will evaluate whether the proposed project contemplates FERC-jurisdictional service and/or will be interconnected with FERC-jurisdictional facilities. If it is determined that the proposed project does not contemplate FERC-jurisdictional service and/or will not be interconnecting with FERC-jurisdictional facilities, the Transmission Provider will so inform the prospective Interconnection Customer and refund the \$300 deposit.

#### **109.5 Pre-application Report**

After the Transmission Provider has determined that a proposed project contemplates FERC-jurisdictional service and/or will be interconnected with FERC-jurisdictional facilities, the prospective Interconnection Customer's \$300 deposit paid in conjunction with the jurisdictional review noted above, will be utilized to satisfy a \$300 non-refundable fee required for the Transmission Provider to process a pre-application report. The Transmission Provider shall provide the pre-application data described in section 109.6 below to the Interconnection Customer within 20 Business Days after the completion of the jurisdictional review set forth above. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Transmission Provider's system.

#### **109.6 Pre-application Report Data**

Using the information provided in the pre-application report request form in section 109.3 above, the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate after application of the screens and/or study that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 109.7 below, the pre-application report will include the following information:

109.6.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

109.6.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.

109.6.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.

109.6.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).

109.6.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

109.6.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

109.6.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

109.6.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 112A.5.3.1 below and absolute minimum load, when available.

109.6.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

109.6.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

109.6.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

109.6.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

109.6.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

## **109.7 Pre-application Report Limitations**

The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes that data that is available. The provision of information on “available capacity” pursuant to Tariff, Part IV, Subpart G, section 109.6.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions

of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

## **110.2 Feasibility Study**

Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the small capacity addition on contingency limits in the vicinity of the Generation Capacity Resource. Linear analysis tools are used to evaluate the impact of a small capacity addition with respect to compliance with the contingency criteria in the Applicable Standards. Generally, small capacity additions will have very limited and isolated impacts on system facilities. If criteria violations are observed, further AC testing is required.

Short circuit calculations are performed for small resource additions to ensure that circuit breaker capabilities are not exceeded.

Once the Feasibility Study is completed, a Feasibility Study report will be prepared and transmitted to the Interconnection Customer along with a System Impact Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Tariff, Part VI, Subpart A, section 204.3A. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

#### **110.4 Facilities Study**

As with larger generation projects, facilities design work for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider as described in Tariff, Part VI, Subpart A, section 206. Transmission Provider will utilize the procedures set forth in Tariff, Part VI, Subpart A, section 207 for completing the Facilities Study. Within 30 calendar days of receiving the Facilities Study, the Interconnection Customer may provide written comments to Transmission Provider regarding the required upgrades identified in the Facilities Study which the Transmission Provider shall consider and include in the Facilities Study and/or the Interconnection Customer may request a meeting to discuss the results of the Facilities Study as specified in Tariff, Part VI, Subpart A, section 207.1. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Facilities Study, subject to confidentiality arrangements as required by the Transmission Provider.

Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement.

Facilities design for small capacity additions will be expedited to the extent possible. In most cases, few or no Network Upgrades will be required for small capacity additions. Attachment Facilities, for some small capacity additions, may, in part, be elements of a “turn key” installation. In such instances, the design of “turn key” attachments will be reviewed by the Interconnected Transmission Owners or their contractors.

## **110.5 Interconnection Service Agreement**

As with larger generation projects, an Interconnection Service Agreement must be executed and filed with the FERC, as specified in Tariff, Part VI, Subpart B, section 212 and 214. The Interconnection Service Agreement identifies the obligations, on the part of the Interconnection Customer, to pay for transmission facilities required to facilitate the interconnection and the Capacity Interconnection Rights which are awarded to the Generation Capacity Resource.

In general, the execution of an Interconnection Service Agreement is no different for capacity additions of 20 MW or less than for larger Generation Capacity Resources. However, in instances where an increase of 20 MW or less to an Existing Generation Capacity Resource can be put in service immediately, a modified Interconnection Service Agreement may be executed. If such an increase is expedited through the System Impact Study phase, ahead of larger projects already in the New Services Queue, an Interconnection Service Agreement will be executed granting interim Capacity Interconnection Rights. These interim rights will allow the capacity increase to be implemented and the resource to participate in the capacity market until studies have been completed for earlier queued resources and all related obligations have been defined. At such time, the interim rights awarded the smaller capacity addition will become dependent on the construction of any required transmission facilities and the satisfaction of any financial obligations for those facilities. If, once those obligations are defined, the smaller capacity addition desires to retain the interim Capacity Interconnection Rights; a new Interconnection Service Agreement will be executed.

If a new Generation Capacity Resource of 20 MW or less can be quickly connected to the system, interim Capacity Interconnection Rights can be awarded, as above, through the execution of a modified Interconnection Service Agreement.



### **111 Permanent Energy Resource Additions of 20 MW or Less but Greater than 2MW (Synchronous) or Greater than 5 MW (Inverter-based)**

This section describes procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are greater than 2 MW (synchronous) or greater than 5 MW (inverter-based) or the increase in capability of 20 MW or less but greater than 2 MW (synchronous) or greater than 5 MW (inverter-based) of an existing generation resource, for which Capacity Interconnection Rights will not be granted. Such resources may participate in the PJM energy markets, but not in the PJM capacity markets. They may, therefore, not be used by load serving entities to meet capacity obligations imposed under the PJM Reliability Assurance Agreement. These procedures apply to generation resources which, when connected to the system, are expected to remain connected to the system for the normal life span of such a generation resource. These procedures do not apply to resources that are specifically being connected to the system temporarily, with the expectation that they will later be removed.

Tariff, Part IV, Subpart G, section 112A describes the procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are less than 2MW (synchronous) or 5MW (inverter based), and includes the eligibility considerations for fast track processing. In the event that such interconnection requests do not qualify for processing in accordance with the provisions of Tariff, Part IV, Subpart G, section 112A, they will be considered under the procedures described in this section 111, if applicable.

## **111.2 Feasibility Study**

Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the small Energy Resource addition on contingency limits in the vicinity of the resource. Linear analysis tools are used to evaluate the impact of a small Energy Resource addition with respect to compliance with the contingency criteria in the Applicable Standards. Generally, small resource additions will have very limited and isolated impacts on system facilities. If criteria violations are observed, further AC testing is required.

Short circuit calculations are performed for small resource additions to ensure that circuit breaker capabilities are not exceeded.

Once the Feasibility Study is completed, a Feasibility Study report will be prepared and transmitted to the Interconnection Customer along with a System Impact Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Tariff, Part VI, Subpart A, section 204.3A. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

#### **111.4 Facilities Study**

As with larger generation projects, facilities design work for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider as described in Tariff, Part VI, Subpart A, section 206. Transmission Provider will utilize the procedures set forth in Tariff, Part VI, Subpart A, section 207 for completing the Facilities Study. Within 30 calendar days of receiving the Facilities Study, the Interconnection Customer may provide written comments to Transmission Provider regarding the required upgrades identified in the Facilities Study which the Transmission Provider shall consider and include in the Facilities Study and/or the Interconnection Customer may request a meeting to discuss the results of the Facilities Study as specified in Tariff, Part VI, Subpart A, section 207.1. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Facilities Study, subject to confidentiality arrangements as required by the Transmission Provider.

Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement.

Facilities design for small Energy Resource additions will be expedited to the extent possible. In most cases, few or no Network Upgrades will be required for small Energy Resource additions. Attachment Facilities, for some small Energy Resource additions, may, in part, be elements of a “turn key” installation. In such instances, the design of “turn key” attachments will be reviewed by the Interconnected Transmission Owners or their contractors.

### **111.5 Interconnection Service Agreement**

As with larger generation projects, an Interconnection Service Agreement must be executed and filed with the FERC as specified in Tariff, Part VI, Subpart B, section 212 and Tariff, Part VI, Subpart B, section 214. For an Energy Resource, the Interconnection Service Agreement identifies the interconnection and the rights of the Interconnection Customer to participate in the energy market as well as the obligations, on the part of the Interconnection Customer, to pay for transmission facilities required to facilitate the interconnection.

In general, the execution of an Interconnection Service Agreement is no different for Energy Resource additions of 20 MW or less than for larger Energy Resources. However, in instances where an increase of 20 MW or less to an existing resource can be put in service immediately, a modified Interconnection Service Agreement may be executed. If such an increase is expedited through the System Impact Study phase, ahead of larger projects already in the New Services Queue, an Interconnection Service Agreement will be executed granting an interim interconnection. This interim interconnection will allow the Energy Resource increase to be implemented and the resource to participate in the energy market until studies have been completed for earlier queued resources and all related obligations have been defined. At such time, the interim rights awarded the smaller Energy Resource addition will become dependent on the construction of any required transmission facilities and the satisfaction of any financial obligations for those facilities. If, once those obligations are defined, the smaller Energy Resource addition desires to retain its interconnection, a new Interconnection Service Agreement will be executed.

If a new Energy Resource of 20 MW or less can be quickly connected to the system, an interim interconnection can be facilitated, as above, through the execution of a modified Interconnection Service Agreement.

## **112 Temporary Energy Resource Additions of 20 MW or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)**

This section describes procedures related to the submission and processing of requests related to the temporary interconnection of Small Generation Resources greater than 2 MW (synchronous) or 5 MW (inverter-based). These procedures apply to generation resources which can be quickly connected to the system in order to participate in the energy market and are connected with the expectation that they will be removed from the system within six months. Such resources may submit subsequent requests to modify or extend their interconnection status. The inherent assumptions justifying the greater degree of expedition in these procedures for temporary Energy Resources are (1) that such resources will typically only be interconnected to participate in the spot market to assist in meeting peak energy demand, and (2) that such resources will only be connected in situations where minimal or no transmission upgrades are required.

Tariff, Part IV, Subpart G, section 112A describes the procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are less than 2MW (synchronous) or 5MW (inverter based), and includes the eligibility considerations for fast track processing. In the event that such interconnection requests do not qualify for processing in accordance with the provisions of Tariff, Part IV, Subpart G, section 112A, they will be considered under the procedures described in this section 112, if applicable.

### **112.3 Interconnection Service Agreement**

A modified Interconnection Service Agreement will be executed and filed with the FERC as specified in Tariff, Part VI, Subpart B, section 212 and Tariff, Part VI, Subpart B, section 214, identifying the obligations and rights related to the interconnection of a temporary Energy Resource. Such agreement will identify the interconnection of the resource, cost responsibility for transmission system upgrades, if any, and the date when the temporary interconnection will expire.

## **112A Permanent or Temporary Energy Resources of 2 MW or Less (Synchronous) or 5 MW or Less (Inverter-based)**

### **Fast Track Eligibility**

The screens process is available to an Interconnection Customer proposing to interconnect its Energy Resource with the Transmission Provider's system if the Energy Resource capacity does not exceed the size limits identified in the table below. Energy Resources below these limits are eligible for the screens process. However, eligibility is distinct from the screens process itself, and eligibility does not imply or indicate that an Energy Resource will pass the screens in section 112A.2 below or the Supplemental Review screens in section 112A.5.3 below.

Eligibility is determined based upon the generator type, the size of the generator, voltage of the line and the location of and the type of line at the Point of Interconnection. All Energy Resources connecting to lines greater than 69 kilovolt (kV) are ineligible for this process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for this process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Energy Resources located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for this process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's proposed Energy Resource must meet the codes, standards and certification requirements of Tariff, Attachment Z and Tariff, Attachment AA. Alternatively, the Transmission Provider has to have reviewed the design or tested the proposed Energy Resource and is satisfied that it is safe to operate.

Fast Track Eligibility for Inverter-Based Systems		
Line Voltage	112A Eligibility Regardless of Location	112A Eligibility on a Mainline <sup>1</sup> and ≤ 2.5 Electrical Circuit Miles from Substation <sup>2</sup>
< 5 kV	≤ 500 kW	≤ 500 kW
≥ 5 kV and < 15 kV	≤ 2 MW	≤ 3 MW
≥ 15 kV and < 30 kV	≤ 3 MW	≤ 4 MW
≥ 30 kV and ≤ 69 kV	≤ 4 MW	≤ 5 MW

In the event that such an Energy Resource does not meet such certification requirements, the request for interconnection of the Energy Resource shall be processed under Tariff, Part IV, Subpart G, section 111 or Tariff, Part IV, Subpart G, section 112, as applicable.

<sup>1</sup> For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

<sup>2</sup> An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.2.

Energy Resources requesting interconnection under this section 112A may be expedited ahead of larger projects already in the New Services Queue. In such instance, the Energy Resource shall be able to participate in the energy market until the studies have been completed for the earlier queued projects and all related obligations have been defined. At such time as these studies are completed and reveal additional obligations required of the Energy Resource interconnected under this section 112A, a revised Interconnection Service Agreement shall be executed.



**112A.2 Screens.** Subject to the Interconnection Customer, Transmission Provider and Interconnected Transmission Owner(s) mutually agreeing to reasonable extension of time beyond 15 business days, which agreement shall not be unreasonably withheld, within 15 business days of the Interconnection Customer submitting an Interconnection Request pursuant to Tariff, Part IV, Subpart G, section 112A.1, Transmission Provider in consultation with the relevant Interconnected Transmission Owner(s) shall:

1. Provide a screens review/evaluation of the Interconnection Request using the screens set forth below; and
2. Notify the Interconnection Customer of the results of the initial review/evaluation and inform the Interconnection Customer whether supplemental screens evaluations must be performed; and
3. Provide the Interconnection Customer with the analysis and data underlying the Transmission Provider's determinations pursuant to the screens set forth below.

112A.2.1 The proposed interconnection must be on a portion of the Interconnected Transmission Owner's distribution facilities located in the PJM Region and the output of the Customer Facility to be used for wholesale sales in the PJM Region. Distribution facilities shall include facilities that are non-networked, often lower voltage facilities that carry power in one direction, but does not include sub transmission facilities.

112A.2.2 For interconnection of a proposed Energy Resource to a radial distribution circuit, the aggregated generation, including the proposed Energy Resource on the circuit shall not exceed 15% of the line section annual peak load as most recently measured at the substation. A line section is that portion of an Interconnected Transmission Owner's electric system connected to a customer and bounded by automatic sectionalizing devices or the end of the distribution line.

112A.2.3 For interconnection of a proposed Energy Resource to the load side of spot network protectors, the proposed Energy Resource must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5% of a spot network's maximum load or 50 kW.

112A.2.4 The proposed Energy Resource, in aggregation with other generation on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

112A.2.5 The proposed Energy Resource, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the proposed interconnection be accepted for a circuit that already exceeds 87.5% of the short circuit interrupting capability.

112A.2.6 Using the table below, Transmission Provider, in consultation with the Interconnected Transmission Owner, shall determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Interconnected Transmission Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

112A.2.7 If the proposed Energy Resource is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Energy Resource, shall not exceed 20 kW.

112A.2.8 If the proposed Energy Resource is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

112A.2.9 The proposed Energy Resource, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Energy Resource proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the point of interconnection).

112A.2.10 No construction of facilities by the Interconnected Transmission Owner on its own system shall be required to accommodate the Energy Resource.

### **112A.3 Results of Screens**

112A.3.1 If the proposed interconnection passes the screens set forth in Tariff, Part IV, Subpart G, section 112A.2, the proposed interconnection shall be approved and the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer with an executable Interconnection Service Agreement within five Business Days after the determination. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within five Business Days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part IV, Subpart G, section 212.4.

112A.3.2 If the proposed interconnection of the Energy Resource fails the screens set forth in Tariff, Part IV, Subpart G, section 112A.2, but the Transmission Provider, in consultation with the Interconnected Transmission Owner, determines that the Energy Resource may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer an executable Interconnection Service Agreement within five Business Days after such determination. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within five Business Days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part IV, Subpart G, section 212.4.

112A.3.3 If the proposed interconnection of the Energy Resource fails the screens set forth in Tariff, Part IV, Subpart G, section 112A.2, but the Transmission Provider does not or cannot determine from the initial review that the Energy Resource may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Transmission Provider shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

## **112A.4 Customer Options Meeting**

112A.4.1 If the Transmission Provider determines that the Interconnection Request cannot be approved without: (1) minor modifications at minimal cost; (2) a supplemental study or other additional studies or actions; or (3) incurring at significant cost to address safety, reliability, or power quality problems, the Transmission Provider shall notify the Interconnection Customer of that determination within five Business Days and provide copies of all data and analyses underlying its conclusion. Within ten Business Days of the Transmission Provider's determination, the Transmission Provider shall offer to convene a customer options meeting with the Transmission Provider and the Transmission Owner to review possible Customer Facility modifications or the screens analysis and related results, to determine what further steps are needed to permit the Energy Resource to be connected safely and reliably. At the time of notification of the Transmission Provider's determination, or at the customer options meeting, the Transmission Provider and Transmission Owner, as applicable, shall:

112A.4.1.1 Offer to perform facility modifications or minor modifications to the Transmission System (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Transmission System. If the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's system, the Transmission Provider will provide the Interconnection Customer with an executable Interconnection Service Agreement within ten Business Days of the customer options meeting; or

112A.4.1.2 Offer to perform a supplemental review in accordance with Tariff, Part IV, Subpart G, section 112A.5, and provide a non-binding good faith estimate of the costs of such review; or

112A.4.1.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under Tariff, Part IV, Subpart G, section 111 or Tariff, Part IV, Subpart G, section 112 (irrespective of the resource size limitations stated therein), as applicable.

## **112A.5 Supplemental Review**

112A.5.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing, and submit a deposit for the estimated costs of the supplemental review in the amount of the Transmission Provider's good faith estimate of the costs of such review (recognizing that such amount may be adjusted by the amount of deposits already held by the Transmission Provider in connection with the Interconnection Request) both within 15 Business Days of the offer. If the written agreement and additional deposit (if required) have not been received by the Transmission Provider within that timeframe, the Interconnection Request shall continue to be evaluated under Tariff, Part IV, Subpart G, section 111 or Tariff, Part IV, Subpart G, section 112 (irrespective of the resource size limitation set forth therein) unless it is withdrawn by the Interconnection Customer.

112A.5.2 The Interconnection Customer may specify the order in which the Transmission Provider will complete the screens in section 112A.5.4 below.

112A.5.3 Within 30 Business Days following receipt of the deposit for a supplemental review, the Transmission Provider shall: (1) perform a supplemental review using the screens set forth below; (2) notify, in writing, the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the Transmission Provider's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the Transmission Provider shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in section 112A.5.3.1 below, within two Business Days of making such a determination to obtain the Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this section 112A.5.3; (2) terminate the supplemental review and continue evaluating the Energy Resource under Tariff, Part IV, Subpart G, section 111 or Tariff, Part IV, Subpart G, section 112 (irrespective of the resource size limitation set forth therein), as applicable; or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

112A.5.3.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed small Energy Resource) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed small Energy Resource. If minimum load data is not available, or cannot be calculated, estimated or determined, the Transmission Provider shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under this section 112A.5.3.

112A.5.3.1.1 The type of generation used by the proposed Energy Resource will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of this section 112A.5.3.1. Solar

photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e., 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

112A.5.3.1.2 When this screen is being applied to an Energy Resource that services some station service load, only the net injection into the Transmission Provider's electric system will be considered as part of the aggregate generation.

112A.5.3.1.3 Transmission Provider will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

112A.5.3.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

112A.5.3.3 Safety and Reliability Screen: The location of the proposed small Energy Resource and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Transmission Provider shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

112A.5.3.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

112A.5.3.3.2 Whether the loading along the line section is uniform or even.

112A.5.3.3.3 Whether the proposed small Energy Resource is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

112A.5.3.3.4 Whether the proposed small Energy Resource incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

112A.5.3.3.5 Whether operational flexibility is reduced by the proposed small Energy Resource, such that transfer of the line section(s) of the small Energy Resource to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

112A.5.3.3.6 Whether the proposed small Energy Resource employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

112A.5.3.4 If the proposed interconnection passes the supplemental screens in sections 112A.5.3.1, 112A.5.3.2, and 112A.5.3.3 above, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer with an executable Interconnection Service Agreement within the timeframes established in sections 112A.5.3.4.1 and 112A.5.3.4.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under Tariff, Part IV, Subpart G, section 111 or Tariff, Part IV, Subpart G, section 112 (irrespective of the resource size limitation set forth therein) consistent with section 112A.5.3.4.3 below

112A.5.3.4.1 If the proposed interconnection passes the supplemental screens in sections 112A.5.3.1, 112A.5.3.2 and 112A.5.3.3 above and does not require construction of facilities by the Transmission Provider on its own system, the Interconnection Service Agreement shall be provided within ten Business Days after notification of the supplemental review results.

112A.5.3.4.2 If interconnection facilities or minor modifications to the Transmission Provider's system are required for the proposed interconnection to pass the supplemental screens in sections 112A.5.3.1, 112A.5.3.2, and 112A.5.3.3 above, and the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's electric system, the Interconnection Service Agreement, along with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be provided to the Interconnection Customer within 15 Business Days after receiving written notification of the supplemental review results.

112A.5.3.4.3 If the proposed interconnection would require more than interconnection facilities or minor modifications to the Transmission Provider's system to pass the supplemental screens in sections 112A.5.3.1, 112A.5.3.2, and 112A.5.3.3 above, the Transmission Provider shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under Tariff, Part IV, Subpart G, sections 111 and 112 (irrespective of the resource size limitation set forth therein) unless the Interconnection Customer withdraws its request.

## **112B Certified Inverter-Based Small Generating Facilities No Larger than 10 kW**

This section describes the procedures related to the submission and processing of requests related to the interconnection of Small Inverter Facilities.



## **112B.2 Verification of Interconnection**

Within 15 Business Days of notification to the Interconnection Customer that its Small Inverter ISA is complete, Transmission Provider shall notify Interconnection Customer whether its Small Inverter Facility can be interconnected safely and reliably. Transmission Provider shall make this determination using the screens set forth in Tariff, Part IV, Subpart G, section 112A. In the event that the Transmission Provider determines that the Small Inverter Facility can be safely and reliably interconnected, Transmission Provider shall tender the Small Inverter ISA to the Interconnected Transmission Owner for execution. The Interconnected Transmission Owner shall have five Business Days to execute the Small Inverter ISA and return it to Transmission Provider. Transmission Provider then will provide the Interconnected Parties with the Small Inverter ISA. In the event an Interconnection Party does not execute the Small Inverter ISA, the Interconnection Customer may request the agreement be filed unexecuted with the FERC or alternative dispute resolution in accordance with Tariff, Part IV, Subpart G, section 212.4.

### **112B.3 Certificate of Completion and Inspection**

**112B.3.1** Upon receipt of an executed Small Inverter ISA, the Interconnection Customer may commence construction (including operational testing not to exceed two hours) of its Small Inverter Facility. After completion of the Small Inverter Facility, Interconnection Customer shall provide Transmission Provider with a completed Tariff, Attachment CC - Form of Certificate of Completion.

**112B.3.2** Prior to parallel operation, Transmission Provider and/or Interconnected Transmission Owner may inspect the Small Inverter Facility for compliance with standards, which may include a witness test. All inspections by Transmission Provider and/or the Interconnected Transmission Owner shall be at its own expense, within ten Business Days after receipt of the completed Certificate of Completion and shall take place at a time agreeable to the Transmission Provider and/or Interconnected Transmission Owner and the Interconnection Customer. Unless otherwise agreed by the Transmission Provider and/or the Interconnected Transmission Owner and the Interconnection Customer, if the Transmission Provider and/or the Interconnected Transmission Owner do not schedule an inspection of the Small Inverter Facility within ten Business Days after receipt of the completed Certificate of Completion, the right to inspection, including the witness test, is waived. Transmission Provider and/or the Interconnected Transmission Owner shall provide a written statement that the Small Inverter Facility has passed inspection or shall notify the Interconnection Customer of what steps are necessary to pass inspection as soon as practicable after the inspection takes place.

## **112B.4 Interconnection and Operation**

**112B.4.1** The Interconnection Customer may interconnect and operate the Small Inverter Facility after all of the following have occurred:

- (a)** Upon completing construction, the Interconnection Customer has caused the Small Inverter Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- (b)** The Interconnection Customer provides Transmission Provider with a completed Certificate of Completion, and
- (c)** In accordance with Tariff, Part IV, Subpart G, section 112B.3(b), the Transmission Provider and/or Interconnected Transmission Owner has either completed its inspection of the Small Inverter Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes or has waived such inspection.

**112B.4.2** Transmission Provider and/or the Interconnected Transmission Owner shall have the right to disconnect the Small Inverter Facility in the event of improper installation of the Small Inverter Facility, an unsatisfactory witness test, or failure to return a completed Certificate of Completion.

**112B.4.3** Revenue quality metering equipment must be installed at the Small Inverter Facility and tested in accordance with applicable ANSI standards. Prior to parallel operation of the Small Inverter Facility, Transmission Provider and/or Interconnected Transmission Owner may schedule appropriate metering replacement, if necessary.

## **112B.7 Disconnection**

**112B.7.1** The Transmission Provider and/or the Interconnected Transmission Owner may temporarily disconnect a Small Inverter Facility upon the following conditions:

- (a)** For scheduled outages upon reasonable notice.
- (b)** For unscheduled outages or emergency conditions.
- (c)** If the Small Inverter Facility does not operate in the manner consistent with the terms and conditions of Tariff, Part IV, Subpart G, section 112B or applicable PJM Manuals.

**112B.7.2** Transmission Provider shall inform the Interconnection Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

### **112B.8 Indemnification**

The Transmission Provider, Interconnected Transmission Owner, and the Interconnection Customer shall at all times indemnify, defend, and save the other party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other party's action or inactions relating to its obligations under this section 112B on behalf of the indemnifying party, except in cases of gross negligence or intentional wrongdoing by the indemnified party.

## **112B.9 Insurance**

An Interconnection Customer interconnecting a Small Inverter Facility shall maintain commercially reasonable amounts of general liability insurance and additionally shall follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state. The amount and type of insurance to be evidenced by an insurance certificate. All other insurance requirements in Tariff, Attachment O, Appendix 2, section 13 and Tariff, Attachment P, Appendix 2, section 11 are applicable to certified inverter-based small generating facilities no larger than 10 kilowatts.

#### **112B.10 Limitation of Liability**

Transmission Provider's, Interconnected Transmission Owner's, and Interconnection Customer's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of its obligations under Tariff, Part IV, Subpart G, section 112B shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under Tariff, Part IV, Subpart G, section 112B.8.

## **Preamble**

This Part VI shall apply to apply to: (a) any New Service Request received prior to April 1, 2018; and (b) any New Service Request for which, as of the Transition Date (defined in Tariff, Part VII), the Interconnection Customer has received for execution an Interconnection Service Agreement or wholesale market participation agreement or has directed the Transmission Provider to file an Interconnection Service Agreement or wholesale market participation agreement unexecuted. New Service Requests received on or after April 1, 2018 for which Interconnection Customers have not received for execution or directed to be filed unexecuted an Interconnection Service Agreement or wholesale market participation agreement will be subject to the Generation Interconnection Procedures set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

Tariff, Part VI sets forth the procedures and other terms governing the Transmission Provider's administration of the New Services Queue; procedures and other terms regarding studies and other processing of New Service Requests; the nature and timing of the agreements required in connection with studies and construction of required facilities; and terms and conditions relating to the rights available to New Service Customers in consideration of their payments for Customer-Funded Upgrades.



## **200     Applicability:**

Tariff, Part VI applies (a) to an Interconnection Request, upon the Transmission Provider's determination in an Interconnection Feasibility Study that a System Impact Study is needed to evaluate the facilities required to accommodate the requested interconnection; (b) to a Completed Application for new transmission service, upon the Transmission Provider's determination in an Firm Transmission Feasibility Study that a System Impact Study is needed to evaluate the facilities required to provide the requested service; and (c) to Upgrade Requests, upon the Transmission Provider's receipt of a completed request containing all applicable information in the form required by Tariff, Attachment EE in which a customer is seeking to propose a Merchant Network Upgrade or to advance construction of Regional Transmission Expansion Plan project; and (d) to Upgrade Requests seeking Incremental Auction Revenue Rights, upon the Transmission Provider's determination in an Upgrade Feasibility Study that a System Impact Study is needed to evaluate the facilities required to accommodate the Upgrade Request. Notwithstanding the foregoing sentence, however, the provisions of Tariff, Part IV, Subpart G shall govern with respect to Generation Interconnection Requests that involve (i) proposed new generation resources having capability of 20 MW or less, or (ii) increases of 20 MW or less to the capability of existing generation resources, except where, and only to the extent, otherwise expressly provided herein.

## **201 Queue Position:**

Each New Service Request shall be assigned a priority, or Queue Position, based on the date and time all required information and requisite deposits are received, i.e., Queue Positions will be assigned on a first-come, first-served basis. The Queue Position of each Interconnection Request and each Completed Application shall be assigned in accordance with the applicable terms of Tariff, Part II, Tariff, Part III, or Tariff, Part IV. The Queue Position of each Upgrade Request shall be the date of Transmission Provider's receipt of all applicable information required by Tariff, Attachment EE. Subject to the applicable terms of the Tariff, all New Service Requests shall be processed as part of a single New Services Queue, except where such projects have been assigned to a subsequent queue pursuant to Tariff, Part IV, Subpart A, sections 36.1.01, 36.1.03, 36.2A.1.2, or 36.2A.2, or Tariff, Part IV, Subpart G, sections 110, 111, 112, or 112A, in which case such projects will be studied as part of a single New Services Queue with such subsequent queue. With the exception of Interconnection Requests pursuant to Tariff, Part IV, section 112, the Transmission Provider shall publish the New Services Queue on its website identifying each pending New Service Request and its status as and to the extent consistent with applicable terms of the Tariff. For the purpose of determining the amount of a New Service Customer's cost responsibility for the construction of necessary facilities or upgrades to accommodate its New Service Request, a New Service Request that is deemed terminated and withdrawn under this Part VI or other applicable terms of the Tariff shall concurrently lose its Queue Position and will not be included in any further studies. Nothing in this section 201, however, precludes an entity from later submitting another New Service Request or resubmitting a withdrawn or terminated New Service Request and receiving a new Queue Position in accordance with the applicable Tariff, Part IV, Subpart A, sections 36.1.01, 36.1.03, 36.2A.1.2, or 36.2A.2, or Tariff, Part IV, Subpart G, sections 110, 111, 112, or 112A.

### **201.1 Transferability of Queue Position:**

A New Service Customer may transfer its Queue Position to another entity only if, (a) in the case of a transfer by an Interconnection Customer, the other entity acquires the rights to the same Point(s) of Interconnection identified in the Interconnection Request, or, (b) in the case of a transfer by any other New Service Customer, the acquiring entity accepts, as applicable, the same receipt and delivery points or the same source and sink as stated in the transferor's New Service Request.

## **202     Coordination with Affected Systems:**

The Transmission Provider will coordinate with Affected System Operators the conduct of any studies required to determine the impact of a New Service Request on any Affected System and, if possible, will include those results in the System Impact Study or the Facilities Study. The Transmission Provider will invite such Affected System Operators to participate in all meetings held with the Interconnection Customer as required by Tariff, Part VI. The Interconnection Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate the Interconnection Request. Transmission Provider shall contact any potential Affected System and shall provide information regarding each relevant New Service Request as required for the Affected System Operator's studies of the effects of such request. A provider of transmission services on a system that may be an Affected System shall cooperate with the Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems related to New Service Requests under the Tariff. To the extent Affected System results are included in the System Impact Study or Facilities Study, an Interconnection Customer shall be provided the opportunity to review such study results consistent with Tariff, Part VI, section 206.2 and Tariff, Part VI, section 212.4(a), as applicable. All New Service Requests will be modeled and studied consistent with the criteria and methodology set forth in PJM Manual 14B, section 2.3 and further supplemented by requirements in PJM Manual 14A, section 4.2. These sections detail the processes and modeling used by the Transmission Provider for all its planning analyses, including Affected System studies.

**203     System Impact Study Agreement:**

Transmission Provider shall conduct System Impact Studies pursuant to a System Impact Study Agreement with each affected New Service Customer. The form of the System Impact Study Agreement is included in Tariff, Attachment N-1. Pursuant to the System Impact Study Agreement, the New Service Customer shall agree to reimburse the Transmission Provider for the cost of a System Impact Study.

### **203.1 Cost Responsibility:**

The System Impact Study Agreement tendered by the Transmission Provider will clearly specify the Transmission Provider's estimate (determined in coordination with the affected Transmission Owner(s)) of the cost and time required for completion of the study in which the New Service Request is being evaluated and the New Service Customer's cost responsibility for that study. The charges to all affected New Service Customers shall not exceed the actual cost of the System Impact Study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. New Service Customers will not be assessed a charge for such existing studies; however, a New Service Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of such customer's New Service Request. In the event more than one New Service Request is evaluated in a single System Impact Study, the cost of such study shall be allocated among the participating New Service Customers such that (i) each Interconnection Customer pays 100 percent of the study costs associated with evaluating the Attachment Facilities necessary to accommodate its Interconnection Request; (ii) each Eligible Customer pays 100 percent of the study costs associated with evaluating the Direct Assignment Facilities necessary to accommodate its Completed Application for new transmission service; and (iii) each New Service Customer pays the study costs associated with evaluating the Local Upgrades and/or Network Upgrades necessary to accommodate its New Service Request in proportion to its projected cost responsibility (as determined in the Interconnection Feasibility Study or the Firm Transmission Feasibility Study) for such upgrades. In the event that a New Service Customer's responsibility for the actual cost of the System Impact Study under this section is less than the deposit provided with its executed System Impact Study Agreement, the unexpended balance of its deposit shall be refunded, with interest determined at the applicable rate under the Commission's regulations.

#### **203.1.1 Transmission Owners:**

For System Impact Studies that the Transmission Provider conducts on behalf of a Transmission Owner, the Transmission Owner shall record the cost of the System Impact Studies pursuant to Tariff, Part I, section 8.

#### **204.1 Completed Applications:**

After completing a Firm Transmission Feasibility Study regarding a Completed Application for new transmission service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is required to accommodate the requested transmission service. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer as soon as practicable. In such cases, the Transmission Provider shall, upon completion of the Firm Transmission Feasibility Study, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required System Impact Study. For a Completed Application to retain its Queue Position, the Eligible Customer (i) shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, and (ii) shall pay the Transmission Provider a \$50,000 deposit which will be applied to the Eligible Customer's study cost responsibility. If the Eligible Customer elects not to execute the System Impact Study Agreement, its Completed Application shall be deemed terminated and withdrawn, and its deposit provided pursuant to Tariff, Part II, section 17.3 shall be returned, with interest.

### **204.3 Interconnection Requests:**

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender to the affected Interconnection Customer a System Impact Study Agreement. For an Interconnection Request to retain its assigned Queue Position pursuant to Tariff, Part VI, Preamble, section 201, within 30 days of receiving the tendered System Impact Study Agreement, the Interconnection Customer (i) shall execute the System Impact Study Agreement and it must be received by the Transmission Provider, (ii) shall remit to Transmission Provider all past due amounts of the actual Feasibility Study costs exceeding the Feasibility Study deposit fee contained in Tariff, Part IV, Subpart A, sections 36.1.02, and 36.1.03, and Tariff, Part IV, Subpart G, sections 110.1, 111.1, and 112.1, if any, (iii) shall pay the Transmission Provider a deposit as provided in section 204.3A below, (iv) shall identify the Point(s) of Interconnection, and (v) in the case of a Generation Interconnection Customer, shall (A) demonstrate that it has made an initial application for the necessary air emission permits, if any, for its proposed generation, (B) specify whether it desires to interconnect its generation to the Transmission System as a Capacity Resource or an Energy Resource, (C) provide required machine modeling data as specified in the PJM Manuals, (D) in the case of a wind generation facility, provide a detailed electrical design specification and other data (including system layout data) as required by the Transmission Provider for completion of the System Impact Study, and (E) notify the Transmission Provider if it seeks to use Capacity Interconnection Rights in accordance with Tariff, Part VI, Subpart C, section 230.3.3; or, (vi) in the case of a Transmission Interconnection Customer, shall (A) provide Transmission Provider with evidence of an ownership interest in, or right to acquire or control, the site(s) where major equipment (e.g., a new transformer or D.C. converter stations) would be installed, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; (B) demonstrate in a manner acceptable to Transmission Provider that it holds rights to use (or an option to obtain such rights) any existing facilities of the Transmission System that are necessary for construction of the proposed Merchant Transmission Facilities; and (C) provide required modeling data as specified in the PJM Manuals. If an Interconnection Customer fails to comply with any of the applicable listed requirements, its Interconnection Request shall be deemed terminated and withdrawn, however in the event that the information required per (v)(C), (v)(D), or (vi)(C) above is provided and deemed to be deficient by the Transmission Provider, Interconnection Customer may provide additional information acceptable to the Transmission Provider within 10 Business Days. Failure of the Interconnection Customer to provide information identified as being deficient within 10 Business Days shall result in the Interconnection Request being terminated and withdrawn. If a terminated and withdrawn Interconnection Request was to be included in a System Impact Study evaluating more than one New Service Request, then the costs of the System Impact Study shall be redetermined and reallocated among the remaining participating New Service Customers as specified in this section 204.

#### **204.3A Deposits for Interconnection Customers**

1. Provided that the maximum total deposit amount for a System Impact Study shall be \$300,000 regardless of the size of the proposed Customer Facility, a System Impact Study deposit shall be submitted to Transmission Provider, as follows:

- a. For a proposed Customer Facility that is 20 MW or greater, a deposit of \$500 for each MW requested; or
  - b. For a proposed Customer Facility that is 2 MW or greater, but less than 20 MW, a deposit of \$10,000; or
  - c. For a proposed Customer Facility that is less than 2 MW, a deposit of \$5,000.
- 2. 10% of each total System Impact Study deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:
  - a. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Interconnection Request and/or associated Queue Position; and/or
  - b. Any restudies required as a result of the rejection, termination and/or withdrawal of such Interconnection Request; and/or
  - c. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior Interconnection Requests by the Interconnection Customer.
- 3. 90% of each total System Impact Study deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total System Impact Study deposit amount to cover the following:
  - a. The cost of the System Impact Study acceptance review; and
  - b. The dollar amount of the Interconnection Customer's cost responsibility for the System Impact Study; and
  - c. If the System Impact Study Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further below, or during the System Impact Study period, the refundable deposit money shall be applied to cover all of the costs incurred by the Transmission Provider up to the point of such request



being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

- i. The costs of any restudies required as a result of the modification, rejection, termination and/or withdrawal of such request; and/or
  - ii. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the System Impact Study Request and/or associated Queue Position; and/or
  - iii. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such customer.
  - iv. If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the customer in accordance with the PJM Manuals.
4. Upon completion of the System Impact Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:
  - a. The cost responsibility of the Interconnection Customer for any other studies conducted for the Interconnection Request; and/or
  - b. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such Interconnection Customer.
5. If any refundable deposit monies remain after the System Impact Study is complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Interconnection Customer.
6. The Interconnection Customer must submit the total required deposit amount with the System Impact Study Request. If the Interconnection Customer fails to submit the total required deposit amount with the System Impact Study Request, the System Impact Study Request shall be deemed to be terminated and withdrawn.

7. Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request, Upgrade Request or Queue Position be applied in whole or in part to a different New Service Request, Interconnection Request or Queue Position.

**205.1 Coordination:**

The Transmission Provider shall coordinate, to the extent practical, all System Impact Studies conducted pursuant to this section 205 for New Service Customers. Such coordination may involve, at the Transmission Provider's sole discretion, combining System Impact Studies for multiple New Service Requests into one study. Transmission Provider shall describe in the PJM Manuals the process by which it will coordinate System Impact Studies and Facilities Studies pertaining to different types of New Service Requests.

## **205.4 Completion of Studies:**

### **205.4.1 Notice to Eligible Customers:**

The Transmission Provider shall notify each Eligible Customer whose Completed Application for new transmission service was included in the System Impact Study upon completion of the System Impact Study whether the Transmission System will be adequate to accommodate all or part of the request for service. In the event that the System Impact Study indicates that no new transmission facilities or upgrades are needed to accommodate the requested service, in order for the Completed Application to retain its Queue Position, within sixty (60) days of completion of the System Impact Study, the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement pursuant to Tariff, Part II, section 15.3 or Tariff, Part III, section 32.4, as applicable, or the Completed Application shall be deemed terminated and withdrawn.

### **205.4.2 Materials for Customers:**

The Transmission Provider shall provide a copy of the System Impact Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, section 18.17, related work papers to all New Service Customers that had New Service Requests evaluated in the study and to the affected Transmission Owner(s).

### **205.4.3 Availability of Information:**

Upon completion of the System Impact Study, the Transmission Provider shall post on the Transmission Provider's OASIS (i) the existence of the study, (ii) the New Service Customers that had New Service Requests evaluated in the study, (iii) the location and size in megawatts of each New Service Customer's project or requested rights, as applicable, and (iv) each New Service Customer's Queue Position. The Transmission Provider also shall, to the extent required by the Commission's regulations, make the completed System Impact Study publicly available upon request.

### **205.4.4 Meeting with Transmission Provider:**

At the New Service Customer's request, Transmission Provider, the affected Transmission Owner(s) and the New Service Customer shall meet to discuss the results of the System Impact Study. Such meeting may occur in person or by telephone or video conference.

**205.5 Re-Study:**

If a re-study of the System Impact Study is required due to a higher queued New Service Request dropping out of the queue, a modification of a higher queued New Service Request subject to Tariff, Part IV, Subpart A, section 36.2A, or re-designation of the Point of Interconnection of an Interconnection Request pursuant to Tariff, Part IV, Subpart A, sections 36.2.1 or 36.2A, the Transmission Provider shall notify the affected New Service Customer(s) in writing explaining the reason for the re-study. Transmission Provider shall use due diligence to complete such re-study within sixty (60) calendar days from the date of the notice. Any cost of re-study shall be borne by the New Service Customer(s) being restudied.

**206 Facilities Study Agreement:**

Upon completion of the System Impact Study, the Transmission Provider, if it determines that a Facilities Study is required, shall tender to the affected New Service Customer(s) a Facilities Study Agreement in the form included in Tariff, Attachment N-2. Transmission Provider, in its sole discretion, may determine to evaluate multiple New Service Requests in the same Facilities Study.

**206.1 Study Agreement:**

Pursuant to the Facilities Study Agreement, the New Service Customer shall agree to reimburse the Transmission Provider for the cost of a Facilities Study. The Transmission Provider shall provide the New Service Customer with an estimate of the time needed to complete the Facilities Study, the cost of the study, and, if more than one New Service Request is being evaluated in the study, the New Service Customer's allocated share of the costs. The Facilities Study Agreement also may contain reasonable milestone dates that an Interconnection Customer's project must meet for the customer's Interconnection Request to retain its assigned Queue Position pursuant to Tariff, Part VI, Preamble, section 201 while the Transmission Provider is completing the Facilities Study.

**206.2 Retaining Queue Position:**

For a New Service Request to retain its assigned Queue Position pursuant to Tariff, Part VI, Preamble, section 201, within 30 days of issuing the System Impact Study, the Transmission Provider must be in receipt of (i) all past due amounts of the actual System Impact Study costs exceeding the System Impact Study deposits contained in Tariff, Part VI, Subpart A, section 204.3A, if any, (ii) the executed Facilities Study Agreement and, (iii) the deposit required under this section 206. If a participating New Service Customer fails to remit past due amounts, execute the Facilities Study Agreement or to pay the deposit required under this section 206, its New Service Request shall be deemed terminated and withdrawn.



## **206.4 Allocation of Costs:**

In the event more than one New Service Request is being evaluated in a single Facilities Study, the cost of such study shall be allocated among the participating New Service Customers such that (i) each Interconnection Customer pays 100 percent of the study costs associated with evaluating the Attachment Facilities necessary to accommodate its Interconnection Request; (ii) each Eligible Customer pays 100 percent of the study costs associated with evaluating the Direct Assignment Facilities necessary to accommodate its Completed Application for new transmission service; and (iii) each New Service Customer pays the study costs associated with evaluating the Local Upgrades and/or Network Upgrades necessary to accommodate its New Service Request in proportion to its projected cost responsibility (as determined in the System Impact Study) for such upgrades. Each New Service Customer's cost responsibility shall equal its estimated cost responsibility for the work on the Facilities Study scheduled to be completed during each three-month period after such work commences. Transmission Provider's estimates of the required quarterly payments will be stated in the Facilities Study Agreement. If a terminated and withdrawn New Service Request was to be included in a Facilities Study evaluating more than one request, then the costs of the Facilities Study shall be redetermined and reallocated among the remaining participating New Service Customers.

### **206.4.1 Invoices and Payment:**

Except in instances when the total estimated cost of the Facilities Study does not exceed the amount of the deposit required under Tariff, Part VI, Subpart A, section 206.3, Transmission Provider shall invoice New Service Customer on a quarterly basis for work to be conducted on the Facilities Study during the subsequent three months. The initial invoice shall be delivered prior to the start of work and shall be for the cost of work scheduled to be completed during the first three months after work commences. New Service Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice.

#### **206.4.1.1 Reconciliation of Costs:**

New Service Customer may request in writing, prior to or at the time of execution of the Facilities Study Agreement that the Transmission Provider provide a quarterly cost reconciliation provision in the Facilities Study Agreement. Such quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 12.B of the Facilities Study Agreement shall govern the timing of the final cost reconciliation upon completion of the study.

#### **206.4.1.2 Failure to Pay:**

In the event that a New Service Customer fails to make timely payment of any invoice for work on the Facilities Study, its New Service Request shall be deemed to be terminated and withdrawn as of the date when payment was due.

## **206.5 Estimates of Certain Upgrade-Related Rights:**

### **206.5.1 Incremental Available Transfer Capability Revenue Rights:**

The New Service Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental Available Transfer Capability Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility. The ultimate assignment of Incremental Available Transfer Capability Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility will be made pursuant to the process set forth in Tariff, Part VI, Subpart C, section 233.

### **206.5.2 Incremental Auction Revenue Rights:**

The New Service Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental Auction Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility on up to three (3) pairs of point-to-point combinations. The ultimate assignment of Incremental Auction Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility will be made pursuant to the allocation process set forth in Tariff, Part VI, Subpart C, section 231 and may depend upon the point-to-point combination requests and cost responsibilities of other New Service Customers.

### **206.5.3 Transmission Injection Rights and Transmission Withdrawal Rights:**

The assignment of Transmission Injection Rights and Transmission Withdrawal Rights associated with new Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities will be made in accordance with Tariff, Part VI, Subpart C, section 232 and may depend upon the capabilities of facilities and upgrades necessary to accommodate other New Service Requests.

**207.2 Re-Study:**

If re-study of the Facilities Study is required due to a higher queued New Service Request dropping out of the queue or a modification of a higher queued New Service Request subject to Tariff, Part IV, Subpart A, section 36.2A, the Transmission Provider shall notify the New Service Customer in writing explaining the reason for the re-study. Transmission Provider shall use due diligence to complete such re-study within sixty (60) calendar days from the date of the notice. Any cost of re-study shall be borne by the New Service Customer being restudied.

## **208 Expedited Procedures for Part II Requests:**

In lieu of the procedures set forth above, an Eligible Customer pursuing a Completed Application under Tariff, Part II shall have the option to expedite the process by requesting the Transmission Provider to tender at one time, together with the results of required studies, an “Expedited Service Agreement” pursuant to which the Eligible Customer would agree to compensate the Transmission Provider or the affected Transmission Owner(s) for all costs incurred pursuant to the terms of the Tariff for purposes of accommodating such customer’s Completed Application. In order to exercise this option, the Eligible Customer shall request in writing an expedited Service Agreement covering all of the above-specified items within thirty (30) days of receiving the results of the System Impact Study identifying needed facility additions or upgrades or costs to be incurred in providing the requested service. While the Transmission Provider agrees to provide the Eligible Customer with its best estimate (determined in coordination with the affected Transmission Owner(s)) of the new facility costs and other charges that may be incurred, such estimate shall not be binding and the Eligible Customer must agree in writing to compensate the Transmission Provider and the affected Transmission Owner(s) for all costs incurred pursuant to the provisions of the Tariff. The Eligible Customer shall execute and return such an Expedited Service Agreement within fifteen (15) days of its receipt or the Eligible Customer’s request for service will cease to be a Completed Application and will be deemed terminated and withdrawn.

## **209.1 Optional Interconnection Study Agreement:**

Within 30 days from the date when the Interconnection Customer receives the results of the System Impact Study, the Interconnection Customer may request, and upon such request, the Transmission Provider shall perform, up to two Optional Interconnection Studies. A request for such a study shall describe the assumptions that the Interconnection Customer wishes the Transmission Provider to study within the scope described in Tariff, Part VI, Subpart A, section 209.2. Within ten (10) Business Days after receipt of a request for an Optional Interconnection Study, the Transmission Provider shall provide to the Interconnection Customer an Optional Interconnection Study Agreement in the form included in Tariff, Attachment N-3.

### **209.1.1**

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify Interconnection Customer's assumptions regarding any Interconnection Requests with earlier Queue Positions that will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) the Transmission Provider's estimate of the cost of the Optional Interconnection Study. To the extent known by the Transmission Provider, such estimate shall include any costs expected to be incurred by an Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, the Transmission Provider shall not be required as a result of a request for an Optional Interconnection Study to conduct any additional New Service Studies with respect to any other New Service Request.

### **209.1.2**

The Interconnection Customer shall execute and deliver the Optional Interconnection Study Agreement, along with the required technical data, and the greater of a \$10,000 deposit or the estimated study cost to the Transmission Provider within ten (10) Business Days of the Interconnection Customer's receipt of such agreement.

### **209.3 Optional Interconnection Study Procedures:**

The Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified in the Optional Interconnection Study Agreement. If the Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the initial deposit and the actual cost of the study shall be paid to the Transmission Provider or refunded to the Interconnection Customer, as appropriate. Upon request, the Transmission Provider shall provide the Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with Tariff, Part VI, Subpart B, section 222.

## **210 Responsibilities of the Transmission Provider and Transmission Owners:**

The Transmission Provider shall be responsible for the preparation of all studies of New Service Requests required by the Tariff. The Transmission Provider may contract with consultants, including the affected Transmission Owner(s), to obtain services or expertise with respect to any such study, including but not limited to the need for Attachment Facilities, Direct Assignment Facilities, and Local Upgrades, estimates of costs and construction times required by Interconnection Feasibility Studies, System Impact Studies, and Facilities Studies, and for information regarding distribution facilities. The Transmission Owners shall supply such information and data reasonably required by the Transmission Provider to perform its obligations under this Tariff, Part VI.

## **211 Interim Interconnection Service Agreement:**

Under certain circumstances, an Interconnection Customer may wish to initiate construction activities relating to Attachment Facilities, Local Upgrades, or Network Upgrades on an expedited basis prior to completion of the Facilities Study. One example of such a circumstance is to request that orders be placed for equipment or materials that have a long lead time for delivery. To initiate such an advance of procurement and/or construction activities, the Interconnection Customer may request execution of an Interim Interconnection Service Agreement (in the form included in Tariff, Attachment O-1) for the activities being advanced. The Interim Interconnection Service Agreement will bind the Interconnection Customer for all costs incurred for the activities being advanced pursuant to the terms of the Tariff. While the Transmission Provider agrees to provide the Interconnection Customer with the best estimate (determined in coordination with affected Transmission Owner(s)) of the new facility costs and other charges that may be incurred for the work being advanced, such estimate shall not be binding and the Interconnection Customer must agree through execution of the Interim Interconnection Service Agreement to compensate the Transmission Provider and the affected Transmission Owner(s) for all costs incurred due to those activities that were advanced. The Transmission Provider shall not be obligated to offer an Interim Interconnection Service Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in Tariff, Part IV or other parts of this Tariff, Part VI. The Interim Interconnection Service Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or date of Initial Operation. The Interim Interconnection Service Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security, such as a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to Transmission Provider's estimate of the costs of the procurement and/or construction activities to be advanced pursuant to the Interim Interconnection Service Agreement, consistent with commercial practices as established by the Uniform Commercial Code. Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of the procurement and/or construction activities to be advanced. The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter of credit or other form of security. The Transmission Provider shall provide the affected Transmission Owner with a copy of the Interim Interconnection Service Agreement when this agreement is provided to the Interconnection Customer for execution.



### **211.1 Payment of Costs on Cancellation:**

In the event that, after execution of an Interim Interconnection Service Agreement, the Interconnection Customer determines not to complete its interconnection, it shall immediately so notify Transmission Provider. The Interconnection Customer shall be liable for all Cancellation Costs related to the acquisition, design, construction and/or installation of facilities under the Interim Interconnection Service Agreement. Upon receipt of the Interconnection Customer's notice under this section, Transmission Provider, after consulting with the affected Transmission Owner, may, at the sole cost and expense of the Interconnection Customer, authorize the Transmission Owner to (a) cancel supplier and contractor orders and agreements entered into by the Transmission Owner to acquire and/or design, construct, and install the facilities identified in the Interim Interconnection Service Agreement, provided, however, that the Interconnection Customer shall have the right to choose to take delivery of any equipment ordered by the Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; or (b) remove any facilities built by the Transmission Owner or (c) partially or entirely complete construction or installation of such facilities as necessary to preserve the integrity or reliability of the Transmission System, provided that the Interconnection Customer shall be entitled to receive any rights associated with such facilities and upgrades as determined in accordance with Tariff, Part VI, Subpart C; or (d) undo any of the changes to the Transmission System that were made pursuant to the Interim Interconnection Service Agreement. To the extent that the Interconnection Customer has fully paid for equipment that is unused upon cancellation or which is removed pursuant to clause (b) above, the Interconnection Customer shall have the right to take back title to such equipment; alternatively, in the event that the Interconnection Customer does not wish to take back title, the Transmission Owner may elect to pay the Interconnection Customer a mutually agreed amount to acquire and own such equipment.

## **212 Interconnection Service Agreement:**

Notwithstanding any other provision of the Tariff, this section 212 shall apply only to Interconnection Customers, excluding those that are proposing Merchant Network Upgrades only for which Tariff, Part VI, Subpart B, section 213 shall apply. Upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to each Interconnection Customer an Interconnection Service Agreement (in the form included in Tariff, Attachment O) to be executed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider. The Transmission Provider shall provide the Interconnected Transmission Owner with a copy of the Interconnection Service Agreement when this agreement is provided to the Interconnection Customer for execution. In order to exercise Option to Build, as set forth in Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, section 3.2.3.1, Interconnection Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of its election to exercise the option no later than thirty (30) days from the date the Interconnection Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). Interconnection Customer may not elect Option to Build after such date.

**212.2 Upgrade-Related Rights:**

The Interconnection Service Agreement shall specify the Upgrade-Related Rights that the Interconnection Customer shall receive pursuant to Tariff, Part VI, Subpart C, except to the extent the applicable terms of Tariff, Part VI, Subpart C provide otherwise.

### **212.3 Specification of Transmission Owners Responsible for Facilities and Upgrades:**

The Facilities Study shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Interconnection Construction Service Agreement(s), for the construction of facilities and upgrades, determined in a manner consistent with Operating Agreement, Schedule 6.

## **212.6 Interconnection Construction Service Agreement and Commencement of Construction:**

For all interconnections within the scope of this section 212 for which construction of facilities is required, Transmission Provider shall tender to the Interconnection Customer an Interconnection Construction Service Agreement relating to such facilities within 45 days after receipt of the executed Interconnection Service Agreement. In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Interconnection Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system. The Transmission Provider shall provide the Transmission Owner(s) with a copy of the Interconnection Construction Service Agreement when this agreement is provided to the Interconnection Customer for execution. Within ninety (90) calendar days of receipt thereof, unless otherwise specified in the project specific milestones of the Interconnection Service Agreement, Interconnection Customer either shall have executed the tendered Interconnection Construction Service Agreement and it must be in possession of the Transmission Provider, or, alternatively, shall request dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5, or that the Interconnection Construction Service Agreement be filed unexecuted with the Commission. In the event that the Interconnection Customer has requested dispute resolution or that the Interconnection Service Agreement be filed unexecuted, construction of facilities and upgrades shall be deferred until any disputes are resolved, unless otherwise agreed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider.

**213.2 Upgrade-Related Rights:**

The Upgrade Construction Service Agreement shall specify the Upgrade-Related Rights to which the New Service Customer is entitled pursuant to Tariff, Part VI, Subpart C, except to the extent the applicable terms of Tariff, Part VI, Subpart C provide otherwise.

### **213.3 Specification of Transmission Owners Responsible for Facilities and Upgrades:**

The Facilities Study shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Upgrade Construction Service Agreement, for the construction of facilities and upgrades, determined in a manner consistent with Operating Agreement, Schedule 6.

#### **213.4 Retaining Priority and Security:**

(a) Retaining Priority: To retain the assigned Queue Position of its New Service Request pursuant to Tariff, Part VI, Preamble, section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the New Service Customer either shall have executed the tendered Upgrade Construction Service Agreement and it must be in possession of the Transmission Provider or, alternatively, request (i) dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5, or (ii) that the Upgrade Construction Service Agreement be filed unexecuted with the Commission.

(b) Security: (1) At the time the New Service Customer executes and returns to the Transmission Provider the Upgrade Construction Service Agreement (or requests dispute resolution or that it be filed unexecuted), the New Service Customer also shall, unless otherwise deferred as set forth in subsection (c) below, provide the Transmission Provider (for the benefit of the affected Transmission Owner(s)) with a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to the sum of the estimated costs determined by the Transmission Provider of (i) the required Direct Assignment Facilities, Non-Direct Connection Local Upgrades and/or Non-Direct Connection Network Upgrades (including required upgrades for which another New Service Customer also has cost responsibility pursuant to Tariff, Part VI, Subpart B, section 217), (ii) the estimated cost of work that the New Service Customer will be responsible for performing on the required Direct Assignment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences in earnest, and (iii) in the event that the New Service Customer exercised the Option to Build pursuant to Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, section 6.2.1, all Cancellation Costs and the first three months of estimated Transmission Owner's oversight costs associated with the New Service Customer's building Direct Assignment Facilities and/or Direct Connection Network Upgrades, including but not limited to Costs for inspections, testing, and tie-in work, consistent with commercial practices as established by the Uniform Commercial Code. Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment GG, Appendix III, section 6.2.2(a)(12). Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of construction.

The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter of credit or other form of security. After execution of the Upgrade Construction Service Agreement, the amount of Security required may be adjusted from time to time in accordance with Tariff, Attachment GG, Appendix III, section 9.1 of the Upgrade Construction Service Agreement.

(2) Transmission Provider shall invoice New Service Customer for work by the Transmission Owner on a quarterly basis for the costs to be expended in the subsequent three months. Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. New Service Customer may request in the Upgrade Construction Service Agreement that the Transmission



Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Tariff, Attachment GG, Appendix III, section 9.3 of the Upgrade Construction Service Agreement shall govern the timing of the final cost reconciliation upon completion of the work.

(3) Security related to construction of Local Upgrades and/or Network Upgrades may be reduced as construction progresses.

(c) Deferred Security: New Service Customer may request to defer providing security under subsection (b) of this section 213.4 until no later than 120 days after New Service Customer executes the Upgrade Construction Service Agreement. Upon New Service Customer's request to defer security, PJM shall determine if any other queued New Service Customer with a completed System Impact Study would require any Local Upgrade(s) and/or Network Upgrade(s) for which New Service Customer has cost responsibility under the Upgrade Construction Service Agreement. New Service Customer may defer security only for Local Upgrade(s) and/or Network Upgrade(s) for which no other such queued New Service Customer may require, provided New Service Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities on such non-shared Local Upgrade(s) and/or Network Upgrade(s), with \$100,000 of such deposit being non-refundable. If the New Service Customer terminates the Upgrade Construction Service Agreement or is otherwise withdrawn, any unused portion of the non-refundable deposit will be used to fund re-studies due to such termination or withdrawal. Any remaining deposit monies, refundable or non-refundable, will be returned to a New Service Customer upon Stage Two Energization of Completed Facilities.

(d) Withdrawal: If a New Service Customer fails to timely execute the Upgrade Construction Service Agreement (or request dispute resolution or that the agreement be filed unexecuted), or to provide the security prescribed in this Section, its New Service Request shall be deemed terminated and withdrawn. In the event that a terminated and withdrawn New Service Request was included in a Facilities Study that evaluated more than one New Service Request, or in the event that a New Service Customer's participation in and cost responsibility for a Network Upgrade or Local Upgrade is terminated in accordance with the Upgrade Construction Service Agreement, the Transmission Provider shall reevaluate the need for the facilities and upgrades indicated by the Facilities Study, shall redetermine the cost responsibility of each remaining New Service Customer for the necessary facilities and upgrades based on its assigned Queue Position pursuant to Tariff, Part VI, Preamble, section 201, and shall enter into an amended Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable, with each remaining New Service Customer setting forth its revised cost obligation. In such event, if the amount of a New Service Customer's cost responsibility increases, the New Service Customer shall provide additional security pursuant to this section.

## **213.6 Procedures if The Affected Transmission Owners are Unable to Complete New Transmission Facilities for Firm Point-To-Point Transmission Service:**

### **213.6.1 Delays in Construction of New Facilities:**

If any event occurs that will materially affect the time for completion of new facilities or the ability to complete new facilities required to accommodate a Completed Application for new Firm Point-To-Point Transmission Service, the Transmission Provider shall promptly notify the Transmission Customer. In such circumstances, the Transmission Provider shall within thirty (30) days of notifying the Transmission Customer of such delays, convene a technical meeting with the Transmission Customer to evaluate the alternatives available to the Transmission Customer. The Transmission Provider also shall make available to the Transmission Customer studies and work papers related to the delay, including all information that is in the possession of the Transmission Provider that is reasonably needed by the Transmission Customer to evaluate any alternatives.

### **213.6.2 Alternatives to the Original Facility Additions:**

When the review process of section 213.6.1 above determines that one or more alternatives exist to the originally planned construction project, the Transmission Provider shall present such alternatives for consideration by the Transmission Customer. If, upon review of any alternatives, the Transmission Customer desires to maintain its Completed Application subject to construction of the alternative facilities, it may request the Transmission Provider to submit, as applicable, a revised Service Agreement for Firm Point-To-Point Transmission Service and/or a revised Upgrade Construction Service Agreement. If the alternative approach solely involves Non-Firm Point-To-Point Transmission Service, the Transmission Provider shall promptly tender a Service Agreement for Non-Firm Point-To-Point Transmission Service providing for the service. In the event the Transmission Provider concludes that no reasonable alternative exists and the Transmission Customer disagrees, the Transmission Customer may seek relief under the dispute resolution procedures pursuant to Tariff, Part I, section 12 or it may refer the dispute to the Commission for resolution.

### **213.6.3 Refund Obligation for Unfinished Facility Additions:**

If the Transmission Provider and the Transmission Customer mutually agree that no other reasonable alternatives exist and the requested service cannot be provided out of existing capability under the conditions of Tariff, Part II, the obligation to provide the requested Firm Point-To-Point Transmission Service shall terminate and any deposit made by the Transmission Customer shall be returned with interest pursuant to the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii)..

However, the Transmission Customer shall be responsible for all prudently incurred costs by the Transmission Provider or any Transmission Owner through the time construction was suspended

### **213.6.4 Supply of Data:**

The Transmission Owners shall supply such information and data reasonably required by the Transmission Provider to perform its obligations under this section 213.6.



## **215    Transmission Service Agreements:**

Upon completion of the Facilities Study (or, if no Facilities Study was required, the System Impact Study), the Transmission Provider shall tender to each Eligible Customer whose Completed Application for new transmission service was included in the study a Service Agreement (in the form included in Tariff, Attachment A, Tariff, Attachment F, or Tariff, Attachment F-1, as applicable). To retain the assigned Queue Position of its Completed Application pursuant to Tariff, Part VI, Preamble section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), each Eligible Customer must execute and return the tendered Service Agreement to the Transmission Provider or, alternatively, request dispute resolution under Tariff, Part I, section 12, or that the Service Agreement be filed unexecuted with the Commission. Should the Eligible Customer fail to execute and return the Service Agreement or to request dispute resolution or filing unexecuted within the prescribed time, its Completed Application shall be deemed to be terminated and withdrawn. Other terms and procedures for these Service Agreements are set forth in Tariff, Part II and Tariff, Part III.

## **216 Interconnection Requests Designated as Market Solutions:**

The provisions of this section shall apply to any Interconnection Request related to a project that Transmission Provider determines, in accordance with Operating Agreement, Schedule 6, section 1.5.7(h) could relieve a transmission constraint and which, in the judgment of the Transmission Provider, is economically justified (hereafter, a “market solution”).

### **216.1 Notification and Acceptance of Market Solution Designation:**

Upon determining that an Interconnection Request is a market solution, Transmission Provider shall so notify the affected Interconnection Customer and shall offer the customer formal designation as a “market solution.” With such notification, Transmission Provider also shall tender to the Interconnection Customer a Development Agreement, as described in section 216.2 below. To accept the designation of its project as a market solution, the Interconnection Customer must execute and return the Development Agreement to Transmission Provider within 15 days after its receipt thereof. The Interconnection Customer may decline the proffered designation as a market solution without prejudice to the Queue Position or processing of its Interconnection Request. An election to decline designation as a market solution may be made by not executing the Development Agreement within the time provided or by otherwise so notifying Transmission Provider. In the event the Interconnection Customer declines designation as a market solution, the remaining provisions of this section 216 shall not apply to the Interconnection Customer’s Interconnection Request.

## **216.2 Development Agreement:**

### **216.2.1 Disclosure:**

The Development Agreement shall provide that, within 30 days after execution of the agreement, the Interconnection Customer shall disclose fully to Transmission Provider and shall promptly report any material changes in: (a) the Interconnection Customer's affiliate relationships with other Market Participants; (b) the Financial Transmission Rights and Auction Revenue Rights positions of the Interconnection Customer and its Affiliates in any portion of the PJM system that affects or is affected by the transmission constraint for which the Interconnection Customer's project has been designated as a market solution; and (c) the Interconnection Customer's and its affiliates' bilateral transactions and other material contractual relationships (as specified in the Development Agreement) with any Market Participant that is affected by the transmission constraint for which the Interconnection Customer's project is designated as a market solution. Transmission Provider shall treat all information disclosed pursuant to the Development Agreement on a confidential basis in accordance with Operating Agreement, section 18.17.

### **216.2.2 Milestones:**

In addition to the milestones required pursuant to Tariff, Part VI, Subpart A, section 204.3 and/or Tariff, Part VI, Subpart A, section 206.1, the Development Agreement may set forth additional milestones for the development of the project designated as a market solution that the Transmission Provider determines to be reasonable and appropriate to ensure diligent pursuit of the project from the time of execution of the Development Agreement until the time for execution of the Interconnection Service Agreement under Tariff, Part VI, Subpart B, section 212. Transmission Provider may extend any of the additional milestones set forth in the Development Agreement if the Interconnection Customer demonstrates that its inability to meet the milestone(s) is due to delays not caused by the Interconnection Customer that could not be avoided or remedied by the exercise of due diligence. In the event that any milestone set forth in the Development Agreement is not timely met and is not extended by Transmission Provider in accordance with the preceding sentence, Interconnection Customer's project shall lose its designation as a market solution and Transmission Provider shall terminate the Development Agreement. Upon termination of the Development Agreement, Interconnection Customer may retain its priority in the applicable Interconnection Queue in accordance with Tariff, Part VI, Preamble, section 201, if the Interconnection Customer affirmatively so requests in writing delivered to Transmission Provider within 15 days after termination of the Development Agreement. In the event such a project stays in the Interconnection Queue, the expedited study procedures described in section 216.3 below will not apply, and any studies of the Interconnection Customer's Interconnection Request that are yet to be completed shall be completed on the schedules otherwise applicable under Tariff, Part IV or Tariff, Part VI for other Interconnection Requests in the same Interconnection Queue.

### **216.2.3 Expedited Studies:**

Transmission Provider shall conduct Feasibility Studies, System Impact Studies, and Facilities Studies associated with projects that have accepted designation as market solutions pursuant to this Tariff, Part VI, Subpart B, section 216 on an expedited and, where feasible, project-specific

basis, notwithstanding the schedule for completion of such studies for the applicable Interconnection Queue under other provisions of Tariff, Part IV or Tariff, Part VI.

#### **216.2.4 Interconnection Service Agreements For Market Solutions:**

##### **216.2.4.1 Additional Milestones:**

In addition to the milestones specified in or pursuant to Tariff, Part VI, Subpart B, section 212.5, the Interconnection Service Agreement executed by an Interconnection Customer with respect to a project for which the customer has accepted designation as a market solution shall include the following additional milestones: (a) within 60 days after execution of the Interconnection Service Agreement, the Interconnection Customer must reasonably demonstrate to Transmission Provider that the Interconnection Customer is likely to be able to obtain sufficient financing for the project; (b) within 180 days after execution of the Interconnection Service Agreement, the Interconnection Customer must demonstrate to Transmission Provider that the Interconnection Customer has arranged sufficient financing to complete the project; and (c) other reasonable milestones that the Transmission Provider determines are necessary to ensure that the Interconnection Customer continues diligently to pursue development of the project.

##### **216.2.4.2 Additional Security:**

###### **216.2.4.2.1 Amount:**

Notwithstanding any other provisions of this Tariff, in the event that no Network Upgrades, Local Upgrades, or Attachment Facilities are required to accommodate the Interconnection Request of a project that has accepted designation as a market solution, at the time of execution of the Interconnection Service Agreement for such project, the Interconnection Customer must provide security in an amount equal to the lesser of 10% of Transmission Provider's reasonable estimate of the fixed cost of the project or \$250,000.

###### **216.2.4.2.2 Forfeiture of Additional Security:**

In the event that Transmission Provider reasonably determines (a) that the Interconnection Customer's failure to meet such milestone(s) reasonably could have been avoided by the exercise of due diligence, and (b) based on the Interconnection Customer's disclosures pursuant to the Development Agreement and other available information, that the Interconnection Customer or one or more of its Affiliates or customers will profit from the transmission constraint for which the Interconnection Customer's project was designated as a market solution, upon termination of the Interconnection Service Agreement, Transmission Provider shall retain the additional security provided by the Interconnection Customer pursuant to section 216.2.4.2.1 above. In all other instances of failure to meet such a milestone, the additional security shall be refunded to the Interconnection Customer.

###### **216.2.4.2.3 Disposition of Forfeited Additional Security:**



Transmission Provider shall utilize any funds that it retains pursuant to section 216.2.4.2.2 above to offset the cost to load affected by the transmission constraint that the project to be built under the relevant terminated Interconnection Service Agreement would have relieved. Such relief shall be applied with regard to congestion caused by the transmission constraint that occurs after termination of the applicable Interconnection Service Agreement. Transmission Provider shall establish in the PJM Manuals procedures for allocating and applying such relief to congestion costs incurred by affected load.

### **217.3 Local and Network Upgrades:**

(a) General: Each New Service Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Local Upgrades and Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Local Upgrades and Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Local Upgrades and Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.

(b) Cost Responsibility for Accelerating Local and Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of a Local Upgrade or Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the New Service Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Tariff, Schedule 12 as having cost responsibility for such Local Upgrade or Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Local Upgrade or Network Upgrade.

**217.3a** The Transmission Provider shall determine the minimum amount of required Local Upgrades and Network Upgrades required to resolve each reliability criteria violation in each New Services Queue, by studying the impact of the queued projects in their entirety, and not incrementally.

Local Upgrades and Network Upgrades shall be studied in their entirety and according to the following process:

(i) The Transmission Provider shall identify the first New Service Request in the queue contributing to the need for the required Local Upgrades and Network Upgrades within the New Services Queue. The initial New Service Request to cause the need for Local Upgrades or Network Upgrades will always receive a cost allocation. Costs for the minimum amount of Local Upgrades and Network Upgrades shall be further allocated to subsequent projects in the New Services Queue, pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

(ii) In the event a subsequent New Service Request in the queue causes the need for additional Local Upgrades or additional Network Upgrades, only this New Service Request and the New Service Requests in the queue, which follow such subsequent New Service Request in the queue,

shall be allocated the costs for these additional required Local Upgrades or Network Upgrades. The allocation shall be pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

Where a Local Upgrade or Network Upgrade included in the Regional Transmission Expansion Plan is classified as both a reliability-based and market efficiency project, a New Service Request cannot eliminate or defer such upgrade unless the request eliminates or defers both the reliability need and the market efficiency need identified in the Regional Transmission Expansion Plan.

#### **217.4 Additional Upgrades:**

In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a New Service Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the New Service Request, a New Service Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its New Service Request. The New Service Customer shall have the right of first refusal to pay for any or all of the upgrades in addition to the minimum, and to hold all rights associated with the additional upgrades for which it agrees to pay, in accordance with Tariff, Part VI, Subpart C. The remaining costs shall be borne by the Transmission Owners in accordance with Operating Agreement, Schedule 6 and, subject to FERC approval, may be included in the revenue requirements of the Transmission Owners. If, based upon the date of the submission of a subsequent New Service Request, the Transmission Provider determines that a New Service Customer will make use of additional economic capacity that exists or will exist as a result of facilities and upgrades constructed as a result of an earlier New Service Request, then the Transmission Provider may require the subsequent New Service Customer to pay an appropriate portion of the cost of the facilities and upgrades that produced the additional economic capacity.

**217.5 Specification of Costs in Agreement:**

The cost responsibility of a New Service Customer shall be specified, (a) in the case of an Interconnection Customer that proposes facilities other than Merchant Network Upgrades, in the Interconnection Service Agreement, and (b) in the case of all other New Service Customers, in the Upgrade Construction Service Agreement. If a New Service Customer does not agree with the Transmission Provider's determination of such cost responsibility, it may request that the matter be submitted to Dispute Resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5, or request that an unexecuted Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable, be filed with the Commission in accordance with the Tariff.

**217.6 Effect of IDR Transfer Agreement:**

A New Service Customer may modify its cost responsibility for Network Upgrades and/or Local Upgrades as determined under this section 217 by submitting an IDR Transfer Agreement in accordance with Tariff, Part VI, Subpart C, section 237 that transfers to the New Service Customer Incremental Deliverability Rights associated with Merchant Transmission Facilities. As provided in Tariff, Part VI, Subpart C, section 237, the New Service Customer's cost responsibility shall be modified only if it elects to terminate, and Transmission Provider confirms termination of, its participation in and cost responsibility for any Network Upgrade or Local Upgrade.

## **217.7 Regional Transmission Expansion Plan:**

### **217.7.1**

Any Attachment Facilities, Direct Assignment Facilities, Local Upgrades, or Network Upgrades constructed to accommodate a New Service Request or an Affected System facility (as defined in section 218 below) shall be included in the Regional Transmission Expansion Plan upon their identification in an executed Interconnection Service Agreement or Upgrade Construction Service Agreement filed with or reported to the Commission pursuant to Tariff, Part VI, Subpart B, section 214.

### **217.7.2**

In the event that termination of a New Service Customer's participation in a previously identified Network Upgrade or Local Upgrade pursuant to Tariff, Part VI, Subpart C, section 237 eliminates the need for such upgrade, Transmission Provider shall offer all New Service Customers whose New Service Requests preceded the IDR Transfer Agreement that facilitated such termination an opportunity to pursue and pay for (in whole or in part) such upgrade. Each New Service Customer shall have the right to hold all Upgrade-Related Rights associated with the additional upgrades (or portions thereof) for which it agrees to pay in accordance with Tariff, Part VI, Subpart C.

### **217.7.3**

Transmission Provider shall remove from the Regional Transmission Expansion Plan any Network Upgrade or Local Upgrade in the event that the need for such upgrade is eliminated due to termination of a New Service Customer's participation in such upgrade and other New Service Customers do not pursue and pay for the upgrade pursuant to section 217.7.2 above.

## **218.2 Generation and Transmission Interconnecting with Affected Systems:**

In the event that interconnection of a new or expanded generation or transmission facility with an Affected System (“Affected System facility”) requires Local Upgrades or Network Upgrades to the Transmission System, such Affected System facility shall be responsible for the costs of such upgrades in accordance with Tariff, Part VI, Subpart B, section 217. Transmission Provider and the developer of the Affected System facility shall enter into an Upgrade Construction Service Agreement for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades. For purposes of applying the Upgrade Construction Service Agreement to the construction of such upgrades, the developer of the Affected System facility shall be deemed to be the New Service Customer.



### **218.3                    Coordination of Third-Party System Additions:**

In circumstances where the need for transmission facilities or upgrades is identified pursuant to this Tariff, Part VI, and if such upgrades further require the addition of transmission facilities on one or more Affected Systems, the affected Transmission Owner(s), in coordination with the Transmission Provider, shall have the right to coordinate construction on their own systems with the construction required by the Affected System(s). The Transmission Provider, together with the affected Transmission Owner(s), after consultation with the Transmission Customer and representatives of the Affected System(s), may defer construction of an affected Transmission Owner's new transmission facilities, if the new transmission facilities on an Affected System cannot be completed in a timely manner. The Transmission Provider shall notify the affected New Service Customer in writing of the basis for any decision to defer construction and the specific problems which must be resolved before construction of new facilities will be initiated or resumed. Within sixty (60) days of receiving written notification by the Transmission Provider of the intent to defer construction pursuant to this section, the New Service Customer may challenge the decision in accordance with the dispute resolution procedures pursuant to Tariff, Part I, section 12 or it may refer the dispute to the Commission for resolution.

## **218.4 Upgrade-Related Rights:**

### **218.4.1 Facilities on Affected System:**

A New Service Customer that pays the costs of any transmission facilities or upgrades on an Affected System as provided in section 218.1 above shall be entitled to any Upgrade-Related Rights that may be created in the Transmission System due to the construction of such facilities or upgrades on the Affected System, as determined in accordance with Tariff, Part VI, Subpart C. The Upgrade-Related Rights (if any) to which the New Service Customer is entitled pursuant to Tariff, Part VI, Subpart C shall be stated in the Upgrade Construction Service Agreement or other agreement executed by such customer as provided in section 218.1 above, except to the extent the applicable terms of Tariff, Part VI, Subpart C provide otherwise.

### **218.4.2 Facilities on Transmission System:**

To the same extent as a New Service Customer under the Tariff, the developer of an Affected System facility that pays the costs of any Local Upgrades or Network Upgrades as provided in section 218.2 above shall be entitled to any Upgrade-Related Rights associated with those facilities in accordance with Tariff, Part VI, Subpart C. The Upgrade-Related Rights (if any) to which the developer of an Affected System facility is entitled pursuant to Tariff, Part VI, Subpart C shall be stated in the Upgrade Construction Service Agreement executed by such developer, except to the extent the applicable terms of Tariff, Part VI, Subpart C provide otherwise.

## **219 Inter-queue Allocation of Costs of Transmission Upgrades:**

In the event that Transmission Provider determines that accommodating a New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade or Network Upgrade that was previously determined to be necessary to accommodate, a New Service Request that was part of a previous New Services Queue, such New Service Customer may be responsible, subject to the terms of Tariff, Part VI, Subpart C, sections 231.4, 233.5, and 234.5 below and in accordance with criteria prescribed by Transmission Provider in the PJM Manuals, for additional costs up to an amount equal to a proportional share of the costs of such previously-constructed facility or upgrade.

Cost responsibility under this section 219 may be assigned with respect to any facility or upgrade:

- (a) the completed cost of which was \$5,000,000 or more, for a period of time not to exceed five years from the execution date of the Interconnection Service Agreement for the project that initially necessitated the requirement for the Local Upgrade or Network Upgrade.

For purposes of applying this section, Transmission Provider may aggregate the costs of related facilities or upgrades, e.g., multiple replacements of or new circuit breakers at a single substation, that are, or are anticipated to be, constructed contemporaneously. In each Interconnection Service Agreement and Upgrade Construction Service Agreement executed after the date on which this section 219 first becomes effective, Transmission Provider shall identify any of the facilities or upgrades included in the Specifications to such Interconnection Service Agreement or Upgrade Construction Service Agreement the costs of which Transmission Provider will aggregate for purposes of application of this section.

## **220     Advance Construction of Certain Network Upgrades:**

An Interconnection Customer that has executed an Interconnection Service Agreement or an Upgrade Construction Service Agreement, as applicable, in order to ensure the availability of, in the case of a Generation Interconnection Customer, all of its Capacity Interconnection Rights, or, in the case of a Transmission Interconnection Customer, all of its Transmission Injection Rights and Transmission Withdrawal Rights, upon Initial Operation of its Customer Facility, may request that the Transmission Provider cause the affected Transmission Owner to advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer; (ii) are necessary to support, (A) in the case of a Generation Interconnection Customer, such Interconnection Customer's full Capacity Interconnection Rights, or (B) in the case of a Transmission Interconnection Customer, are necessary to support such Transmission Interconnection Customer's full Transmission Injection Rights and Transmission Withdrawal Rights; (iii) are the cost responsibility of an entity other than the Interconnection Customer making the request for advance construction; and (iv) would otherwise not be completed on behalf of such other entity in time to support the full Capacity Interconnection Rights or the full Transmission Injection Rights and Transmission Withdrawal Rights, as applicable, of the requesting Interconnection Customer upon Initial Operation of its Customer Facility. Upon such request, Transmission Provider will use Reasonable Efforts to cause the affected Transmission Owner to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay Transmission Provider, on behalf of such Transmission Owner: (a) any associated expediting costs and (b) the cost of such Network Upgrades. The Interconnection Customer shall be entitled to a refund of the cost of the Network Upgrades after the date on which the entity bearing cost responsibility for such upgrades has completed payment of the costs thereof. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. The Transmission Provider shall forward to the Interconnection Customer the amount paid by the entity with cost responsibility for the Network Upgrades as payment in full for the outstanding balance owed to the Interconnection Customer, provided, however, that if the Network Upgrades were built and paid for by a Transmission Owner, such Transmission Owner shall refund to the Interconnection Customer the cost of such upgrades in accordance with the terms of this section. An Interconnection Customer that pays for advance construction of Network Upgrades pursuant to this section 220 shall be entitled to any Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and/or any Incremental Available Transfer Capability Revenue Rights associated with such facilities for the period from the date of completion of the advanced Network Upgrades to the date on which the cost of such upgrades is refunded to the Interconnection Customer.

**221.1 Construction Obligation:**

The determination of the Transmission Owners' obligations to build the necessary facilities and upgrades to accommodate New Service Requests, or interconnections with Affected Systems in accordance with Tariff, Part VI, Subpart B, section 218.2, shall be made in the same manner as such responsibilities are determined under Operating Agreement, Schedule 6. Except to the extent otherwise provided in a Construction Service Agreement entered into pursuant to this Tariff, Part VI, the Transmission Owners shall own all Attachment Facilities, Direct Assignment Facilities, Local Upgrades, and Network Upgrades constructed to accommodate New Service Requests.

## **221.2 Alternative Facilities and Upgrades:**

Upon completion of the studies of a New Service Request prescribed in the Tariff, the Transmission Provider shall recommend the necessary facilities and upgrades to accommodate the New Service Request and the Transmission Owner's construction obligation to build such facilities and upgrades. The Transmission Owner(s) or the New Service Customer may offer alternatives to the Transmission Provider's recommendation. If, based upon its review of the relative costs and benefits, the ability of the alternative(s) to accommodate the New Service Request, and the alternative's(s') impact on the reliability of the Transmission System, the Transmission Provider does not adopt such alternative(s), the Transmission Owner(s) or the New Service Customer may require that the alternative(s) be submitted to Dispute Resolution in accordance with Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. The affected New Service Customer may participate in any such Dispute Resolution process.

## **222 Confidentiality:**

Except as otherwise provided in this section, all information provided to Transmission Provider by New Service Customers relating to any study of a New Service Request required under the Tariff shall be deemed Confidential Information under Tariff, Part VI, Subpart B, section 223. Upon completion of each study, the study will be listed on the Transmission Provider's OASIS and, to the extent required by Commission regulations, will be made publicly available upon request, except that, in the case of Interconnection Feasibility Studies, the identity of the Interconnection Customer shall remain confidential. To the extent that the Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of any of the studies required under the Tariff, the consultants and/or Transmission Owner(s) shall keep all information provided by New Service Customers confidential and shall use such information solely for the purpose of the study for which it was provided and no other purpose.

## **223 Confidential Information:**

For purposes of this section 223, the term “party” refers to the New Service Customer, the Transmission Provider, or an affected Transmission Owner, as applicable, and the term “parties” refers to all of such entities collectively or to any two or more of them, as the context indicates. Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the party providing the information orally informs the party receiving the information that the information is confidential. If requested by any party, the disclosing party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting party may disclose such writing to an appropriate Governmental Authority. Any party shall be responsible for the costs associated with affording confidential treatment to its information.



**223.1 Term:**

During the longest of the terms of (as and to the extent applicable) the Interconnection Service Agreement, the Service Agreement, and the Upgrade Construction Service Agreement, and for a period of three (3) years after the expiration or termination thereof, and except as otherwise provided in this section 223, each party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other party.

## **223.2 Scope:**

Confidential Information shall not include information that the receiving party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving party; (ii) was in the lawful possession of the receiving party on a non-confidential basis before receiving it from the disclosing party; (iii) was supplied to the receiving party without restriction by a third party, who, to the knowledge of the receiving party, after due inquiry, was under no obligation to the disclosing party to keep such information confidential; (iv) was independently developed by the receiving party without reference to Confidential Information of the disclosing party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving party or breach of the requirements of this section 223; or (vi) is required, in accordance with section 223.7 below, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Subpart or any agreement entered into pursuant thereto. Information designated as Confidential Information shall no longer be deemed confidential if the party that designated the information as confidential notifies the other parties that it no longer is confidential.

### **223.3 Release of Confidential Information:**

No party shall disclose Confidential Information to any other person, except to its Affiliates (limited by the Commission's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be, or may be considering, providing financing to or equity participation in the New Service Customer or to potential purchasers or assignees of the New Service Customer, on a need-to-know basis in connection with the Interconnection Service Agreement, Service Agreement, and/or Construction Service Agreement, unless such person has first been advised of the confidentiality provisions of this section 223 and has agreed to comply with such provisions. Notwithstanding the foregoing, a party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this section 223.

**223.6 Standard of Care:**

Each party shall use at least the same standard of care to protect Confidential Information it receives as the party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each party may use Confidential Information solely to fulfill its obligations to the other parties under this Tariff, Part VI or any agreement entered into pursuant to this Tariff, Part VI.

### **223.7 Order of Disclosure:**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that party shall provide the party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing party may seek an appropriate protective order or waive compliance with the terms of this Tariff, Part VI or any applicable agreement entered into pursuant to this Tariff, Part VI. Notwithstanding the absence of a protective order or agreement, or waiver, the party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the party is legally compelled to disclose. Each party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**223.8 Termination of Agreement(s):**

Upon termination of any agreement entered into pursuant to this Tariff, Part VI, Subpart B for any reason, each party shall, within ten (10) calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

### **223.9 Disclosure to FERC or its Staff:**

Notwithstanding anything in this section 223 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the parties that is otherwise required to be maintained in confidence pursuant to this Tariff, Part VI or any agreement entered into pursuant to such Tariff, Part VI, the party receiving such request shall provide the requested information to FERC or its staff, within the time provided for in the request for information.

In providing the information to FERC or its staff, the party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other parties prior to the release of the Confidential Information to the Commission or its staff. A party shall notify the other party(ies) to any agreement entered into pursuant to this Tariff, Part VI when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

**223.10 Other Disclosures:**

Subject to the exception in section 223.9 above, no party shall disclose Confidential Information of another party to any person not employed or retained by the disclosing party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing party to be required in connection with a dispute between or among the parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Tariff, Part VI or any agreement entered into pursuant to this Tariff, Part VI, or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another party's Confidential Information under this section 223.10, the disclosing party shall promptly notify the other parties in writing and shall assert confidentiality and cooperate with the other parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.



**230.1 Purpose:**

Capacity Interconnection Rights shall entitle the holder to deliver the output of a Generation Capacity Resource at the bus where the Generation Capacity Resource interconnects to the Transmission System. The Transmission Provider shall plan the enhancement and expansion of the Transmission System in accordance with Operating Agreement, Schedule 6 such that the holder of Capacity Interconnection Rights can integrate its Capacity Resources in a manner comparable to that in which each Transmission Owner integrates its Capacity Resources to serve its Native Load Customers.

## **230.2 Receipt of Capacity Interconnection Rights:**

Generation accredited under the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region as a Generation Capacity Resource prior to the original effective date of Tariff, Part IV shall have Capacity Interconnection Rights commensurate with the size in megawatts of the accredited generation. When a Generation Interconnection Customer's generation is accredited as deliverable through the applicable procedures in Tariff, Part VI and Tariff, Part VI, the Generation Interconnection Customer also shall receive Capacity Interconnection Rights commensurate with the size in megawatts of the generation as identified in the Interconnection Service Agreement. Any Generation Owner of an Intermittent Resource or Environmentally Limited Resource which has been accredited as deliverable for additional Capacity Interconnection Rights for the winter period (defined as November through April of a Delivery Year) under the Tariff, Preamble, Part IV, shall receive such Capacity Interconnection Rights as further documented in section 2.0 of the Specifications of the Interconnection Service Agreement of such Generation Owner for the year specified. Pursuant to applicable terms of RAA, Schedule 10, a Transmission Interconnection Customer may combine Incremental Deliverability Rights associated with Merchant Transmission Facilities with generation capacity that is not otherwise accredited as a Generation Capacity Resource for the purposes of obtaining accreditation of such generation as a Generation Capacity Resource and associated Capacity Interconnection Rights.

### **230.3 Loss of Capacity Interconnection Rights:**

#### **230.3.1 Operational Standards:**

To retain Capacity Interconnection Rights, the Generation Capacity Resource associated with the rights must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with RAA, Schedule 9 and the PJM Manuals. Generation Capacity Resources that meet these operational standards shall retain their Capacity Interconnection Rights regardless of whether they are available as a Generation Capacity Resource or are making sales outside the PJM Region.

#### **230.3.2 Failure to Meet Operational Standards:**

This section 230.3.2 shall apply only in circumstances other than Deactivation of a Generation Capacity Resource. In the event a Generation Capacity Resource fails to meet the operational standards set forth in Tariff, Part VI, section 230.3.1 for any consecutive three-year period (with the first such period commencing on the date the Interconnection Customer must demonstrate commercial operation of the generating unit(s) as specified in the Interconnection Service Agreement), the holder of the Capacity Interconnection Rights associated with such Generation Capacity Resource will lose its Capacity Interconnection Rights in an amount commensurate with the loss of generating capability. Any period during which the Generation Capacity Resource fails to meet the standards set forth in section 230.3.1 above as a result of an event that meets the standards of a force majeure event as defined in Tariff, Attachment O, Appendix 2, section 9.4 shall be excluded from such consecutive three-year period, provided that the holder of the Capacity Interconnection Rights exercises due diligence to remedy the event. A Generation Capacity Resource that loses Capacity Interconnection Rights pursuant to this section may continue Interconnection Service, to the extent of such lost rights, as an Energy Resource in accordance with (and for the remaining term of) its Interconnection Service Agreement and/or applicable terms of the Tariff.

#### **230.3.3 Replacement of Generation:**

In the event of the Deactivation of a Generation Capacity Resource (in accordance with Tariff, Part V and any Applicable Standards), or removal of Capacity Resource status (in accordance with Tariff, Attachment DD, section 6.6 or Tariff, Attachment DD, section 6.6A), any Capacity Interconnection Rights associated with such facility shall terminate one year from the Deactivation Date, or one year from the date the Capacity Resource status change takes effect, unless the holder of such rights (including any holder that acquired the rights after Deactivation or removal of Capacity Resource status) has submitted a new Generation Interconnection Request up to one year after the Deactivation Date, or up to one year from the date the Capacity Resource status changes take effect, which contemplates use of the same Capacity Interconnection Rights. The Interconnection Customer must provide written notification to the Transmission Provider that it intends to utilize such Capacity Interconnection Rights on or before the date the Interconnection Customer executes the System Impact Study Agreement associated with the Generation Interconnection Request for which it intends to utilize such Capacity Interconnection Rights. Notwithstanding the previous sentence, Interconnection Customers in

the New Services Queue prior to May 1, 2012 must provide written notice of intent to utilize such Capacity Interconnection Rights when it executes its Facilities Study Agreement or, if it has already executed its Facilities Study Agreement, then by November 1, 2012. Such notification of transfer of Capacity Interconnection Rights shall be posted on Transmission Provider's public website. Such new Generation Interconnection Request may include a request to increase Capacity Interconnection Rights in addition to the replacement of the previously deactivated amount, or amount removed from Capacity Resource status, as a single Generation Interconnection Request. Transmission Provider may perform thermal, short circuit, and/or stability studies, as necessary and in accordance with its manuals, due to any changes in the electrical characteristics of any newly proposed equipment, or where there is a change in Point of Interconnection, which may result in the loss of a portion or all of the Capacity Interconnection Rights as determined by such studies.

Upon execution of an Interconnection Service Agreement reflecting its new Interconnection Request, the holder of the Capacity Interconnection Rights will retain only such rights that are commensurate with the size in megawatts of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights associated with the facility upon Deactivation or removal of Capacity Resource status. Any desired increase in Capacity Interconnection Rights must be requested in the new Generation Interconnection Request and be accredited through the applicable procedures in Tariff, Part IV and Tariff, Part VI. In the event the new Interconnection Request to which this section refers is or is deemed to be terminated and/or withdrawn for any reason at any time, the pertinent Capacity Interconnection Rights shall not terminate until the end of the one year period from the Deactivation Date, or the end of the one year period from the date the Capacity Resource status change takes effect.

**230.4 Transfer of Capacity Interconnection Rights:**

Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by the Transmission Provider regarding such transfer and notice to the Transmission Provider of any generation facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in section 230.3 above regarding loss of Capacity Interconnection Rights.

### **231.1 Right of New Service Customer to Incremental Auction Revenue Rights:**

A New Service Customer that (a) pursuant to Tariff, Part VI, Subpart B, section 212.1, reimburses the Transmission Provider for the costs of, or (b) pursuant to its Construction Service Agreement undertakes responsibility for, constructing or completing Network Upgrades and/or Local Upgrades required to accommodate its New Service Request shall be entitled to receive the Incremental Auction Revenue Rights associated with such facilities and upgrades as determined in accordance with this section 231. In addition, an Interconnection Customer that executes an Upgrade Construction Service Agreement for Merchant Network Upgrades shall be entitled to receive the Incremental Auction Revenue Rights as determined in accordance with this section 231. However, a Transmission Interconnection Customer that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System shall be entitled to Incremental Auction Revenue Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to Tariff, Part IV, section 36.1.03, to receive Incremental Auction Revenue Rights, Incremental Deliverability Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

## **231.2 Procedures for Assigning Incremental Auction Revenue Rights:**

No less than forty-five (45) days prior to the in-service date, as determined by the Office of the Interconnection, of the applicable Customer Facility or of a transmission facility or upgrade related to a New Service Request, the Office of the Interconnection shall notify the New Service Customer(s) which have responsibility to reimburse the costs of, or responsibility for, constructing or completing the facility or upgrade, that initial requests for Incremental Auction Revenue Rights associated with the facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with section 231.3 below.

In round two, two-thirds of the Incremental Auction Revenue Rights available for each requested point-to-point combination in that round will be assigned in accordance with section 231.3 below. In round three, all available Incremental Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with section 231.3 below. In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental Auction Revenue Rights assignment in rounds one and two will result in the Incremental Auction Revenue Rights being available for the next round. The Incremental Auction Revenue Rights assignments made in round three will be final and binding. The final and binding Incremental Auction Revenue Right assignment for a requested point-to-point combination in each round shall in no event be less than one third of 80% and no greater than one-third of 100% of the non-binding estimate of Incremental Auction Revenue Rights for that point-to-point combination that was provided to the New Service Customer under Tariff, Part VI, Subpart A, section 206.5.2. For each round, a request for Incremental Auction Revenue Rights shall specify a single point-to-point combination for which the New Service Customer desires Incremental Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the facility or upgrade.

### **231.3 Determination of Incremental Auction Revenue Rights to be Provided to New Service Customer:**

The Office of the Interconnection shall determine the Incremental Auction Revenue Rights to be provided to New Service Customers associated with a particular transmission facility or upgrade pursuant to section 231.2 above using the tools described in Tariff, Attachment K, including an assessment of the simultaneous feasibility of any Incremental Auction Revenue Rights and all other outstanding Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system Auction Revenue Right capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate New Service Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the Auction Revenue Rights capability, including the impact of any new facilities and upgrades. For each point-to-point combination, the Incremental Auction Revenue Right capability shall be the difference between the Auction Revenue Right capability in the base system analysis and the Auction Revenue Right capability in the analysis including the impact of the new facilities and upgrades. When multiple New Service Customers have cost responsibility for the same new transmission facility or upgrade, Incremental Auction Revenue Rights shall be assigned to each New Service Customer in proportion to the New Service Customers' relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or interfaces of the point-to-point combinations selected by the New Service Customers.



#### **231.4 Reallocation of Incremental Auction Revenue Rights:**

(1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating a New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate a New Service Request that was part of an earlier New Services Queue, provided that such previously-constructed facility or upgrade meets the criteria stated in Tariff, Part VI, Subpart B, section 219, and

(b) such New Service Customer (hereafter in this section, the "Current Customer") executes, as applicable, an Interconnection Service Agreement or an Upgrade Construction Service Agreement.

Upon determining that this section applies, the Office of the Interconnection shall:

(c) notify each New Service Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Customer") of the portion of the costs of such facility or upgrade for which the Current Customer is determined to be responsible, and

(d) afford each such Preceding Customer, subject to the terms of this section 231.4, an opportunity to obtain, in exchange for a proportional share (as determined in accordance with section 231.3 above) of the Incremental Auction Revenue Rights associated with such facility or upgrade that the Preceding Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Customer paid or incurred that is proportional to the cost responsibility of the Current Customer for such facility or upgrade.

(2) A Preceding Customer shall have no obligation to exchange Incremental Auction Revenue Rights for cost reimbursement pursuant to this section. In the event, however, that a Preceding Customer chooses not to relinquish Incremental Auction Revenue Rights associated with a previously-constructed facility or upgrade, the Current Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Customer bore cost responsibility.

(3) In the event that a Preceding Customer elects to exchange Incremental Auction Revenue Rights for cost reimbursement pursuant to this section, (a) the Preceding Customer shall relinquish the Incremental Auction Revenue Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental Auction Revenue Rights that the Preceding Customer agreed to exchange; and (c) the Office of the Interconnection shall assign Incremental Auction Revenue Rights associated with the previously-constructed facility or upgrade to the Current Customer in accordance with the following:

(i) in the event that more than one Current Customer is contemporaneously eligible for a reallocation of Incremental Auction Revenue Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of section 231.2 above to reallocate the Incremental Auction Revenue Rights made feasible by retirement of the Incremental Auction Revenue Rights relinquished by the Preceding Customer;

(ii) in all other instances, the Current Customer shall be entitled to assignment of either (A) the Incremental Auction Revenue Rights associated with the pertinent facility or upgrade that the Preceding Customer relinquished pursuant to this section, or (B) any new Incremental Auction Revenue Rights that are made feasible by retirement of the Incremental Auction Revenue Rights relinquished by the Preceding Customer, provided, however,

(iii) that if it is not feasible to assign Incremental Auction Revenue Rights associated with the pertinent facility or upgrade to the Current Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental Auction Revenue Rights that can be feasibly assigned to it, and (B) the Preceding Customer's Incremental Auction Revenue Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Customer's final cost responsibility. In the event of a reduction in the Current Customer's cost responsibility for a previously-constructed facility or upgrade pursuant to this subsection (3)(c)(iii), Transmission Provider shall refund to the Current Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this section and the amount of its final cost responsibility for the pertinent facility or upgrade. Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Customer an amount that is proportional to the Current Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental Auction Revenue Rights relinquished by the Preceding Customer.

(4) A Preceding Customer that elects to exchange rights for cost reimbursement pursuant to this section must exchange all Incremental Auction Revenue Rights and all other Upgrade-Related Rights associated with the same Local Upgrade and/or Network Upgrade.

(5) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental Auction Revenue Rights pursuant to this section and shall complete the reallocation process before the date of, as applicable, commencement of Interconnection Service, Transmission Service or Network Service for the Current Customer, or completion of the Customer-Funded Upgrade that precipitated the reallocation of such rights.

### **231.5 Duration of Incremental Auction Revenue Rights:**

Incremental Auction Revenue Rights received by a New Service Customer pursuant to this section shall be available as of the first day of the first month that the Network Upgrades and/or Local Upgrades required to accommodate its New Service Request that are associated with the Incremental Auction Revenue Rights are included in the transmission system model for the monthly FTR auction and shall continue to be available for thirty (30) years or for the life of the associated facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all Auction Revenue Rights (including Incremental Auction Revenue Rights) in accordance with the Tariff, Attachment K-Appendix. At any time during this thirty-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this thirty-year Auction Revenue Right, the New Service Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to Tariff, Attachment K-Appendix, section 7.4.2) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to Tariff, Attachment K-Appendix, section 7.5. A New Service Customer may return Incremental Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding Auction Revenue Rights following the return of such Auction Revenue Rights. In the event a New Service Customer returns Incremental Auction Revenue Rights, the New Service Customer shall have no further rights regarding such Incremental Auction Revenue Rights.

**231.5A Value of Incremental Auction Revenue Rights:**

The value of Incremental Auction Revenue Rights to be provided to a New Service Customer associated with a particular transmission facility or upgrade pursuant to section 231.2 above that become effective at the beginning of a Planning Period shall be determined in the same manner as annually allocated Auction Revenue Rights based on the nodal prices resulting from the annual Financial Transmission Rights auction. The value of such Incremental Auction Revenue Rights that become effective after the commencement of a Planning Period shall be determined on a monthly basis for each month in the Planning Period beginning with the month the Incremental Auction Revenue Right(s) becomes effective. The value of such Incremental Auction Revenue Right shall be equal to the megawatt amount of the Incremental Auction Revenue Rights multiplied by the LMP differential between the source and sink nodes of the corresponding FTR obligations in each prompt-month FTR auction that occurs from the effective date of the Incremental Auction Revenue Rights through the end of the relevant Planning Period. For each Planning Period thereafter, the value of such Incremental Auction Revenue Rights shall be determined in the same manner as Incremental Auction Revenue Rights that became effective at the beginning of a Planning Period.

**232.1 Purpose:**

Transmission Injection Rights shall entitle the holder, as provided in this section 232, to schedule energy transmitted on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities for injection into the Transmission System at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System. Transmission Withdrawal Rights shall entitle the holder, as provided in this section 232, to schedule for transmission on the associated Merchant Transmission Facilities energy to be withdrawn from the Transmission System at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System.

## **232.2 Right of Interconnection Customer to Transmission Injection Rights and Transmission Withdrawal Rights:**

Provided that such customer elects pursuant to Tariff, Part IV, Subpart A, section 36.1.03 to receive Transmission Injection Rights and/or Transmission Withdrawal Rights in lieu of Incremental Deliverability Rights, Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights, and subject to the terms of this section 232, a Transmission Interconnection Customer that constructs Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with the Transmission System and with another control area outside the PJM Region shall be entitled to receive Transmission Injection Rights and/or Transmission Withdrawal Rights at each terminal where such customer's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. A Transmission Interconnection Customer that is granted Firm Transmission Withdrawal Rights and/or transmission customers that have a Point of Delivery at the Border of PJM where the Transmission System interconnects with the Merchant D.C. Transmission Facilities may be responsible for a reasonable allocation of transmission upgrade costs added to the Regional Transmission Expansion Plan after such Transmission Interconnection Customer's Queue Position is established, in accordance with Tariff, Part I, section 3E and Tariff, Schedule 12. Notwithstanding the foregoing, any Transmission Injection Rights and Transmission Withdrawal Rights awarded to an Interconnection Customer that interconnects Controllable A.C. Merchant Transmission Facilities shall be, throughout the duration of the Interconnection Service Agreement applicable to such interconnection, conditioned on such customer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

### **232.2.1 Total Capability:**

A Transmission Interconnection Customer or other party may hold Transmission Injection Rights and Transmission Withdrawal Rights simultaneously at the same terminal on the Transmission System. However, neither the aggregate Transmission Injection Rights nor the aggregate Transmission Withdrawal Rights held at a terminal may exceed the Nominal Rated Capability of the interconnected Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, as stated in the associated Interconnection Service Agreement.

**232.4 Duration of Transmission Injection Rights and Transmission Withdrawal Rights:**

Subject to the terms of section 232.7 below, Transmission Injection Rights and/or Transmission Withdrawal Rights received by a Transmission Interconnection Customer shall be effective for the life of the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities.

**232.6 Transfer of Transmission Injection Rights and Transmission Withdrawal Rights:**

Transmission Injection Rights and/or Transmission Withdrawal Rights may be sold or otherwise transferred subject to compliance with such procedures as Transmission Provider may establish (by publication in the PJM Manuals) regarding such transfer and required notice to the Transmission Provider of use of such rights after the transfer. The transfer of Transmission Injection Rights or of Transmission Withdrawal Rights shall not itself extend the periods set forth in section 232.7 below regarding loss of such rights.



## **232.7 Loss of Transmission Injection Rights and Transmission Withdrawal Rights:**

### **232.7.1 Operational Standards:**

To retain Transmission Injection Rights and Transmission Withdrawal Rights, the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with applicable criteria stated in the PJM Manuals. Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that meet these operational standards shall retain their Transmission Injection Rights and Transmission Withdrawal Rights regardless of whether they are used to transmit energy within or to points outside the PJM Region.

### **232.7.2 Failure to Meet Operational Standards:**

In the event that any Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities fail to meet the operational standards set forth in section 232.7.1 above for any consecutive three-year period, the holder(s) of the associated Transmission Injection Rights and Transmission Withdrawal Rights will lose such rights in an amount reflecting the loss of first contingency transfer capability. Any period during which the transmission facility fails to meet the standards set forth in section 232.7.1 above as a result of an event that meets the standards of a force majeure event as defined in Tariff, Attachment O, Appendix 2, section 9.4 shall be excluded from such consecutive three-year period, provided that the owner of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities exercises due diligence to remedy the event.

### **233.1 Right of Transmission Interconnection Customer to Incremental Available Transfer Capability Revenue Rights:**

An Interconnection Customer that interconnects a Customer Facility with the Transmission System shall be entitled to receive any Incremental Available Transfer Capability Revenue Rights that are associated with the interconnection of such facility as determined in accordance with this section. In addition, a New Service Customer that (a) reimburses the Transmission Provider for the costs of, or (b) pursuant to its Construction Service Agreement undertakes responsibility for, constructing or completing required Customer-Funded Upgrades to accommodate its New Service Request shall be entitled to receive any Incremental Available Transfer Capability Revenue Rights associated with such required facilities and upgrades as determined in accordance with this section.

#### **233.1.1 Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities:**

An Interconnection Customer (a) that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Available Transfer Capability Revenue Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under Tariff, Attachment C.

### **233.5 Reallocation of Incremental Available Transfer Capability Revenue Rights:**

(1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating a New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate a New Service Request that was part of an earlier New Services Queue, provided that such previously-constructed facility or upgrade meets the criteria stated in Tariff, Part VI, Subpart B, section 219, and

(b) such New Service Customer (hereafter in this section, the "Current Customer") executes, as applicable, an Interconnection Service Agreement or Upgrade Construction Service Agreement.

Upon determining that this section applies, the Office of the Interconnection:

(c) shall notify each New Service Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Customer") of the portion of the costs of such facility or upgrade for which the Current Customer is determined to be responsible, and (d) shall afford each such Preceding Customer, subject to the terms of this section 233.5, an opportunity to obtain, in exchange for a proportional share (as determined in accordance with section 233.2 above) of the Incremental Available Transfer Capability Revenue Rights associated with such facility or upgrade that the Preceding Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Customer paid or incurred that is proportional to the cost responsibility of the Current Customer for such facility or upgrade.

(2) A Preceding Customer shall have no obligation to exchange Incremental Available Transfer Capability Revenue Rights for cost reimbursement pursuant to this section, provided, however, that in the event that a Preceding Customer chooses not to relinquish Incremental Available Transfer Capability Revenue Rights associated with a previously-constructed facility or upgrade, the Current Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Customer bore cost responsibility.

(3) In the event that a Preceding Customer elects to exchange Incremental Available Transfer Capability Revenue Rights for cost reimbursement pursuant to this section, (a) the Preceding Customer shall relinquish the Incremental Available Transfer Capability Revenue Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental Available Transfer Capability Revenue Rights that the Preceding Customer agreed to exchange; and (c) the Office of the Interconnection shall assign Incremental Available Transfer

Capability Revenue Rights associated with the previously-constructed facility or upgrade to the Current Customer in accordance with the following:

- (i) in the event that more than one Current Customer is contemporaneously eligible for a reallocation of Incremental Available Transfer Capability Revenue Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of section 233.2 above to reallocate the Incremental Available Transfer Capability Revenue Rights made feasible by retirement of the Incremental Available Transfer Capability Revenue Rights relinquished by the Preceding Customer;
  - (ii) in all other instances, the Current Customer shall be entitled to assignment of either (A) the Incremental Available Transfer Capability Revenue Rights associated with the pertinent facility or upgrade that the Preceding Customer relinquished pursuant to this section, or (B) any new Incremental Available Transfer Capability Revenue Rights that are made feasible by retirement of the Incremental Available Transfer Capability Revenue Rights relinquished by the Preceding Customer, provided, however,
    - (iii) that if it is not feasible to assign Incremental Available Transfer Capability Revenue Rights associated with the pertinent facility or upgrade to the Current Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental Available Transfer Capability Revenue Rights that can be feasibly assigned to it, and (B) the Preceding Customer's Incremental Available Transfer Capability Revenue Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Customer's final cost responsibility. In the event of a reduction in the Current Customer's cost responsibility for a previously-constructed facility or upgrade pursuant to this subsection (3)(c)(iii), Transmission Provider shall refund to the Current Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this section and the amount of its final cost responsibility for the pertinent facility or upgrade. Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Customer an amount that is proportional to the Current Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental Available Transfer Capability Revenue Rights relinquished by the Preceding Customer.
- (4) A Preceding Customer that elects to exchange rights for cost reimbursement pursuant to this section must exchange all Incremental Auction Revenue Rights and all other Upgrade-Related Rights associated with the same Local Upgrade and/or Network Upgrade.
- (5) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental Available Transfer Capability Revenue Rights pursuant to this section and shall complete the reallocation process before the date of, as applicable, commencement of Interconnection Service, Transmission Service, or Network Service for the Current Customer, or completion of the Customer-Funded Upgrade that precipitated the reallocation of such rights.

**233.7 Compensation for Utilization of Incremental Available Transfer Capability Revenue Rights:**

At any time during the effective life, as specified in section 233.4 above, of Incremental Available Transfer Capability Revenue Rights held by an Interconnection Customer that such rights are utilized to accommodate a subsequent Interconnection Request, the Interconnection Customer holding such rights will be compensated to the extent such rights are utilized according to the PJM Manuals.

## **234.1 Right of New Service Customers to Incremental Capacity Transfer Rights:**

A Transmission Interconnection Customer that interconnects Merchant Transmission Facilities with the Transmission System shall be entitled to receive any Incremental Capacity Transfer Rights that are associated with the interconnection of such Merchant Transmission Facilities as determined in accordance with this section. In addition, a New Service Customer that (a) reimburses the Transmission Provider for the costs of, or (b) pursuant to its Construction Service Agreement, undertakes responsibility for, constructing or completing Customer-Funded Upgrades shall be entitled to receive any Incremental Capacity Transfer Rights associated with such required facilities and upgrades as determined in accordance with this section.

### **234.1.1 Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities:**

An Interconnection Customer (a) that interconnects Merchant D.C. transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Capacity Transfer Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under Tariff, Attachment C.

**234.3 Determination of Incremental Capacity Transfer Rights to be Provided to New Service Customer:**

The Office of the Interconnection shall determine the Incremental Capacity Transfer Rights to be provided to New Service Customers in accordance with the applicable terms of Tariff, Attachment DD and pursuant to the procedures specified in the PJM Manuals.

## **234.5 Reallocation of Incremental Capacity Transfer Rights:**

(1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating an New Service Customer's New Service Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate an New Service Request that was part of an earlier New Services Queue, provided that such previously-constructed facility or upgrade meets the criteria stated in Tariff, Part VI, Subpart B, section 219, and

(b) such New Service Customer (hereafter in this section, the "Current Customer") executes an Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable.

Upon determining that this section applies, the Office of the Interconnection:

(c) shall notify each New Service Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Customer") of the portion of the costs of such facility or upgrade for which the Current Customer is determined to be responsible, and

(d) shall afford each such Preceding Customer, subject to the terms of this section 234.5, an opportunity to obtain, in exchange for a proportional share (as determined in accordance with section 234.2 above) of the Incremental Capacity Transfer Rights associated with such facility or upgrade that the Preceding Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Customer paid or incurred that is proportional to the cost responsibility of the Current Customer for such facility or upgrade.

(2) A Preceding Customer shall have no obligation to exchange Incremental Capacity Transfer Rights for cost reimbursement pursuant to this section, provided, however, that in the event that a Preceding Customer chooses not to relinquish Incremental Capacity Transfer Rights associated with a previously-constructed facility or upgrade, the Current Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Customer bore cost responsibility.

(3) In the event that a Preceding Customer elects to exchange Incremental Capacity Transfer Rights for cost reimbursement pursuant to this section, (a) the Preceding Customer shall relinquish the Incremental Capacity Transfer Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental Capacity Transfer Rights that the Preceding Customer agreed to exchange; and (c) the Office of the Interconnection shall assign



Incremental Capacity Transfer Rights associated with the previously-constructed facility or upgrade to the Current Customer in accordance with the following:

(i) in the event that more than one Current Customer is contemporaneously eligible for a reallocation of Incremental Capacity Transfer Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of section 234.2 above to reallocate the Incremental Capacity Transfer Rights made feasible by retirement of the Incremental Capacity Transfer Rights relinquished by the Preceding Customer;

(ii) in all other instances, the Current Customer shall be entitled to assignment of either (A) the Incremental Capacity Transfer Rights associated with the pertinent facility or upgrade that the Preceding Customer relinquished pursuant to this section, or (B) any new Incremental Capacity Transfer Rights that are made feasible by retirement of the Incremental Capacity Transfer Rights relinquished by the Preceding Customer, provided, however,

(iii) that if it is not feasible to assign Incremental Capacity Transfer Rights associated with the pertinent facility or upgrade to the Current Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental Capacity Transfer Rights that can be feasibly assigned to it, and (B) the Preceding Customer's Incremental Capacity Transfer Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Customer's final cost responsibility. In the event of a reduction in the Current Customer's cost responsibility for a previously-constructed facility or upgrade pursuant to this subsection (3)(c)(iii), Transmission Provider shall refund to the Current Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this section and the amount of its final cost responsibility for the pertinent facility or upgrade. Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Customer an amount that is proportional to the Current Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental Capacity Transfer Rights relinquished by the Preceding Customer.

(4) A Preceding Customer that elects to exchange rights for cost reimbursement pursuant to this section must exchange all Incremental Capacity Transfer Rights and all other Upgrade-Related Rights associated with the same Local Upgrade and/or Network Upgrade.

(5) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental Capacity Transfer Rights pursuant to this section and shall complete the reallocation process before the date of, as applicable, commencement of Interconnection Service, Network Service or Transmission Service for the Current Customer, or completion of the Customer-Funded Upgrade that precipitated the reallocation of such rights.

### **235.1 Right of Transmission Interconnection Customer to Incremental Deliverability Rights:**

A Transmission Interconnection Customer shall be entitled to receive the Incremental Deliverability Rights associated with its Merchant Transmission Facilities as determined in accordance with this section, provided, however, that a Transmission Interconnection Customer that proposes to interconnect Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area shall be entitled to Incremental Deliverability Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to Tariff, Part IV, Subpart A, section 36.1.03, to receive Incremental Deliverability Rights, Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

**235.3 Determination of Incremental Deliverability Rights to be Provided to Interconnection Customer:**

Transmission Provider shall determine the Incremental Deliverability Rights to be provided to a Transmission Interconnection Customer associated with proposed Merchant Transmission Facilities under section 235.2 above pursuant to procedures specified in the PJM Manuals.

#### **235.4 Duration of Incremental Deliverability Rights:**

Incremental Deliverability Rights assigned to a Transmission Interconnection Customer shall be effective until the earlier of the date that is one year after the commencement of Interconnection Service for such customer or the date that such Transmission Interconnection Customer's Transmission Interconnection Request is withdrawn and terminated, or deemed to be so, in accordance with Tariff, Part IV or Tariff, Part VI. Notwithstanding the preceding sentence, however, Incremental Deliverability Rights that are transferred pursuant to an IDR Transfer Agreement under Tariff, Part VI, Subpart C, section 237, shall be deemed to be Capacity Interconnection Rights of the generator that acquires them under such agreement upon commencement of Interconnection Service related to the generator's generation facility and shall remain effective for the life of such generation facility, or for the life of the Merchant Transmission Facilities associated with the transferred IDRs, whichever is shorter. The deemed conversion of IDRs to Capacity Interconnection Rights under this section 235.4 shall not affect application to such IDRs of the other provisions of this section 235. A Transmission Interconnection Customer may return Incremental Deliverability Rights that it no longer desires at any time. In the event that a Transmission Interconnection Customer returns Incremental Deliverability Rights, it shall have no further rights regarding such Incremental Deliverability Rights.

**235.5 Transfer of Incremental Deliverability Rights:**

Incremental Deliverability Rights may be sold or otherwise transferred at any time after they are assigned pursuant to section 235.2 above, subject to execution and submission of an IDR Transfer Agreement in accordance with Tariff, Part VI, Subpart C, section 237. The transfer of Incremental Deliverability Rights shall not itself extend the periods set forth in Tariff, Part VI, Subpart C, section 235.7 regarding loss of Incremental Deliverability Rights.

### **235.7 Loss of Incremental Deliverability Rights:**

Incremental Deliverability Rights shall be extinguished (a) in the event that the Transmission Interconnection Request of the Transmission Interconnection Customer to which the rights were assigned is withdrawn and terminated, or deemed to be so, as provided in Tariff, Part IV or Tariff, Part VI, without regard for whether the rights have been transferred pursuant to an IDR Transfer Agreement, or (b) such rights are not transferred pursuant to an IDR Transfer Agreement on or before the date that is one year after the commencement of Interconnection Service related to the Merchant Transmission Facilities with which the rights are associated.

### **236.1 Qualification to Receive Certain Rights:**

In order to obtain the rights associated with Merchant Transmission Facilities (other than Merchant Network Upgrades) provided under this Tariff, Part VI, Subpart C, prior to the commencement of Interconnection Service associated with such facilities, a Transmission Interconnection Customer that interconnects or adds Merchant Transmission Facilities (other than Merchant Network Upgrades) to the Transmission System must become and remain a signatory to the Consolidated Transmission Owners Agreement.

## **236.2 Upgrades to Merchant Transmission Facilities:**

In the event that Transmission Provider determines in accordance with the Regional Transmission Expansion Planning Protocol of Operating Agreement, Schedule 6 that an addition or upgrade to Merchant A.C. Transmission Facilities is necessary, the owner of such Merchant A.C. Transmission Facilities shall undertake such addition or upgrade and shall operate and maintain all facilities so constructed or installed in accordance with Good Utility Practice and with applicable terms of the Operating Agreement and the Consolidated Transmission Owners Agreement, as applicable. Cost responsibility for each such addition or upgrade shall be assigned in accordance with Operating Agreement, Schedule 6. Each Transmission Owner to whom cost responsibility for such an upgrade is assigned shall further be responsible for all costs of operating and maintaining the addition or upgrade in proportion to its respective assigned cost responsibilities.



### **236.3 Limited Duration of Rights in Certain Cases:**

Notwithstanding any other provision of this Subpart C, in the case of any Merchant Transmission Facilities interconnected pursuant to Tariff, Part VI that solely involves advancing the construction of a transmission enhancement or expansion other than a Merchant Transmission Facility that is included in the Regional Transmission Expansion Plan, any rights available to such facility under this Tariff, Part VI, Subpart C shall be limited in duration to the period from the inception of Interconnection Service for the affected Merchant Transmission Facility until the time when the Regional Transmission Expansion Plan originally provided for the pertinent transmission enhancement or expansion to be completed.

**237.1 Purpose:**

An Interconnection Customer (hereafter in this section 237 the “Buyer Customer”) may acquire Incremental Deliverability Rights assigned to another Interconnection Customer (hereafter in this section 237, the “Seller Customer”) by entering into an IDR Transfer Agreement with the Seller Customer. Subject to the terms of this section 237, the Buyer Customer may rely upon such Incremental Deliverability Rights to satisfy, in whole or in part, its responsibility for Network Upgrades and/or Local Upgrades otherwise necessary to accommodate the Buyer Customer’s Interconnection Request.

### **237.3 Subsequent Election:**

A Buyer Customer that has submitted a valid IDR Transfer Agreement may elect to terminate its participation in any Network Upgrade or

Local Upgrade for which it has not previously made such an election, at any time prior to its execution of an Interconnection Service Agreement related to the Interconnection Request with respect to which it was assigned responsibility for the affected facility or upgrade. The Buyer Customer must notify Transmission Provider in writing of such an election and its election shall be subject to Transmission Provider's determination and confirmation under section 237.4 below.

## **237.4 Confirmation by Transmission Provider:**

### **237.4.1**

Transmission Provider shall determine whether and to what extent the Incremental Deliverability Rights transferred under an IDR Transfer Agreement would satisfy the deliverability requirements applicable to the Buyer Customer's Interconnection Request. Transmission Provider shall notify the parties to the IDR Transfer Agreement of its determination within 30 days after receipt of the agreement. If the Transmission Provider determines that the IDRs transferred under the proffered agreement would not satisfy, in whole or in part, the deliverability requirement applicable to the Buyer Customer's Interconnection Request, its notice to the parties shall explain the reasons for its determination and, to the extent of Transmission Provider's negative determination, the parties' IDR Transfer Agreement shall not be queued as an Interconnection Request pursuant to section 237.6 below. Any dispute regarding Transmission Provider's determination may be submitted to dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5.

### **237.4.2**

To the extent that an election of the Buyer Customer under section 237.2.2(b) above or section 237.3 above to terminate participation in any Network Upgrade or Local Upgrade is consistent with Transmission Provider's determination, Transmission Provider shall confirm Buyer's termination election and shall recalculate accordingly the Buyer Customer's cost responsibility under Tariff, Part VI, Subpart B, section 217, as applicable. Transmission Provider shall provide its confirmation, along with any recalculation of cost responsibility, under this section in writing to the Buyer Customer within 30 days after receipt of notice of the Buyer Customer's election to terminate participation.

**237.5 Effect of Election on Interconnection Request:**

In the event that the Buyer Customer, pursuant to a confirmed election under this section 237, terminates its participation in any Network Upgrade or Local Upgrade and the Interconnection Request underlying the Incremental Deliverability Rights acquired by the Buyer Customer under its IDR Transfer Agreement subsequently is terminated and withdrawn, or deemed to be so, under the terms of Tariff, Part IV or Tariff, Part VI, then the Buyer Customer's Interconnection Request also shall be deemed to be concurrently terminated and withdrawn.

**Tariff, Part VII**  
**TRANSITION CYCLE**  
**GENERATION INTERCONNECTION PROCEDURE**

**Tariff, Part VII, Subpart A**  
**INTRODUCTION**

**Tariff, Part VII, Subpart A, section 300**  
**Definitions**

For purposes of these Generation Interconnection Procedures and any agreement set forth in Tariff, Part IX, in the event of a conflict between the definitions set forth herein and the definitions set forth in Tariff, Part I, the definitions set forth in these Generation Interconnection Procedures shall control.



**Tariff, Part VII, Subpart A, section 300**  
**Definitions A**

**Abnormal Condition:**

“Abnormal Condition” shall mean any condition on the Interconnection Facilities which, determined in accordance with Good Utility Practice, is: (i) outside normal operating parameters such that facilities are operating outside their normal ratings or that reasonable operating limits have been exceeded; and (ii) could reasonably be expected to materially and adversely affect the safe and reliable operation of the Interconnection Facilities; but which, in any case, could reasonably be expected to result in an Emergency Condition. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not, standing alone, constitute an Abnormal Condition.

**Affected System:**

“Affected System” shall mean an electric system other than the Transmission Provider’s Transmission System that may be affected by a proposed interconnection or on which a proposed interconnection or addition of facilities or upgrades may require modifications or upgrades to the Transmission System.

**Affected System Customer**

“Affected System Customer” shall mean the developer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider’s Transmission System,

**Affected System Facility**

“Affected System Facility” shall mean a new, expanded or upgraded generation or transmission facility outside of Transmission Provider’s Transmission System, the effect of which requires Network Upgrades to Transmission Provider’s Transmission System.

**Affected System Operator**

“Affected System Operator” shall mean an entity that operates an Affected System or, if the Affected System is under the operational control of an independent system operator or a regional transmission organization, such independent entity.

**Affected System Study Agreement**

“Affected System Study Agreement” shall mean the agreement set forth in Tariff, Part IX, Subpart N.

**Affiliate:**

“Affiliate” shall mean any two or more entities, one of which Controls the other or that are under common Control. “Control,” as that term is used in this definition, shall mean the possession, directly or indirectly, of the power to direct the management or policies of an entity. Ownership of publicly-traded equity securities of another entity shall not result in Control or affiliation for purposes of the Tariff or Operating Agreement if the securities are held as an investment, the holder owns (in its name or via intermediaries) less than 10 percent of the outstanding securities of the entity, the holder does not have representation on the entity’s board of directors (or equivalent managing entity) or vice versa, and the holder does not in fact exercise influence over day-to-day management decisions. Unless the contrary is demonstrated to the satisfaction of the Members Committee, Control shall be presumed to arise from the ownership of or the power to vote, directly or indirectly, 10 percent or more of the voting securities of such entity.

#### **Ancillary Services:**

“Ancillary Services” shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider’s Transmission System in accordance with Good Utility Practice.

#### **Applicable Laws and Regulations:**

“Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the relevant parties, their respective facilities, and/or the respective services they provide.

#### **Applicable Regional Entity:**

“Applicable Regional Entity” shall mean the Regional Entity for the region in which a Network Customer, Transmission Customer, Project Developer, Eligible Customer, or Transmission Owner operates.

#### **Applicable Standards:**

“Applicable Standards” shall mean the requirements and guidelines of NERC, the Applicable Regional Entity, the Control Area in which the Generating Facility or Merchant Transmission Facility is electrically located and the Transmission Owner FERC Form No. 715 – Annual Transmission Planning and Evaluation Report for each Applicable Regional Entity; the PJM Manuals; and Applicable Technical Requirements and Standards.

#### **Applicable Technical Requirements and Standards:**

“Applicable Technical Requirements and Standards” shall mean those certain technical requirements and standards applicable to interconnections of generation and/or transmission facilities with the facilities of an Transmission Owner or, as the case may be and to the extent applicable, of an Electric Distributor, as published by Transmission Provider in a PJM Manual.

All Applicable Technical Requirements and Standards shall be publicly available through postings on Transmission Provider's internet website.

**Application and Studies Agreement:**

"Application and Studies Agreement" shall mean the application that must be submitted by a Project Developer or Eligible Customer that seeks to initiate a New Service Request, a form of which is set forth in Tariff, Part VII, Subpart A. An Application and Studies Agreement must be submitted electronically through PJM's web site in accordance with PJM's Manuals.

**Application Deadline:**

"Application Deadline" shall mean the Cycle deadline for submitting a Completed New Service Request, as set forth in Tariff, Part VII, Subpart C, section 306(A). If Project Developer's or Eligible Customer's Completed New Service Request is received by Transmission Provider after a particular Cycle deadline, such Completed New Service Request shall automatically be considered as part of the immediate subsequent Cycle.

**Application Phase:**

"Application Phase" shall mean the Cycle period encompassing both the submission and review of New Service Requests as set forth in Tariff, Part VII, Subpart C, subsections 306(A) and 306(B).

**Tariff, Part VII, Subpart A, section 300**  
**Definitions B**

**Behind The Meter Generation:**

“Behind The Meter Generation” shall refer to a generation unit that delivers energy to load without using the Transmission System or any distribution facilities (unless the entity that owns or leases the distribution facilities has consented to such use of the distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection); provided, however, that Behind The Meter Generation does not include (i) at any time, any portion of such generating unit’s capacity that is designated as a Generation Capacity Resource; or (ii) in an hour, any portion of the output of such generating unit that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy Market.

**Breach:**

“Breach” shall mean the failure of a party to perform or observe any material term or condition of the Tariff, Part VII, or any agreement entered into thereunder as described in the relevant provisions of such agreement.

**Breaching Party:**

“Breaching Party” shall mean a party that is in Breach of the Tariff, Part VII and/or an agreement entered into thereunder.

**Business Day:**

“Business Day” shall mean a day ending at 5 pm Eastern prevailing time in which the Federal Reserve System is open for business and is not a scheduled PJM holiday.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions C**

**Cancellation Costs:**

“Cancellation Costs” shall mean costs and liabilities incurred in connection with: (a) cancellation of supplier and contractor written orders and agreements entered into to design, construct and install Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, and/or (b) completion of some or all of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, or specific unfinished portions and/or removal of any or all of such facilities which have been installed, to the extent required for the Transmission Provider and/or Transmission Owner(s) to perform their respective obligations under the Tariff, Part VII. Cancellation costs may include costs for Customer-Funded Upgrades assigned to Project Developer or Eligible Customer, in accordance with the Tariff and as reflected in this GIA, that remain the responsibility of Project Developer or Eligible Customer under the Tariff, even if such New Service Request is terminated or withdrawn.

**Capacity:**

“Capacity” shall mean the installed capacity requirement of the Reliability Assurance Agreement or similar such requirements as may be established.

**Capacity Interconnection Rights:**

“Capacity Interconnection Rights” shall mean the rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection.

**Capacity Resource:**

“Capacity Resource” shall have the meaning provided in the Reliability Assurance Agreement.

**Commencement Date:**

“Commencement Date” shall mean the date on which Interconnection Service commences in accordance with a Generation Interconnection Agreement.

**Common Use Upgrade:**

“Common Use Upgrade” or “CUU” shall mean a Network Upgrade that is needed for the interconnection of Generating Facilities or Merchant Transmission Facilities of more than one Project Developer or Eligible Customer and which is the shared responsibility of each Project Developer or Eligible Customer.

**Completed Application:**

“Completed Application” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

**Completed New Service Request:**

“Completed New Service Request” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit(s). A Completed New Service Request, if accepted upon review, shall become a valid New Service Request.

**Confidential Information:**

“Confidential Information” shall mean any confidential, proprietary, or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy, or compilation relating to the present or planned business of a Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party, which is designated as confidential by the party supplying the information, whether conveyed verbally, electronically, in writing, through inspection, or otherwise, and shall include, without limitation, all information relating to the producing party’s technology, research and development, business affairs and pricing, and any information supplied by any Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party to another such party prior to the execution of an Generation Interconnection Agreement or a Construction Service Agreement.

**Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:**

“Consolidated Transmission Owners Agreement,” “PJM Transmission Owners Agreement” or “Transmission Owners Agreement” shall mean the certain Consolidated Transmission Owners Agreement dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

**Constructing Entity:**

“Constructing Entity” shall mean either the Transmission Owner, Project Developer, Eligible Customer or Affected System Customer, depending on which entity has the construction responsibility pursuant to the Tariff, Part VII and the applicable GIA or Construction Service Agreement; this term shall also be used to refer to a Project Developer or Eligible Customer with respect to the construction of the Interconnection Facilities.

**Construction Party:**

“Construction Party” shall mean a party to a Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or a party to a GIA that requires activities pursuant to a GIA.

**Construction Service Agreement:**

“Construction Service Agreement” shall mean either an Interconnection Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

**Contingent Facilities:**

“Contingent Facilities” shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Control Area:**

“Control Area” shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common automatic generation control scheme is applied in order to:

- (1) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
- (2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
- (3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and
- (4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Controllable A.C. Merchant Transmission Facilities:**

“Controllable A.C. Merchant Transmission Facilities” shall mean transmission facilities that (1) employ technology which Transmission Provider reviews and verifies will permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were direct current transmission facilities, and (2) that are interconnected with the Transmission System pursuant to the Tariff, Part VII.

**Cost Responsibility Agreement:**

“Cost Responsibility Agreement” shall mean a form of agreement between Transmission Provider and a Project Developer with an existing generating facility, intended to provide the terms and conditions for the Transmission Provider to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner. A form of the Cost Responsibility Agreement is set forth in Tariff, Part IX, Subpart F.

**Costs:**

As used in the Tariff, Part VII and related agreements and attachments, “Costs” shall mean costs and expenses, as estimated or calculated, as applicable, including, but not limited to, capital expenditures, if applicable, and overhead, return, and the costs of financing and taxes and any Incidental Expenses.

**Customer-Funded Upgrade:**

“Customer-Funded Upgrade” shall mean any Network Upgrade, Distribution Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on a Project Developer or Eligible Customer pursuant to Tariff, Part VII, Subpart D, section 307(A)(5), or (ii) is voluntarily undertaken by an Upgrade Customer in fulfillment of an Upgrade Request. No Network Upgrade, Distribution Upgrade or Merchant Network Upgrade or other transmission expansion or enhancement shall be a Customer-Funded Upgrade if and to the extent that the costs thereof are included in the rate base of a public utility on which a regulated return is earned.

**Cycle:**

“Cycle” shall mean that period of time between the start of an Application phase and conclusion of the corresponding Final Agreement Negotiation Phase. The Cycle consists of the Application Phase, Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.



**Tariff, Part VII, Subpart A, section 300**  
**Definitions D**

**Decision Point I:**

“Decision Point I” shall mean the time period that commences on the first Business Day immediately following Phase I of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point II:**

“Decision Point II” shall mean the time period that commences on the first Business Day immediately following Phase II of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point III:**

“Decision Point III” shall mean the time period that commences on the first Business Day immediately following Phase III of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Default:**

As used in the Generation Interconnection Agreement, Construction Service Agreement, and Network Upgrade Cost Responsibility Agreement, “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with the applicable provisions of a Generation Interconnection Agreement, Construction Service Agreement, or Network Upgrade Cost Responsibility Agreement.

**Distribution System:**

“Distribution System” shall mean the Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades:**

“Distribution Upgrades” shall mean the additions, modifications, and upgrades to the Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the delivery service necessary to affect Project Developer’s wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions E**

**Eligible Customer:**

“Eligible Customer” shall mean:

(i) Any electric utility (including any Transmission Owner and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner.

(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff. As used in Tariff, Part VII, Eligible Customer shall mean only those Eligible Customers that have submitted an Application and Study Agreement.

**Emergency Condition:**

“Emergency Condition” shall mean a condition or situation (i) that in the judgment of any Interconnection Party is imminently likely to endanger life or property; or (ii) that in the judgment of the Transmission Owner or Transmission Provider is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Transmission System, the Interconnection Facilities, or the transmission systems or distribution systems to which the Transmission System is directly or indirectly connected; or (iii) that in the judgment of Project Developer is imminently likely (as determined in a non-discriminatory manner) to cause damage to the Generating Facility or to the Project Developer Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions, provided that a Generation Project Developer is not obligated by a Generation Interconnection Agreement to possess black start capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one or more of the enumerated conditions or situations identified in this definition also exists.

**Energy Resource:**

“Energy Resource” shall mean a Generating Facility that is not a Capacity Resource.

**Energy Storage Resource:**

“Energy Storage Resource” shall mean a resource capable of receiving electric energy from the grid and storing it for later injection to the grid that participates in the PJM Energy, Capacity and/or Ancillary Services markets as a Market Participant

**Engineering and Procurement Agreement:**

“Engineering and Procurement Agreement” shall mean an agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request. An Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. A form of the Engineering and Procurement Agreement is set forth in Tariff, Part IX, Subpart D. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions F**

**Facilities Study:**

"Facilities Study" shall be an engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to: (1) determine the required modifications to the Transmission Provider's Transmission System necessary to implement the conclusions of the System Impact Studies; and (2) complete any additional studies or analyses documented in the System Impact Studies or required by PJM Manuals, and determine the required modifications to the Transmission Provider's Transmission System based on the conclusions of such additional studies.

**Federal Power Act:**

"Federal Power Act" shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a, et seq.

**FERC or Commission:**

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

**Final Agreement Negotiation Phase:**

"Final Agreement Negotiation Phase" shall mean the phase set forth in Tariff, Part VII, Subpart D, section 314 to tender, negotiate, and execute any service agreement in Tariff, Part IX.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions G**

**Generating Facility:**

“Generating Facility” shall mean Project Developer’s device for the production and/or storage for later injection of electricity identified in the New Service Request, but shall not include the Project Developer’s Interconnection Facilities. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**Generation Interconnection Agreement (“GIA”):**

“Generation Interconnection Agreement” (“GIA”) shall mean the form of interconnection agreement applicable to a Generation Interconnection Request or Transmission Interconnection Request. A form of the GIA is set forth in Tariff, Part IX, Subpart B.

**Generation Interconnection Procedures (“GIP”):**

“Generation Interconnection Procedures” (“GIP”) shall mean the interconnection procedures set forth in Tariff, Part VII.

**Generation Interconnection Request:**

“Generation Interconnection Request” shall mean a request by a Generation Project Developer pursuant to Tariff, Part VII, Subpart C, section 306(A)(1), to interconnect a generating unit with the Transmission System or to increase the capacity of a generating unit interconnected with the Transmission System in the PJM Region.

**Generation Project Developer:**

“Generation Project Developer” shall mean an entity that submits a Generation Interconnection Request to interconnect a new generation facility or to increase the capacity of an existing generation facility interconnected with the Transmission System in the PJM Region.

**Good Utility Practice:**

“Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act, section 215(a)(4).

**Governmental Authority:**

“Governmental Authority” shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, arbitrating body, or other governmental authority having jurisdiction over any Interconnection Party or Construction Party or regarding any matter relating to a Generation Interconnection Agreement or Construction Service Agreement, as applicable.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions H**

**Hazardous Substances:**

“Hazardous Substance” shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions I**

**Incidental Expenses:**

“Incidental Expenses” shall mean those expenses incidental to the performance of construction pursuant to an Interconnection Construction Service Agreement, including, but not limited to, the expense of temporary construction power, telecommunications charges, Interconnected Transmission Owner expenses associated with, but not limited to, document preparation, design review, installation, monitoring, and construction-related operations and maintenance for the Customer Facility and for the Interconnection Facilities.

**Incremental Auction Revenue Rights:**

“Incremental Auction Revenue Rights” shall mean the additional Auction Revenue Rights, not previously feasible, created by the addition of Incremental Rights-Eligible Required Transmission Enhancements, Merchant Transmission Facilities, or of one or more Customer-Funded Upgrades.

**Incremental Capacity Transfer Rights:**

“Incremental Capacity Transfer Right” shall mean a Capacity Transfer Right allocated to a Generation Project Developer or Transmission Project Developer obligated to fund a transmission facility or upgrade, to the extent such upgrade or facility increases the transmission import capability into a Locational Deliverability Area, or a Capacity Transfer Right allocated to a Responsible Customer in accordance with Tariff, Schedule 12A.

**Incremental Deliverability Rights (IDRs):**

“Incremental Deliverability Rights” (“IDR”) shall mean the rights to the incremental ability, resulting from the addition of Merchant Transmission Facilities, to inject energy and capacity at a point on the Transmission System, such that the injection satisfies the deliverability requirements of a Capacity Resource. Incremental Deliverability Rights may be obtained by a generator or a Generation Project Developer, pursuant to an IDR Transfer Agreement, to satisfy, in part, the deliverability requirements necessary to obtain Capacity Interconnection Rights.

**Initial Operation:**

“Initial Operation” shall mean the commencement of operation of the Generating Facility and Project Developer Interconnection Facilities after satisfaction of the conditions of Tariff, Part IX, Subpart B, Appendix 2, section 1.4.

**Interconnected Entity:**

“Interconnected Entity” shall mean either the Project Developer or the Transmission Owner; Interconnected Entities shall mean both of them.

**Interconnection Construction Service Agreement:**



“Interconnection Construction Service Agreement” shall mean the agreement entered into by an Project Developer, Transmission Owner and the Transmission Provider pursuant to this Tariff, Part VII in the form set forth in Tariff, Part IX, Subpart J or Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades, Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades and/or Transmission Owner Interconnection Facilities and coordination of the construction and interconnection of an associated Generating Facility.

**Interconnection Facilities:**

“Interconnection Facilities” shall mean the Transmission Owner’s Interconnection Facilities and the Project Developer’s Interconnection Facilities. Collectively Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modifications, additions, or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades, or Network Upgrades.

**Interconnection Party:**

“Interconnection Party” shall mean a Transmission Provider, Project Developer, or the Transmission Owner. Interconnection Parties shall mean all of them.

**Interconnection Request:**

“Interconnection Request” shall mean a Generation Interconnection Request, a Transmission Interconnection Request and/or an IDR Transfer Agreement.

**Interconnection Service:**

“Interconnection Service” shall mean the physical and electrical interconnection of the Generating Facility with the Transmission System pursuant to the terms of this Tariff, Part VII and the Generation Interconnection Agreement entered into pursuant thereto by Project Developer, the Transmission Owner and Transmission Provider.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions L**

**List of Approved Contractors:**

“List of Approved Contractors” shall mean a list developed by each Transmission Owner and published in a PJM Manual of (a) contractors that the Transmission Owner considers to be qualified to install or construct new facilities and/or upgrades or modifications to existing facilities on the Transmission Owner’s system, provided that such contractors may include, but need not be limited to, contractors that, in addition to providing construction services, also provide design and/or other construction-related services, and (b) manufacturers or vendors of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) whose products the Transmission Owner considers acceptable for installation and use on its system.

**Load Serving Entity (LSE):**

“Load Serving Entity” or “LSE” shall have the meaning specified in the Reliability Assurance Agreement.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions M**

**Material Modification:**

“Material Modification” shall mean, as determined through a Necessary Study, any modification to a Generation Interconnection Agreement that has a material adverse effect on the cost or timing of Interconnection Studies related to, or any Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades or Transmission Owner Interconnection Facilities needed to accommodate, any Interconnection Request with a later Cycle.

**Maximum Facility Output:**

“Maximum Facility Output” shall mean the maximum (not nominal) net electrical power output in megawatts, specified in the Generation Interconnection Agreement, after supply of any parasitic or host facility loads, that a Generation Project Developer’s Generating Facility is expected to produce, provided that the specified Maximum Facility Output shall not exceed the output of the proposed Generating Facility that Transmission Provider utilized in the System Impact Study.

**Maximum State of Charge:**

“Maximum State of Charge” shall mean the maximum State of Charge that should not be exceeded, measured in units of megawatt-hours.

**Merchant A.C. Transmission Facilities:**

“Merchant A.C. Transmission Facility” shall mean Merchant Transmission Facilities that are alternating current (A.C.) transmission facilities, other than those that are Controllable A.C. Merchant Transmission Facilities.

**Merchant D.C. Transmission Facilities:**

“Merchant D.C. Transmission Facilities” shall mean direct current (D.C.) transmission facilities that are interconnected with the Transmission System pursuant to the Tariff.

**Merchant Network Upgrades:**

“Merchant Network Upgrades” shall mean additions to, or modifications or replacements of, or advancement of additions to, or modifications or replacement of, physical facilities of the Transmission Owner that, on the date of the pertinent Upgrade Customer’s Upgrade Request, are part of the Transmission System or are included in the Regional Transmission Expansion Plan, but that are not already subject to an already existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

**Merchant Transmission Facilities:**

“Merchant Transmission Facilities” shall mean A.C. or D.C. transmission facilities that are interconnected with or added to the Transmission System pursuant to the Tariff, Part VII and that are so identified in Tariff, Attachment T, provided, however, that Merchant Transmission Facilities shall not include (i) any Project Developer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20, 2003 ; (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Tariff, Attachment T, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.

**Merchant Transmission Provider:**

“Merchant Transmission Provider” shall mean an Project Developer that (1) owns, controls, or controls the rights to use the transmission capability of, Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area, (2) has elected to receive Transmission Injection Rights and Transmission Withdrawal Rights associated with such facility pursuant to this Tariff, Part VII, Subpart E, section 330, and (3) makes (or will make) the transmission capability of such facilities available for use by third parties under terms and conditions approved by the Commission and stated in the Tariff, consistent with Tariff, Part VII, Subpart E, section 319.

**Metering Equipment:**

“Metering Equipment” shall mean all metering equipment installed at the metering points designated in the appropriate appendix to a Generation Interconnection Agreement.

**Minimum State of Charge:**

“Minimum State of Charge” shall mean the minimum State of Charge that should be maintained in units of megawatt-hours.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions N**

**NERC:**

“NERC” shall mean the North American Electric Reliability Corporation or any successor thereto.

**Necessary Study Agreement:**

“Necessary Study Agreement” shall mean the form of agreement for preparation of one or more Necessary Studies, as set forth in Tariff, Part IX, Subpart G.

**Necessary Study:**

“Necessary Study(ies)” shall mean the assessment(s) undertaken by the Transmission Provider to determine whether a planned modification under Appendix 2, section 3.4.1 of the GIA will have a permanent material impact on the Transmission System and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice, and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the planned modifications. A form of the Necessary Study Agreement is set forth in Tariff, Part IX, Subpart G.

**Network Upgrade Cost Responsibility Agreement:**

“Network Upgrade Cost Responsibility Agreement” shall mean the agreement entered into by the Project Developer Parties and the Transmission Provider pursuant to this GIP, and in the form set forth in Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades and coordination of the construction and interconnection of associated Generating Facilities. In regard to Common Use Upgrades, a separate Network Upgrade Cost Responsibility Agreement will be executed for each set of Common Use Upgrades on the system of a specific Transmission Owner that is associated with the interconnection of a Generating Facility.

**Network Upgrades:**

“Network Upgrades” shall mean modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System. Network Upgrades shall include Stand Alone Network Upgrades which are Network Upgrades that are not part of an Affected System; only serve the Generating Facility or Merchant Transmission Facility; and have no impact or potential impact on the Transmission System until the final tie-in is complete. Both Transmission Provider and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in the GIA, Schedule L or in the Interconnection Construction Service Agreement, Schedule D. If the Transmission Provider and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Project Developer a written technical explanation outlining why the

Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**New Service Request:**

“New Service Request” shall mean an Interconnection Request or a Completed Application.

**Nominal Rated Capability:**

“Nominal Rated Capability” shall mean the nominal maximum rated capability in megawatts of a Transmission Project Developer’s Generating Facility or the nominal increase in transmission capability in megawatts of the Transmission System resulting from the interconnection or addition of a Transmission Project Developer’s Generating Facility, as determined in accordance with pertinent Applicable Standards and specified in the Generation Interconnection Agreement.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions O**

**Open Access Same-Time Information System (OASIS) or PJM Open Access Same-Time Information System:**

“Open Access Same-Time Information System,” “PJM Open Access Same-Time Information System” or “OASIS” shall mean the electronic communication and information system and standards of conduct contained in Part 37 and Part 38 of the Commission’s regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS for the collection and dissemination of information about transmission services in the PJM Region, established and operated by the Office of the Interconnection in accordance with FERC standards and requirements.

**Operating Agreement of the PJM Interconnection, L.L.C., Operating Agreement or PJM Operating Agreement:**

“Operating Agreement of the PJM Interconnection, L.L.C.,” “Operating Agreement” or “PJM Operating Agreement” shall mean the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. dated as of April 1, 1997 and as amended and restated as of June 2, 1997, including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time thereafter, among the Members of the PJM Interconnection, L.L.C., on file with the Commission.

**Option to Build:**

“Option to Build” shall mean the option of the Project Developer to build certain Stand Alone Network Upgrades, as set forth in, and subject to the terms of, the Construction Service Agreement.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions P**

**Part I:**

“Part I” shall mean the Tariff Definitions and Common Service Provisions contained in Tariff, Part I, sections 1 through 12A.

**Part II:**

“Part II” shall mean Tariff, Part II, sections 13 through 27A pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part III:**

“Part III” shall mean Tariff, Part III, sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part IV:**

“Part IV” shall mean Tariff, Part IV, sections 36 through 112C pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VI:**

“Part VI” shall mean Tariff, Part VI, sections 200 through 237 pertaining to the queuing, study, and agreements relating to New Service Requests, and the rights associated with Customer-Funded Upgrades in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VII:**

“Part VII” shall mean Tariff, Part VII, sections 300 through 337 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VIII:**

“Part VIII” shall mean Tariff, Part VIII, sections 400 through 435 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the



applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

#### **Part IX:**

“Part IX” shall mean Tariff, Part IX, section 500 and Subparts A through L pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

#### **Parties:**

“Parties” shall mean the Transmission Provider, as administrator of the Tariff, and the Transmission Customer receiving service under the Tariff. PJMSettlement shall be the Counterparty to Transmission Customers.

#### **Permissible Technological Advancement:**

"Permissible Technological Advancement" shall mean a proposed technological change such as an advancement to turbines, inverters, plant supervisory controls or other similar advancements to the technology proposed in the Interconnection Request that is submitted to the Transmission Provider no later than the end of Decision Point II. Provided such change may not: (i) increase the capability of the Generating Facility or Merchant Transmission Facility as specified in the original Interconnection Request; (ii) represent a different fuel type from the original Interconnection Request; or (iii) cause any material adverse impact(s) on the Transmission System with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response. If the proposed technological advancement is a Permissible Technological Advancement, no additional study will be necessary and the proposed technological advancement will not be considered a Material Modification.

#### **Phase I**

“Phase I” shall start on the first Business Day immediately after the close of the Application Phase of a Cycle, but no earlier than 30 calendar days following the distribution of the Phase I System Impact Study Base Case Data. During Phase I, Transmission Provider shall conduct the Phase I System Impact Study.

#### **Phase I System Impact Study:**

“Phase I System Impact Study” shall mean System Impact Study conducted during the Phase I System Impact Study Phase.

#### **Phase II**

“Phase II” shall start on the first Business Day immediately after the close of Decision Point I Phase unless the Decision Point III of the immediately preceding Cycle is still open. In no event,

shall Phase II of a Cycle commence before the conclusion of Decision Point III of the immediately preceding Cycle. During Phase II, Transmission Provider shall conduct the Phase II System Impact Study.

**Phase II System Impact Study:**

“Phase II System Impact Study” shall mean System Impact Study conducted during the Phase II System Impact Study Phase.

**Phase III**

“Phase III” shall start on the first Business Day immediately after the close of Decision Point II, unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle. During Phase III, Transmission Provider shall conduct the Phase III System Impact Study.

**Phase III System Impact Study:**

“Phase III System Impact Study” shall mean System Impact Study conducted during Phase III.

**PJM:**

“PJM” shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

**PJM Manuals:**

“PJM Manuals” shall mean the instructions, rules, procedures and guidelines established by the Office of the Interconnection for the operation, planning, and accounting requirements of the PJM Region and the PJM Interchange Energy Market.

**PJM Region:**

“PJM Region” shall have the meaning specified in the Operating Agreement.

**PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:**

“PJM Tariff,” “Tariff,” “O.A.T.T.,” “OATT,” or “PJM Open Access Transmission Tariff” shall mean that certain PJM Open Access Transmission Tariff, including any schedules, appendices or exhibits attached thereto, on file with FERC and as amended from time to time thereafter.

**Point of Change in Ownership:**

“Point of Change in Ownership” shall mean the point, as set forth Schedule B of the Generation Interconnection Agreement, where the Project Developer’s Interconnection Facilities connect to the Transmission Owner’s Interconnection Facilities.

**Point of Interconnection:**

“Point of Interconnection” shall mean the point or points where the Interconnection Facilities connect with the Transmission System.

**Project Developer:**

“Project Developer” shall mean a Generation Project Developer and/or a Transmission Project Developer.

**Project Developer Interconnection Facilities:**

“Project Developer Interconnection Facilities” shall mean all facilities and equipment owned and/or controlled, operated and maintained by Project Developer on Project Developer’s side of the Point of Change of Ownership identified in the Schedule B of the Generation Interconnection Agreement, including any modifications, additions, or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System.

**Project Finance Entity:**

“Project Finance Entity” shall mean: (a) a holder, trustee or agent for holders, of any component of Project Financing; or (b) any purchaser of capacity and/or energy produced by the Generating Facility to which Project Developer has granted a mortgage or other lien as security for some or all of Project Developer’s obligations under the corresponding power purchase agreement.

**Provisional Interconnection Service:**

“Provisional Interconnection Service” shall mean interconnection service provided by Transmission Provider associated with interconnecting the Project Developer’s Generating Facility to Transmission Provider’s Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions Q**

**Qualifying Facility:**

“Qualifying Facility” shall mean means an electric energy generating facility that complies with the qualifying facility definition established by Public Utility Regulatory Policies Act (“PURPA”) and any FERC rules as amended from time to time (18 C.F.R. part 292, section 292.203 et seq.) implementing PURPA and, to the extent required to obtain or maintain Qualifying Facility status, is self-certified as a Qualifying Facility or is certified as a Qualified Facility by the FERC.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions R**

**Readiness Deposit:**

“Readiness Deposit” shall mean the deposit or deposits required by Tariff, Part VII, Subpart A, section 301(A)(3)(b).

**Reasonable Efforts:**

“Reasonable Efforts” shall mean, with respect to any action required to be made, attempted, or taken by an Interconnection Party under the Tariff, Part VII, a Generation Interconnection Agreement, or a Construction Service Agreement, such efforts as are timely and consistent with Good Utility Practice and with efforts that such party would undertake for the protection of its own interests.

**Regional Entity:**

“Regional Entity” shall have the same meaning specified in the Operating Agreement.

**Regional Transmission Expansion Plan:**

“Regional Transmission Expansion Plan” shall mean the plan prepared by the Office of the Interconnection pursuant to Operating Agreement, Schedule 6 for the enhancement and expansion of the Transmission System in order to meet the demands for firm transmission service in the PJM Region.

**Reliability Assurance Agreement or PJM Reliability Assurance Agreement:**

“Reliability Assurance Agreement” or “PJM Reliability Assurance Agreement” shall mean that certain Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, on file with FERC as PJM Interconnection L.L.C. Rate Schedule FERC No. 44, and as amended from time to time thereafter.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions S**

**Schedule of Work:**

“Schedule of Work” shall mean that Schedule of Work set forth in section 8.0 of a GIA, or Schedule of an ICSA, as applicable, setting forth the timing of work to be performed by the Constructing Entity(ies), based upon the System Impact Study(ies) and subject to modification, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Scope of Work:**

“Scope of Work” shall mean that scope of the work set forth in Specification section 3.0 of the GIA to be performed by the Constructing Entity(ies) pursuant to the Interconnection Construction Service Agreement, provided that such Scope of Work may be modified, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Secondary Systems:**

“Secondary Systems” shall mean control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers.

**Security:**

“Security” shall mean the financial guaranty provided by the Project Developer, Eligible Customer or Upgrade Customer pursuant to Tariff, Part VII, Subpart D, sections 309(A)(2)(i), 309(A)(3)(a), 311(a)(2)(d)(i)(a), 311(A)(2)(h), and 313(A)(1)(a), to secure the Project Developer’s, Eligible Customer’s or Upgrade Customer responsibility for Costs under an interconnection-related agreement set forth in Tariff, Part IX.

**Service Agreement:**

“Service Agreement” shall mean the initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

**Site:**

“Site” shall mean all of the real property including, but not limited to, any owned or leased real property, bodies of water and/or submerged land, and easements, or other forms of property rights acceptable to PJM, on which the Generating Facility or Merchant Transmission Facility is situated and/or on which the Project Developer Interconnection Facilities are to be located.

**Site Control:**

“Site Control” shall mean the evidentiary documentation provided by Project Developer in relation to a New Service Request demonstrating the requirements as set forth in the following Tariff, Part VII, Subpart A, section 302, and Tariff, Part VII, Subpart C, section 306, and Subpart D, sections 309 and 313.

**Stand Alone Network Upgrades:**

“Stand Alone Network Upgrades” shall mean Network Upgrades, which are not part of an Affected System, which a Project Developer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Specifications section 3.0 of Appendix L of the GIA. If the Transmission Provider or Transmission Owner and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider or Transmission Owner that disagrees with the Project Developer must provide the Project Developer a written technical explanation outlining why the Transmission Provider or Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**State:**

“State” shall mean the District of Columbia and any State or Commonwealth of the United States.

**State of Charge:**

“State of Charge” shall mean the operating parameter that represents the quantity of physical energy stored (measured in units of megawatt-hours) in an Energy Storage Resource Model Participant in proportion to its maximum State of Charge capability. State of Charge is quantified as defined in the PJM Manuals.

**Station Power:**

“Station Power” shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility; (iii) used in association with restoration or black start service; or (iv) that is Direct Charging Energy.

**Study Deposit:**

“Study Deposit” shall mean the payment in the form of cash required to initiate and fund any study provided for in Tariff, Part VII, Subpart A, section 301(A)(3)(a).

**Surplus Project Developer:**

“Surplus Project Developer” shall mean either a Project Developer whose Generating Facility is already interconnected to the PJM Transmission System or one of its affiliates, or an unaffiliated entity that submits a Surplus Interconnection Request to utilize Surplus Interconnection Service within the Transmission System in the PJM Region.

**Surplus Interconnection Service:**

“Surplus Interconnection Service” shall mean any unneeded portion of Interconnection Service established in a Generation Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

**Switching and Tagging Rules:**

“Switching and Tagging Rules” shall mean the switching and tagging procedures of Transmission Owners and Project Developer as they may be amended from time to time.

**System Impact Study:**

“System Impact Study” shall mean an assessment(s) by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a New Service Request, (ii) whether any additional costs may be incurred in order to provide such transmission service or to accommodate a New Service Request, and (iii) an estimated date that the New Service Requests can be interconnected with the Transmission System and an estimate of the cost responsibility for the interconnection of the New Service Request; and (iv) with respect to an Upgrade Request, the estimated cost of the requested system upgrades or expansion, or of the cost of the system upgrades or expansion, necessary to provide the requested incremental rights.

**System Protection Facilities:**

“System Protection Facilities” shall refer to the equipment required to protect (i) the Transmission System, other delivery systems and/or other generating systems connected to the Transmission System from faults or other electrical disturbance occurring at or on the Generating Facility, and (ii) the Generating Facility from faults or other electrical system disturbance occurring on the Transmission System or on other delivery systems and/or other generating systems to which the Transmission System is directly or indirectly connected. System Protection Facilities shall include such protective and regulating devices as are identified in the Applicable Technical Requirements and Standards or that are required by Applicable Laws and Regulations or other Applicable Standards, or as are otherwise necessary to protect personnel and equipment and to minimize deleterious effects to the Transmission System arising from the Generating Facility.



**Tariff, Part VII, Subpart A, section 300**  
**Definitions T**

**Transition Date:**

“Transition Date” shall mean the later of: (i) the effective date of Transmission Provider’s Docket No. ER22-XXXX transition cycle filing seeking FERC acceptance of this Tariff, Part VII or (ii) the date by which all AD2 and prior queue window Interconnection Service Agreements or wholesale market participation agreements have been executed or filed unexecuted.

**Transmission Facilities:**

“Transmission Facilities” shall have the meaning set forth in the Operating Agreement.

**Transmission Injection Rights:**

“Transmission Injection Rights” shall mean Capacity Transmission Injection Rights and Energy Transmission Injection Rights.

**Transmission Interconnection Request:**

“Transmission Interconnection Request” shall mean a request by a Transmission Interconnection Project Developer pursuant to Tariff, Part VII, Subpart C, section 306(A)(4) to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of existing Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

**Transmission Owner:**

“Transmission Owner” shall mean a Member that owns or leases with rights equivalent to ownership Transmission Facilities and is a signatory to the PJM Transmission Owners Agreement. Taking transmission service shall not be sufficient to qualify a Member as a Transmission Owner.

**Transmission Owner Interconnection Facilities:**

“Transmission Owner Interconnection Facilities” shall mean all Interconnection Facilities that are not Project Developer Interconnection Facilities and that, after the transfer under Appendix 2, section 23.3.5 of the GIA to the Transmission Owner of title to any Transmission Owner Interconnection Facilities that the Project Developer constructed, are owned, controlled, operated and maintained by the Transmission Owner on the Transmission Owner’s side of the Point of Change of Ownership identified in appendices to the Generation Interconnection Agreement and if applicable, the Interconnection Construction Service Agreement, including any modifications, additions or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System or interconnected distribution facilities.

**Transmission Owner Upgrades:**

“Transmission Owner Upgrades” shall mean Distribution Upgrades, Merchant Transmission Upgrades, Network Upgrades and Stand-Alone Network Upgrades.

**Transmission Project Developer:**

“Transmission Project Developer” shall mean an entity that submits a request to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

**Transmission Provider:**

The “Transmission Provider” shall be the Office of the Interconnection for all purposes, provided that the Transmission Owners will have the responsibility for the following specified activities:

- (a) The Office of the Interconnection shall direct the operation and coordinate the maintenance of the Transmission System, except that the Transmission Owners will continue to direct the operation and maintenance of those transmission facilities that are not listed in the PJM Designated Facilities List contained in the PJM Manual on Transmission Operations;
- (b) Each Transmission Owner shall physically operate and maintain all of the facilities that it owns; and
- (c) When studies conducted by the Office of the Interconnection indicate that enhancements or modifications to the Transmission System are necessary, the Transmission Owners shall have the responsibility, in accordance with the applicable terms of the Tariff, Operating Agreement and/or the Consolidated Transmission Owners Agreement to construct, own, and finance the needed facilities or enhancements or modifications to facilities.

**Transmission Service:**

“Transmission Service” shall mean Point-To-Point Transmission Service provided under Tariff, Part II on a firm and non-firm basis.

**Transmission System:**

“Transmission System” shall mean the facilities controlled or operated by the Transmission Provider within the PJM Region that are used to provide transmission service under Tariff, Part II and Part III.

**Transmission Withdrawal Rights:**

“Transmission Withdrawal Rights” shall mean Firm Transmission Withdrawal Rights and Non-Firm Transmission Withdrawal Rights.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions U**

**Upgrade Customer:**

“Upgrade Customer” shall mean an entity that submits an Upgrade Request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8, or that submits an Upgrade Request for Merchant Network Upgrades (including accelerating the construction of any transmission enhancement or expansion, other than Merchant Transmission Facilities, that is included in the Regional Transmission Expansion Plan prepared pursuant to Operating Agreement, Schedule 6).

**Upgrade Request:**

“Upgrade Request” shall mean a request submitted in the form prescribed in Tariff, Part IX, Subpart K, for evaluation by the Transmission Provider of the feasibility and estimated costs of (a) a Merchant Network Upgrade or (b) the Customer-Funded Upgrades that would be needed to provide Incremental Auction Revenue Rights specified in a request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8.

**Tariff, Part VII, Subpart A, section 300**  
**Definitions V**

**Valid Upgrade Request:**

“Valid Upgrade Request” shall mean an Upgrade Request that has been determined by Transmission Provider to meet the requirements of Tariff, Part VII, Subpart C, section 306 (application requirements).

**Tariff, Part VII, Subpart A, section 300**  
**Definitions W**

**Wholesale Market Participation Agreement (“WMPA”):**

“Wholesale Market Participation Agreement” (“WMPA”) shall mean the form of agreement intended to allow a Project Developer to effectuate in wholesale sales in the PJM markets. A form of the WMPA is set forth in Tariff, Part IX, Subpart C.

**Wholesale Transaction:**

“Wholesale Transaction” shall mean any transaction involving the transmission or sale for resale of electricity in interstate commerce that utilizes any portion of the Transmission System.

**Tariff, Part VII, Subpart A, section 301**  
**Transition Introduction**

A. Introduction

1. Transition Cycle Overview

Tariff, Part VII sets forth the procedures and other terms governing the Transmission Provider's administration of the transition to the new Cycle-process, including: procedures and other terms regarding studies and other processing of New Service Requests within the Transition Cycle; the nature and timing of the agreements required within the Transition Cycle in connection with the studies and construction of required facilities; and the terms and conditions relating to the rights available to Project Developers and Eligible Customers in the Transition Cycle. For purposes of this Tariff, Part VII, the term Project Developer shall include an Interconnection Customer as defined in Tariff, Part I. The Transition Cycle shall be comprised of two separate Transition Cycles (Transition Cycle No. 1; and Transition Cycle No. 2), and shall include the processing of backlogged New Service Requests received up to and including the AH1 queue.

2. Tariff, Part VII applies to any project for which the Project Developer, Eligible Customer or Upgrade Customer has submitted a New Service Request between April 1, 2018 and September 30, 2021, and for which, as of the Transition Date, Transmission Provider has not tendered for execution an Interconnection Service Agreement, Wholesale Market Participation Agreement or Upgrade Construction Service Agreement.

a. As of the Transition Date, valid AE1-AG1 projects that have not either executed or received for execution a final Interconnection Service Agreement or Wholesale Market Participation Agreement will have to demonstrate readiness pursuant to Tariff, Part VII, Subpart A, section 301(A)(3)(b), in order to move forward in the interconnection transition process.

i. As set forth in Tariff, Part VII, those projects that have demonstrated readiness and met additional eligibility may be able to advance using the Expedited Process.

b. Priority for projects in the Transition Cycle process is determined by the specific Transition Cycle in which a project's valid New Service Request was assigned.

i. Transition Cycle No. 1 will include re-queued AE1, AE2, AF1, AF2 and AG1 projects.

(a) Transition Cycle No. 1 will include: Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.

- (b) Phase III of Transition Cycle #1 will not start until after all valid projects in the Expedited Process have executed their relevant Generator Interconnection Agreement or Wholesale Market Participation Agreement.
  - ii. Transition Cycle No. 2 will include re-queued AG2 and AH1 projects.
    - (a) Transition Cycle No. 2 will include: the Application Review Phase, Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.
    - (b) The Phase I Base Case data release of Transition Cycle No. 2 will not start until after all Transition Cycle No. 1 Decision Point No. II activities have been completed.
    - (c) Phase II of Transition Cycle No. 2 will not start until after all Transition Cycle No. 1 Decision Point No. III activities have been completed.
    - (d) Phase III of Transition Cycle No. 2 will not start until after all Transition Cycle No. 1 Final Agreement Negotiation Phase activities have been completed.
- 3. Required Study Deposits and Readiness Deposits.
  - a. Study Deposits. Pursuant to Tariff, Part VII, Subpart C, section 306(A)(5), each New Service Request must submit with its Application a Study Deposit, the amount of which will be determined based upon the MWs requested in such Application. Ten percent of the Study Deposit is non-refundable. Project Developer and Eligible Customers are responsible for actual study costs, which may exceed the Study Deposit amount.
    - i. If any Study Deposit monies remain after all System Impact Studies are completed and any outstanding monies owed by Project Developer or Eligible Customer in connection with outstanding invoices related to the present or prior New Service Requests have been paid, such remaining deposit monies shall be returned to the Project Developer or Eligible Customer at the conclusion of the required studies for the New Service Request.
  - b. Readiness Deposits. Readiness Deposits are funds committed by the Project Developer or Eligible Customer based upon the MW size of the project and, where applicable, the study results.
    - i. Readiness Deposits are due at the following Phases of a Cycle:
      - (a) Readiness Deposit No. 1: Application Submission
      - (b) Readiness Deposit No. 2: Decision Point I; and

- (c) Readiness Deposit No. 3: Decision Point II
    - ii. Readiness Deposits No. 2 and/or No. 3 may equal an amount equal to or greater than zero, but may never be a negative dollar amount.
    - iii. Readiness Deposit refunds will be handled as follows:
      - (a) If the project is withdrawn or terminated, the Readiness Deposit refunds for the project will be determined by the study phase at which the project was withdrawn or terminated, and adverse study results tests, as set forth below in Tariff, Part VII, Subpart D, section 311(B)(3)(c).
      - (b) When all Cycle New Service Requests have either entered into final agreements and the Decision Point III Site Control requirements have been met, or have been withdrawn, remaining Readiness Deposit funds will be dispositioned as follows:
        - (i) Transmission Provider will incorporate all project withdraws and retool analysis results to provide a final determination on the Network Upgrades that are required for the Cycle.
        - (ii) Underfunded Network Upgrades will be identified as those where one or more withdrawn New Service Requests that were identified as having a cost allocation in the Phase III analysis results. In the event that there are no underfunded Network Upgrades, all Readiness Deposits will be refunded.
        - (iii) Readiness Deposits will be applied to underfunded Network Upgrades on a pro-rata share of funds missing from the Phase III cost allocation. In the event that all underfunded Network Upgrades are made whole relative to the withdrawn New Service Requests, remaining Readiness Deposits will be refunded on a pro-rata share.
  - c. Study Deposits and Readiness Deposits are separate financial obligation, and non-transferrable and cannot be commingled. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific New Service Request be applied in whole or in part to a different New Service Request.
4. If Project Developer is proposing a Generating Facility that will physically connect to non-jurisdictional distribution or sub-transmission facilities for the purpose of engaging in wholesale sales in the PJM markets, such Project Developer must provide additional required information and documentation associated with the



non-jurisdictional arrangements, as set forth in Tariff, Part VII, Subpart D, sections 309 and 312 and Tariff, Part IX, Subpart C.

5. A Project Developer or Eligible Customer cannot combine, swap or exchange all or part of a New Service Request with any other New Service Request within the same or a different Cycle.
6. Prior to entering into a final agreement from Tariff, Part IX, a Project Developer or Eligible Customer may assign its New Service Request to another entity only if the acquiring entity:
  - a. as applicable, accepts and acquires the rights to the same Point of Interconnection and Point of Change of Ownership as identified in the New Service Request for such project;
  - b. and/or as applicable, accepts, as applicable, the same receipt and delivery points or the same source and sink points as stated in the New Service Request for such project.
7. Additional Interconnection-Related Agreements. In connection with interconnection with the Transmission System pursuant to Tariff, Part VIII, Project Developer may be required, or may elect, to enter into one or more of the following interconnection-related agreements:
  - a. Cost Responsibility Agreement. A Project Developer with an existing generating facility that is not a party to an interconnection agreement with Transmission Provider and the relevant Transmission Owner, that desires to enter into a GIA with Transmission Provider and Transmission Owner, shall be required to enter into a Cost Responsibility Agreement in the form set forth in Tariff, Part IX, Subpart F. The Cost Responsibility Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with Transmission Provider and Transmission Owner.
  - b. Engineering and Procurement Agreement. A Project Developer that wishes to advance the implementation of its Interconnection Request during Phase III of a Cycle may enter into an Engineering and Procurement Agreement with Transmission Provider and Transmission Owner, in the form set forth in Tariff, Part IX, Subpart D, to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. An Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

- c. Necessary Study Agreement. A Project Developer that has entered into a GIA that plans to undertake modifications pursuant to that GIA to its Generating Facility or Merchant Transmission Facility shall be required to enter into a Necessary Study Agreement with Transmission Provider in the form set forth in Tariff, Part IX, Subpart G. The Necessary Study Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform the Necessary Study(ies) to determine: (a) the type and scope of the permanent material impact, if any, the change will have on the Transmission System; (b) the additions, modifications, or replacements to the Transmission System required to accommodate the change; and (c) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the change.

**Tariff, Part VII, Subpart A, section 302**  
**Site Control**

**A. Site Control Evidentiary Requirements**

Site Control is evidence provided by the Project Developer to Transmission Provider in relation to Project Developer's New Service Request demonstrating Project Developer's interest in, control over, and right to utilize the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities, and, if applicable, the Transmission Owner's Interconnection Facilities and/or Network Upgrades at the Point of Interconnection. Specific Site Control phase requirements are set forth in the following Tariff, Part VII, Subpart C, section 306, and Subpart D, sections 309 and 312.

1. Site Control consistent with the requirements herein is required for a project to have a valid position within a Cycle.
2. Proof of Site Control can be in the form of one of the following: (1) deed; (2) lease; (3) option to lease or purchase; or (4) as deemed acceptable by the Transmission Provider, any other contractual or legal right to possess, occupy and control the Site.
  - a. Memorandums are not acceptable.
  - b. Documentation solely evidencing an intent to purchase or control the Site is not acceptable.
  - c. Rights of Way are only acceptable for Project Developer Interconnection Facilities up to the Point of Interconnection.
  - d. Notwithstanding the foregoing, for a New Service Request, all or a portion of which requires the use of Sites owned or physically controlled by a state and/or federal governmental entity, and authorization for such use is subject to environmental and other state and/or federal governmental permitting requirements, including 42 U.S.C. § 4331 et seq. and any succeeding statutes, acceptable evidence of Site Control can be in any form the governmental entity issues. For Decision Point I and Decision Point III, Project Developers shall provide evidence that the Project Developer is taking identifiable steps acceptable to the Transmission Provider in furtherance of the issuance of such authorization by the state and/or federal governmental entity, including documentation sufficiently describing and explaining the source of and effects of such regulatory requirements, including a description of any conditions that must be met in order to satisfy the regulatory requirements and the anticipated time by which the Project Developer expects to satisfy the regulatory requirements. For Decision Point I and Decision Point III, Project Developers shall also identify any additional property rights for the

portion of the Site that is not owned or physically controlled by a state and/or federal governmental entity but which cannot be secured until the regulatory requirements have been met and authorization has been provided by the requisite state and/or federal governmental entity.

3. Demonstration of Site Control must include verification, to PJM's satisfaction, that the total feet or acreage ("acreage") of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, as set forth in the PJM Manuals.
  - a. The Project Developer must submit a Geographic Information System (GIS) Site Plan map and data files acceptable to PJM demonstrating the arrangement of the resource-specific proposed facilities for the amount of MW requested.
  - b. Any GIS Site Plan map and data files submitted in accordance with this section must be consistent with all other modeling data submitted in connection with Project Developer's New Service Request.
  - c. In the event of a disagreement between the Transmission Provider and the Project Developer over whether the total acreage of the Site is fully sufficient for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, Transmission Provider will accept a Professional Engineer (PE) stamped site plan drawing (licensed in the state of the facility location) that depicts the proposed generation arrangement and specifies the Maximum Facility Output for that arrangement.
    - i. Failure to verify to Transmission Provider's satisfaction that the total acreage of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility shall result in the New Service Request being deemed terminated and withdrawn.
4. Site Control must be in the name of the Project Developer identified on the corresponding New Service Request. Otherwise, the Project Developer must demonstrate to PJM's satisfaction the relationship between the entity owning or controlling the Site ("landowner" or "owner") with Site Control and the Project Developer identified on the New Service Request.
5. Project Developers are prohibited from submitting evidence of Site Control that utilizes the same Site for multiple New Service Requests unless the total acreage amount of such Site is adequate to support all such New Service Requests.
  - a. To the extent that multiple New Service Requests are submitted by a Project Developer using the same Site Control evidence and the total acreage amount of such Site is not adequate to support all such New Service

Requests, all such New Service Requests shall be deemed terminated and withdrawn.

- b. To the extent that a Project Developer submits a New Service Request with Site Control evidence utilizing the Site that is also the subject of Site Control in New Service Requests submitted by other Project Developer's, such Project Developer shall include with its New Service Request evidence, to Transmission Provider's satisfaction, demonstrating that the project referenced in the Project Developer's New Service Request is concurrently feasible with the development of any other projects that will share the Site identified in the Site Control. Such proof of concurrent feasibility shall include:
  - i. Identification of any other New Service Requests that will share all or a portion of the Site identified in the Site Control; and
  - ii. Identification of the proposed location and space utilization of all projects that will share the Site, including acreage and boundaries for all projects sharing the Site identified in the Site Control; and
  - iii. Any related technical information required by the Transmission Provider to enable the Transmission Provider to determine that development of the project referenced in the submitted New Service Request is not inconsistent with development of any of the other New Service Requests that will share all or a portion of the same Site.
- 6. Multiple projects may share Project Developer Interconnection Facilities. A shared facilities agreement is required if jointly owned common Interconnection Facilities are proposed.
- 7. Project Developers are prohibited from submitting evidence of Site Control for the Site which is also the subject of an interconnect request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system. To the extent that Project Developers submit evidence of Site Control for the Site which is also the subject of an interconnection request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system, the relevant New Service Request submitted to Transmission Provider shall be deemed terminated and withdrawn.
- 8. Site Control must demonstrate three key elements: conveyance, term, and exclusivity:
  - a. Term

Term is the minimum duration required to evidence Site Control. The Term requirements vary, and are established in the following Tariff, Part VII

rules, at various points within a Cycle. The Term cannot be satisfied by an agreement with an initial term shorter than the requisite required term that has extensions, including unilateral extensions, unless those extensions have been exercised and any requisite conditions fulfilled, including any payment obligations, by the Project Developer at the time evidence of Site Control is provided to the Transmission Provider.

b. Exclusivity

With the exception of Tariff, Part VII, Subpart A, section 302(A)(5)(b), exclusivity is evidenced by written acknowledgement from the land owner provided to the Transmission Provider by the Project Developer as part of the Site Control that, for the Term, the Project Developer has exclusive use of the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities, and, if applicable, the Transmission Owner's Interconnection Facilities and/or Network Upgrades, and the landowner cannot make the Site Control identified for the Site available for purchase or lease, to any person or entity other than the Project Developer for any purpose or use that will interfere with the rights granted to Project Developer.

c. Conveyance

The Site Control evidence submitted by the Project Developer must demonstrate that the subject Site is or will be conveyed to the Project Developer, e.g., through a deed or an option to purchase or lease or other form of property rights acceptable to PJM, or that the Project Developer is guaranteed a right to future conveyance at Project Developer's sole discretion, e.g., through a deed or an option to purchase or lease or other forms of property rights acceptable to PJM, consistent with the Site Control Evidentiary Requirements provisions in Tariff, Part VII, Subpart C, section 302(A)(2), above.

9. At each point within a Cycle where a Project Developer is required to provide Site Control, the Project Developer shall also provide Site Control certification in a form set forth in PJM Manual 14G, executed by an officer or authorized representative of Project Developer, verifying that the Site Control requirements are met. At PJM's request, Project Developer shall provide copies of landowner attestations, county recordings, or other similar documentation acceptable to PJM to validate such Site Control certifications.

**Tariff, Part VII, Subpart B**  
**AE1-AG1 TRANSITION CYCLE # 1**

**Tariff, Part VII, Subpart B, section 303**  
**Transition Eligibility**

A. Transition Eligibility

Within 60 calendar days of the Transition Date, a Project Developer that submitted a valid Interconnection Request to Transmission Provider during the period April 1, 2018 through September 30, 2020 (the AE1 through AG1 New Services Queues) and who has not been tendered an Interconnection Service Agreement or Wholesale Market Participation Agreement under Tariff, Part VI, and whose New Service Request has not been withdrawn, shall:

1. Remit to and have received by Transmission Provider a Readiness Deposit of \$4,000/MW. Such payment shall be by wire transfer or posting of a letter of credit, and shall not be at-risk prior to the end of Decision Point I. Any Readiness Deposit provided, in whatever form, shall include the Project Identifier, conspicuously marked. Such Readiness Deposit shall be at-risk at the end of Decision Point I as set forth in Tariff, Part VII, Subpart D, section 309; and
2. Demonstrate Site Control over the Site for the purpose of constructing a Generating Facility or Merchant Transmission Facility through a deed, lease, or option for 100 percent of the Generation Facility Site including the location of the high-voltage side of the Generating Facility's main power transformer(s) for at least a one-year term beginning from the Transition Date, consistent with the requirements of Tariff, Part VII, Subpart B, section 302.
3. In the event the Project Developer fails to satisfy the requirements of subsections 303(A)(1) and (2) above, its New Service Request shall be deemed terminated and withdrawn. The New Service Request of a Project Developer that satisfies that the requirements of subsections 303(A)(1) and (2) above shall maintain its existing priority.
4. If the Transition Date does not fall on a Business Day, this time period shall conclude on the next Business Day.

No changes or modifications to a New Service Request will be permitted after the effective date of the Transition Cycle Filing, other than as otherwise permitted by this Tariff, Part VII.



**Tariff, Part VII, Subpart B, section 304**  
**AE1-AG1 Expedited Process Eligibility**

A. Expedited Process Eligibility

1. Project Developers who have met the requirements of Tariff, Part VII, Subpart B, section 303, shall be subject to an additional restudy to determine shared network upgrades impacts. Projects will be studied on the base case model that was used for their System Impact Study analysis prior to the effective date of the Transition Cycle Filing. A Project is not eligible for the expedited process if it has cost allocation eligibility or is identified as the first to cause, as determined according to Tariff, Part VI, section 217.3, for a Network Upgrade which has a total estimated cost of greater than \$5,000,000. Such cost estimate will be based on Transmission Provider's most recently available data.

All other Projects will be eligible for the expedited procedures set forth in Tariff, Part VII, Subpart B, section 304(B). A New Service Request that does not satisfy the expedited process eligibility criteria shall be reprioritized to Transition Cycle #1. The cost associated with the following factors shall not be considered as part of this analysis: (a) costs associated with Interconnection Facilities required to interconnect the Project Developer's New Service Request; and (b) the costs associated with approved baseline or supplemental projects as determined in accordance with the Regional Transmission Expansion Plan. Affected System impacts will also not be considered as part of this restudy. Transmission Provider shall post the results of this restudy on Transmission Provider's public web site.

2. Valid Upgrade Requests previously submitted in the AE1-AG1 queues will be eligible for the expedited process and are not subject to any additional readiness requirements.

B. Expedited Process Rules

Projects that have been determined to be eligible as set forth in Tariff, Part VII, Subpart B, section 304(A), will be allowed to enter the expedited process as follows:

- The cost of Interconnection Facilities is not considered when determining a project's eligibility for the expedited process;
- No additional Readiness Deposits or other readiness requirements will apply to expedited process projects;
- If a project is an uprate (project relies on the Interconnection Facilities of a prior project) whose base project does not qualify for the expedited process, the uprate also will not qualify for the expedited process, regardless of analysis results;
- If stability analysis or a sag study is completed during the expedited process, and it is determined that a project has an estimated Network Upgrade cost greater than \$5,000,000, the project will be removed from the expedited process and shifted to Transition Cycle #1

- If it is determined during the Facilities Study that the cost of a Network Upgrade is now estimated to be greater than \$5,000,000, the project will be removed from the expedited process and shifted to Transition Cycle #1.

Projects that enter the expedited process will have their Facilities Studies completed, and will be tendered an interconnection-related service agreement pursuant to Tariff, Part IX, pursuant to the following cost allocation rules.

Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

1. Cost Responsibility for Necessary Facilities and Upgrades:

- a. General: Each Project Developer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.
- b. Cost Responsibility for Accelerating Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of Network Upgrades that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Project Developer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Tariff, Schedule 12 as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

C. Rules for Transition Cycle #1 Projects

1. The procedures and other terms governing the Transmission Provider's administration of the studies required under the Transition Cycle #1 Phase process, and the nature and timing of such studies, are set forth below.
2. AE1-AG1 Projects that have cost allocation eligibility for a Network Upgrade of greater than \$5,000,000 as set forth in Tariff, Part VII, Subpart B, section 304(A), will be processed in Transition Cycle #1 cycle process.
  - a. Transition Cycle #1 will start after Transmission Provider completes the eligibility review for the Expedited Process and no later than one year from the Transition Date defined in Tariff, Part VII, Subpart A, section 300. Transition Cycle #1 will run simultaneously with the expedited process, however Transition Cycle #1, Phase III will not begin until all expedited process projects have been completed.
  - b. System Impact Studies
    - i. Introduction
      - (a) The Cycle process for Transition Cycle #1 includes three study Phases and three Decision Points:
        - (i) Phase I System Impact Study and Decision Point I;  
and
        - (ii) Phase II System Impact Study and Decision Point II;  
and
        - (iii) Phase III System Impact Study and Decision Point III

There is no Application Review Phase for Transition Cycle #1.
  - c. Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

**Tariff, Part VII, Subpart C**  
**AG2-AH1 TRANSITION CYCLE #2**

**Tariff, Part VII, Subpart C, section 305**  
**Introduction, Overview and Eligibility**

A. Introduction and Overview of AG2-AH1 Transition Cycle #2

1. AG2-AH1 Transition Cycle #2

Tariff, Part VII, Subpart C, section 305 applies to AG2 through AH1 projects in Transition Cycle #2, and sets forth the procedures and other terms governing the Transmission Provider's administration of the AG2 through AH1 Transition Cycle #2 approach; procedures and other terms regarding studies and other processing of New Service Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to New Service Customers.

2. To move forward in Transition Cycle #2, each Project Developer or Eligible Customer with valid projects in AG2 through AH1 must submit the Application and System Study Agreement in the form set forth in Tariff, Attachment IX and submit the required Study Deposit amounts and a Readiness Payment, as set forth below in Tariff, Part VII, Subpart C, section 306, Application Rules. The following restrictions apply to the Application and System Study Agreement to be submitted by the Project Developer or Eligible Customer:

- a. the fuel type may not change from that which was previously submitted for the valid projects in AG2 through AH1; and
- b. Maximum Facility Output and/or Capacity Interconnection Rights values shall not increase but may be reduced up to 100 percent from that which was previously submitted for the valid projects in AG2 through AH1; and
- c. the Project Developer must choose between the primary or secondary Point of Interconnection as previously identified in its New Service Request from that which was previously submitted for the valid projects in AG2 through AH1; and
- d. Eligible Customer transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission System shall not increase but may be reduced up to 100 percent from that which was previously submitted for the valid projects in AG2 through AH1.
  - i. Each valid New Service Request from AG2-AH1 shall be assigned to AG2-AH1 Transition Cycle #2. Phase I of AG2-AH1 Transition Cycle #2 will only start after: (i) all Application Review period activities have been completed for that Cycle; and (ii) the Phase I Base Case data has been made available for a 30 day review during the Application Phase of that Cycle; and (iii) Decision Point II of Transition Cycle #1 has concluded. Phase II of AG2-AH1 Transition

Cycle #2 will only start after all Decision Point III determinations have concluded in Transition Cycle #1. Phase III of AG2-AH1 Transition Cycle #2 will only start after the Final Agreement Negotiation Phase of Transition Cycle #1 has concluded (with all New Service Requests within Transition Cycle #1 either being withdrawn or resulting in a fully executed Tariff, Part IX service agreement).

3. To move forward in Transition Cycle #2, each Upgrade Customer with valid projects in AG2-AH1 must submit revised technical data and/or configuration information, and updates other requirements for its Upgrade Request, and submit the required Study Deposit amounts, as set forth below in Tariff, Part VII, Subpart C, section 306, Application Rules.
  - a. Each valid Upgrade Request from AG2-AH1 shall maintain its existing priority upon successful resubmission under Tariff, Part VII, Subpart C, section 306, Application Rules within 60 days of the Transition Date. Such existing priority shall be subsequent to valid AG1 and prior Upgrade Requests.
  - b. A valid Upgrade Request will be processed in accordance with Tariff, Part VII, Subpart C, section 306.

**Tariff, Part VII, Subpart C, section 306**  
**Application Rules**

**A. Application Submission**

A Project Developer or Eligible Customer (collectively, “Applicant”) that seeks to initiate a New Service Request must submit the following information to the Transmission Provider: (i) a Project Developer Applicant electronically submits through the PJM web site, an Application and Studies Agreement (“Application”), a form of which is provided in Tariff, Part IX, Subpart A, (ii) an Eligible Customer Applicant executes a Transmission Provider tendered Application, a form of which is provided in Tariff, Part IX, Subpart A, following the procedures outlined in Tariff, Parts II and III as applicable.

To be considered in a Cycle, Applicant must submit a completed and signed Application, including the required Study Deposit and Readiness Deposit, to Transmission Provider prior to the Cycle’s Application Deadline. Transmission Provider will post a firm Application Deadline for a Cycle at the beginning of Phase II of the immediately prior Cycle, no less than 180 days in advance of the Application Deadline. Only Completed New Service Requests received from Project Developers by the Application Deadline will be considered for the corresponding Cycle. Only Completed Applications received from Eligible Customers by the Application Deadline will be considered for the corresponding Cycle. Completed New Service Requests and Completed Applications shall be assigned a tentative Project Identifier. Transmission Provider will review and validate New Service Requests and the Project Identifier during the Application Phase, prior to Phase I of the corresponding Cycle. Only valid New Service Requests will proceed past the Application Phase.

**1. Generation Interconnection Request Requirements**

For Transmission Provider to consider an Application for a Generation Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the location of the proposed Point of Interconnection to the Transmission System, including the substation name or the name of the line to be tapped (including the voltage), the estimated distance from the substation endpoints of a line tap, address, and GPS coordinates.
- c. Provide information about the Generating Facility project, including whether it is (1) a proposed new Generating Facility, (2) an increase in capability of an existing Generating Facility, or (3) the replacement of an existing Generating Facility.

- d. Indicate the type of Interconnection Service requested, whether (1) Energy Resource only or (2) Capacity Resource (includes Energy Resource) with Capacity Interconnection Rights.
- e. Specify the project location and provide a detailed site plan.
- f. Submit required evidence of Generating Facility Site Control (including the location of the main step-up transformer), including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- g. Provide information about Qualifying Facility status under the Public Utility Regulatory Policies Act, as applicable.
- h. Submit required information and documentation if the Generating Facility will share Applicant's Interconnection Facilities with another Generating Facility.
- i. For a new Generating Facility, specify requested Maximum Facility Output and Capacity Interconnection Rights.
- j. For a requested increase in generation capability of an existing Generating Facility, specify the existing Maximum Facility Output and Capacity Interconnection Rights, and requested increases.
- k. Provide a detailed description of the equipment configuration and electrical design specifications for the Generating Facility.
- l. Specify the fuel type for the Generating Facility; or, in the case of a multi-fuel Generating Facility, the fuel types.
- m. For a multi-fuel Generating Facility, provide a detailed description of the physical and electrical configuration.
- n. If the Generating Facility will include a storage component, provide detailed information about (1) whether and how the storage device(s) will charge using energy from the Transmission System, (2) the primary frequency response operating range for the storage device(s), (3) the MWh stockpile, and (4) the hour class, as applicable.
- o. Specify the proposed date that the project or uprate associated with the Application will be in service.
- p. Provide other relevant information, including whether Applicant or an affiliate has submitted a previous Application for the Generating Facility; and, if an increase in generation capability, information about existing PJM



Service Agreements and associated Queue Position Nos. or Project Identifier Nos.

2. Behind the Meter Generator Application Requirements

In addition to the above requirements for a Generating Facility, in order for Transmission Provider to consider an Application for behind-the-meter generation Interconnection Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Specify gross output, behind the meter load, requested Maximum Facility Output, and requested Capacity Interconnection Rights.
- b. For a requested increase in generation capability of an existing Behind the Meter Generating Facility, specify existing and requested increase in gross output, behind the meter load, Maximum Facility Output, and Capacity Interconnection Rights.

3. Long Term Firm Transmission Service Application Requirements

For Transmission Provider to consider an Application for Long Term Firm Transmission Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the locations of the Point(s) of Receipt and Point(s) of Delivery.
- c. Specify the requested Service Commencement Date and term of service.
- d. Specify the transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission System.

4. Merchant Transmission Application Requirements

For Transmission Provider to consider an Application for a Transmission Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the location of the proposed facilities, and the name and description of the substation where Applicant proposes to interconnect or add its facilities.

- c. Specify the proposed voltage and nominal capability of new facilities or increase in capability of existing facilities.
- d. Provide a detailed description of the equipment configuration and electrical design specifications for the project.
- e. Specify the proposed date that the project or increase in capability will be in service.
- f. Specify whether the proposed facilities will be either (1) merchant A.C., (2) Merchant D.C. Transmission Facilities, or (3) Controllable A.C. Merchant Transmission Facilities.
- g. If Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities, specify whether Applicant elects to receive (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR) or (2) Incremental Delivery Rights, Incremental Auction Revenue Rights, and/or Incremental Capacity Transfer Rights.
  - i. If Applicant elects to receive TIRs or TWRs, specify (1) total project MWs to be evaluated as Firm (capacity) injection for TIR; (2) total project MWs to be evaluated as Non-firm (energy) injection for TIR; (3) total project MWs to be evaluated as Firm (capacity) withdrawal for TWR; and (4) total project MWs to be evaluated as Non-firm (energy) withdrawal for TWR.
  - ii. If Applicant elects to receive Incremental Delivery Rights, specify the location on the Transmission System where it proposes to receive Incremental Delivery Rights associated with its proposed facilities.
- h. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Applicant contractually binds itself in its interconnection-related service agreement always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the interconnection-related service agreement will provide Applicant with the same types of transmission rights that are available under the Tariff for Merchant D.C. Transmission Facilities. In the Application, Applicant shall represent that, should it execute an interconnection-related service agreement for its project described in the Application, it will agree in the interconnection-related service agreement to operate its facilities continuously in a controllable mode.

- i. Specify the site where Applicant intends to install its major equipment, and provide a detailed site plan.
- j. Submit required evidence of Site Control for the major equipment, including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- k. Provide evidence acceptable to Transmission Provider that Applicant has submitted a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting, as applicable. Applicant shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Applicant fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

5. Additional Requirements Applicable to All Applications

- a. Study Deposit: For Transmission Provider to consider an Application complete, Transmission Provider must receive from the Applicant the required Study Deposit by wire transfer, the amount of which is based on the size of the project as described below. Applicant's wire transfer must specify the Application reference number to which the Study Deposit corresponds, or Transmission Provider will not review or process the Application.
  - i. Ten percent of the Study Deposit is non-refundable. If Applicant withdraws its New Service Request, or the New Service Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:
    - (a) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request;
    - (b) Any restudies required as a result of the rejection, termination, and/or withdrawal of such New Service Request; and/or

- (c) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.
- ii. 90 percent of the Study Deposit is refundable, and Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:
  - (a) The cost of the Application review;
  - (b) The dollar amount of Applicant's cost responsibility for the System Impact Study; and
  - (c) If the New Service Request is modified, rejected, terminated, and/or withdrawn, refundable deposit money shall be applied to cover all of the costs incurred by Transmission Provider up to the point of the New Service Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:
    - (i) The costs of any restudies required as a result of the modification, rejection, termination, and/or withdrawal of the New Service Request;
    - (ii) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request; and/or
    - (iii) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.
  - (d) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to Applicant in accordance with the PJM Manuals.
- iii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
  - (a) Applicant is responsible for, and must pay, all actual study costs.

- (b) If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.
- iv. The Study Deposit shall be calculated as follows, based on the number of MW energy (e.g., Maximum Facility Output) or MW capacity (e.g., Capacity Interconnection Rights), whichever is greater:
  - (a) Up to 20 MW: \$75,000;
  - (b) Over 20 MW up to 50 MW: \$200,000;
  - (c) Over 50 MW up to 100 MW: \$250,000;
  - (d) Over 100 MW up to 250 MW: \$300,000;
  - (e) Over 250 MW up to 750 MW: \$350,000; and
  - (f) Over 750 MW: \$400,000.
- b. Readiness Deposit: For Transmission Provider to consider an Application complete, Applicant must submit to Transmission Provider the required Readiness Deposit by wire transfer or letter of credit. Applicant's wire transfer or letter of credit must specify the Application reference number to which the Readiness Deposit corresponds, or Transmission Provider will not review or process the Application. Readiness Deposit No. 1 shall be an amount equal to \$4,000 per MW energy (e.g., Maximum Facility Output) or per MW capacity (e.g., Capacity Interconnection Rights), whichever is greater, as specified in the Application.

B. Application Review Phase

- 1. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Project Developers for completeness and then establishes the validity of such submitted Applications, beginning with a deficiency review, as follows:

- a. Transmission Provider will exercise Reasonable Efforts to inform Applicant of Application deficiencies within 15 Business Days after the Application Deadline.
  - b. Applicant then has 10 Business Days to respond to Transmission Provider's deficiency determination.
  - c. Transmission Provider then will exercise Reasonable Efforts to review Applicant's response within 15 Business Days, and then will either validate or reject the Application.
2. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Eligible Customers for completeness and then establishes the validity of such submitted Applications.
3. Transmission Provider will only review an Application during the Application Review Phase following the Application Deadline for which the Application was submitted and deemed complete, which will extend for 90 days or the amount of time it takes to complete all Application review activities for the relevant Cycle, whichever is greater.
4. During the Application Review Phase, and at least 30 days prior to initiating Phase I of the Cycle, Transmission Provider will post the Phase I Base Case data for review, subject to CEII protocols.
5. In the case of an Application for a Generating Facility, the Application Review Phase will include a Site Control review for the Generating Facility. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VII, Subpart A, section 302, for at least a one-year term beginning from the Application Deadline, for 100 percent of the Generating Facility Site including the location of the high-voltage side of the Generating Facility's main power transformer(s). In addition, Applicant shall provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings. The Site Control requirement in the Application includes an acreage requirement for the Generating Facility, as set forth in the PJM Manuals.
6. In the case of an Application for Merchant Transmission, the Application Review Phase will include a Site Control review for the Site of the HVDC converter station(s), phase angle regulator (PAR), and/or variable frequency transformer, as applicable. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VII, Subpart A, section 302, for at least a one-year term beginning from the Application Deadline, for 100 percent of the Site. In addition, Applicant shall provide a certification, executed by an officer or authorized representative of

Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings.

C. Scoping Meetings

1. During the Application Review Phase, Transmission Provider may hold a single, or several, scoping meetings for projects in each Transmission Owner zone, which are optional and may be waived by Applicants or Transmission Owner.
2. Scoping meetings may include discussion of potential Affected System needs, whereby Transmission Provider may coordinate with Affected System Operators the conduct of required studies.

D. Other Requirements

1. Applicant must submit any claim for Capacity Interconnection Rights from deactivating generation units with the Application, and it must be received by Transmission Provider prior to the Application Deadline.
2. When an Application results in a valid New Service Request, Transmission Provider shall confirm the assigned Project Identifier to the New Service Request, in accordance with Tariff, Part VII, Subpart E, section 315. Applicant and Transmission Provider shall reference the Project Identifier in all correspondence, submissions, wire transfers, documents, and other materials relating to the New Service Request.

**Tariff, Part VII, Subpart D**  
**PHASES AND DECISION POINTS**



**Tariff, Part VII, Subpart D, section 307**  
**Introduction**

A. Phase I, Phase II and Phase III System Impact Studies

1. Introduction

Tariff, Part VII, Subpart D sets forth the procedures and other terms governing the Transmission Provider's administration of the studies and procedures required under the Cycle process, and the nature and timing of such studies. The Cycle process set forth in Tariff, Part VII includes three study Phases and the three Decision Points:

- a. Phase I: Phase I System Impact Study and Decision Point I
- b. Phase II: Phase II System Impact Study and Decision Point II; and
- c. Phase III: Phase III System Impact Study and Decision Point III.

Procedures and other terms relative to the three study Phases are set forth separately below in Tariff, Part VII, Subpart D, sections 308 through 313.

2. Overview of System Impact Studies

- a. The Phase I, Phase II and Phase III System Impact Studies are a regional analysis of the effect of adding to the Transmission System the new facilities and services proposed by valid New Service Requests and an evaluation of their impact on deliverability to the aggregate of PJM Network Load.
  - i. These studies identify the system constraints, identified with specificity by transmission element or flowgate, relating to the New Service Requests included therein and any resulting Interconnection Facilities, Network Upgrades, and/or Contingent Facilities required to accommodate such New Service Requests.
  - ii. These studies provide estimates of cost responsibility and construction lead times for new facilities required to interconnect the project and system upgrades.
  - iii. Transmission Provider, in its sole discretion, can aggregate multiple New Service Requests at the same Point of Interconnection for purposes of Phase I, Phase II and Phase III System Impact Studies.
  - iv. The scope of the studies may include (a) an assessment of sub-area import deliverability, (b) an assessment of sub-area export deliverability, (c) an assessment of project related system stability issues (only occurs in Phase II and Phase III); (d) an assessment of project-related short circuit duty issues (only occurs in Phase II and Phase III), (e) a contingency analysis consistent with NERC's and each Applicable Regional Entity's reliability criteria and the

transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity, (f) an assessment of regional transmission upgrades that most effectively meet identified needs, and (g) an analysis to determine cost allocation responsibility for required facilities and upgrades.

- v. For purposes of determining necessary Interconnection Facilities and Network Upgrades, these studies shall consider the level of service requested in the New Service Request unless otherwise required to study the full electrical capability of the New Service Request due to safety or reliability concerns.
- vi. The studies' results shall include the list and facility loading of all reliability criteria violations specific to the New Service Requests.
- vii. If applicable, the studies for a Transmission Project Developer New Service Request shall also include a preliminary estimate of the Incremental Deliverability Rights associated with the Transmission Project Developer's proposed Merchant Transmission Facilities.

### 3. Contingent Facilities

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Interconnection Facilities and/or Network Upgrades, upon which the New Service Request's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the New Service Request or reassessment of the Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies) and Generator Interconnection Agreement, including why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall also provide, upon request of the Project Developer or Eligible Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

#### a. Minimum Thresholds to Identify Contingent Facilities

##### i. Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least 5 percent distribution factor (DFAX) or contributing at least 5 percent of the facility rating in the applicable model.

##### ii. Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

iii. Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

4. Additional System Impact Study Procedures for Eligible Customers

The following provisions apply to System Impact Studies conducted for Eligible Customers:

- a. The Transmission Provider will notify Eligible Customers of the need to conduct a System Impact Study whenever the Transmission Provider determines that available transmission capability may not be sufficient to provide the requested firm service(s). The purpose of the System Impact Study will be to determine the effect the requested service(s) will have on system operations, identify any system constraints, redispatch options and whether system expansion will be required to provide the requested service(s).
- b. The Commission's comparability standard will be applied in evaluating the impact of all requests. Specifically, the Transmission Provider will use the same due diligence in completing System Impact Studies for Eligible Customers that it uses when completing studies for any Transmission Owner that requests service from the Transmission Provider.
- c. Requests for long-term firm transmission service will be evaluated, to the extent possible, as a part of the on-going planning process for Bulk Transmission Supply in the PJM Region. Appropriate planning studies will be conducted annually to assess the capability of the PJM Region Transmission System to deliver the planned Network Resources to the Forecasted Network Loads of the existing load serving entities and any prior committed Firm Point-to-Point Service transmission customers. The loads and resources of Eligible Customers requesting new or additional service during the normal planning cycle will be incorporated into this aggregate planning process along with the loads and resources of all other Firm Point-to-Point and load serving entities for which prior commitments to provide service have been made. Requests for long-term firm service made at times that will not permit the evaluation of impacts as part of the normal planning process, and requests for short-term firm service, will require that special impact studies be completed.
- d. The Transmission Provider plans and evaluates the PJM Region Transmission System in strict compliance with the following:

- i. North American Electric Reliability Council ("NERC") Reliability Principles and Guides
  - ii. Applicable Standards
  - iii. Transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity.
- e. In evaluating the impact of any request for new or additional service(s), the Transmission Provider will first determine the capability of the system to reliably provide prior committed Network and Point-to-Point service for the term of the requested new or additional service(s), or the normal planning horizon (generally 10 years), whichever is shorter. Requests for new or additional service(s) will then be incorporated into the system representation data and the appropriate system analyses will be completed to evaluate the impacts of the requested services.

5. Cost Allocation for Network Upgrades

- a. General: Each Project Developer and Eligible Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.
- b. Cost Responsibility for Accelerating Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of Network Upgrades that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Project Developer or Eligible Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission

Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

- c. The Transmission Provider shall determine the minimum amount of Network Upgrades required to resolve each reliability criteria violation in each Cycle, by studying the impact of the projects the Cycle in their entirety, and not incrementally. Interconnection Facilities and Network Upgrades shall be studied in their entirety and according to the following process:

The Transmission Provider shall identify the New Service Requests in the Cycle contributing to the need for the required Network Upgrades within the Cycle. All New Service Requests that contribute to the need for a Network Upgrade will receive cost allocation for that upgrade pursuant to each New Service Request's contribution to the reliability violation identified on the transmission system in accordance with PJM Manuals.

There will be no inter-Cycle cost allocation for Interconnection Facilities or Network Upgrades identified in the System Impact Study costs identified in a Cycle; all such costs shall be allocated to New Service Requests in that Cycle.

#### 6. Interconnection Facilities

A Project Developer shall be obligated to pay 100 percent of the costs of the Interconnection Facilities necessary to accommodate its Interconnection Request.

#### 7. Facilities Study Procedures:

The Facilities Studies will include good faith estimates of the cost, determined in accordance with Tariff, Part VII, Subpart D, section 307(A)(5), (a) to be charged to each affected New Service Customer for the Interconnection Facilities and Network Upgrades that are necessary to accommodate each New Service Request evaluated in the study; (b) the time required to complete detailed design and construction of the facilities and upgrades; (c) a description of any site-specific environmental issues or requirements that could reasonably be anticipated to affect the cost or time required to complete construction of such facilities and upgrades.

The Facilities Study will document the engineering design work necessary to begin construction of any required transmission facilities, including estimating the costs of the equipment, engineering, procurement and construction work needed to implement the conclusions of the System Impact Study in accordance with Good Utility Practice and, when applicable, identifying the electrical switching configuration of the connection equipment, including without limitation: the transformer, switchgear, meters, and other station equipment; and the nature and

estimated costs of Interconnection Facilities and Network Upgrades necessary to accommodate the New Service Request.

For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Facilities Study shall consider the level of Interconnection Service requested by the Project Developer unless otherwise required to study the full electrical capability of the Generating Facility or Merchant Transmission Facility due to safety or reliability concerns. The Facilities Study will also identify any potential control equipment for requests for Interconnection Service that are lower than the full electrical capability of the Generating Facility or Merchant Transmission Facility.

**Tariff, Part VII, Subpart D, section 308**  
**Phase I**

**A. Phase I Rules**

1. This Tariff, Part VII, Subpart D section 308 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase I of the Cycle process. After the Application Phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase I of a Cycle will commence. During Phase I of a Cycle, the Transmission Provider shall conduct a Phase I System Impact Study.
  - a. The Phase I System Impact Study is conducted on an aggregate basis within a New Services Request's Cycle, and results are provided in a single Cycle format. The Phase I System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers must obtain the results from the website.
  - b. Start and Duration of Phase I
    - i. Phase I shall start on the first Business Day immediately following the end of the Application Review phase, but no earlier than 30 days following the distribution of the Phase I Base Case Data. Transmission Provider shall use Reasonable Efforts to complete Phase I within 120 calendar days from the date such phase commenced. If the 120th day does not fall on a Business Day, Phase I shall be extended to the end of the next Business Day. If Transmission Provider is unable to complete Phase I within 120 calendar days, Transmission Provider shall notify all impacted Project Developers and Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase I.
    - ii. During Phase I, and at least 30 days prior to initiating Decision Point I of the Cycle, Transmission Provider will post an estimated start date for Decision Point I in order for Project developers and Eligible Customers to prepare to meet their Decision Point I requirements.

**Tariff, Part VII, Subpart D, section 309**  
**Decision Point I**

**A. Requirements**

The Decision Point I shall commence on the first Business Day immediately following the end of Phase I. New Service Requests that are studied in Phase I will enter Decision Point I. Before the close of the Decision Point I, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such New Service Request must meet the requirements set forth below in Tariff, Part VII, Subpart D, section 309(A)(2) (acceleration provisions).
  - a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point I:
    - i. The applicable Readiness Deposit No. 2
      - (a) The Decision Point I Readiness Deposit No. 2 is to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase. The Decision Point I Readiness Deposit No. 2 will be calculated by the Transmission Provider during Phase I, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.
      - (b) At Decision Point I, the Readiness Deposit No. 2 required shall be an amount equal to:
        - (i) the greater of (i) 10 percent of the cost allocation for the Network Upgrades as calculated in Phase I or (ii) the Readiness Deposit No. 1 paid by the Project Developer with its New Service Request during the Application Phase; minus
        - (ii) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase
      - (c) The Readiness Deposit No. 2 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 2).



- b. Project Developers must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
  - i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional one-year term beginning from last day of the relevant Cycle, Phase I.
    - (a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
    - (b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 50 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
    - (c) If applicable, Interconnection Switchyard Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 50 percent of the acreage required for the identified required Interconnection Switchyard facilities associated with a New Service Request.
- c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant

PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.

- d. Evidence of air and water permits (if applicable)
  - e. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
  - f. Submission of New Service Request data for Phase II System Impact Study.
  - g. If Project Developer or Eligible Customer fails to submit all of the criteria in (a) through (f) above, before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
  - h. If Project Developer or Eligible Customer submits all elements in (a) through (f) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in (b) through (e) above, as follows:
    - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
    - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
    - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase II.
    - iv. Transmission Provider's review of the above required elements may run co-extensively with Phase II.
2. Acceleration at Decision Point I. Upon completion of the Phase I System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.
- a. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements before the close of Decision Point I:
    - i. Security

- (a) Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.
- ii. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
- iii. Project Developer must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
  - (a) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase I.
    - (i) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
  - (b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.
    - (i) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
  - (c) Interconnection Switchyard, if applicable, Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.
    - (i) Such Site Control evidence shall cover 100 percent of the acreage required identified required Interconnection Switchyard associated with a New Service Request.
- iv. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the

Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above.

- (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
    - (1) Such condition precedent shall not be extended under any circumstances for any reason.
- b. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.
- d. For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- e. If Project Developer or Eligible Customer fails to submit all of the criteria in (a) through (d) above (noting the exception provided for Site Control), before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.

- f. If Project Developer or Eligible Customer subject to Acceleration at Decision Point I submits all elements in (a) through (d) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in (a) through (d) above, as follows:
    - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
    - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
    - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.
- 3. For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point I to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:
  - a. Security. Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.
  - b. Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request
  - c. Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
    - i. Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
      - (a) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall

continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

- ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
- iii. Interconnection Switchyard, if applicable, Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- iv. PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase I through a date that extends three years beyond the full execution date of the relevant state level interconnection agreement with the applicable entity
- v. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above.
  - (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in

accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with (i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

- (i) Such condition precedent shall not be extended under any circumstances for any reason.
- d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle
- e. Evidence of a fully executed state level Interconnection Agreement with the applicable entity
- f. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- g. If Project Developer fails to submit all of the criteria in (a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's New Service Request shall be deemed terminated and withdrawn.
- h. When Project Developer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in (a) through (f) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in (a) through (f) above, as follows:
  - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer of deficiencies within 10 Business Days after the close of Decision Point I.

- ii. Project Developer then has five Business Days to respond to Transmission Provider's deficiency determination.
- iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.

4. New Service Request Withdraw or Termination at Decision Point I

- a. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point I. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point I, the Transmission Provider must receive before the close of the Decision Point I Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
- b. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point I requirements, as set forth in this Tariff, Part VII, Subpart D, section 309.
- c. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - i. For Readiness Deposits:
    - (a) At the conclusion of Transmission Provider's deficiency review for Decision Point I or upon voluntary withdrawal of a New Service Request, refund to the Project Developer or Eligible Customer 50 percent of Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase, and 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during this Decision Point I. Notwithstanding the preceding, Project Developers or Eligible Customers in Transition Cycle # 1 will be refunded 100 percent of Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request provided pursuant to Tariff, Part VII, Subpart C, section 306(A)(5)(b), and 100 percent of the Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during this Decision Point I; and
    - (b) At the conclusion of the Cycle, Project Developers or Eligible Customers will be refunded up to 50 percent of



Readiness Deposit No. 1 pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).

- ii. At the conclusion of Transmission Provider's deficiency review for Decision Point I, Project Developers or Eligible Customers will be refunded up to 90 percent of their Study Deposit submitted with their New Service Request during the Application Phase, less any actual costs.

B. New Service Request Modification Requests at Decision Point I

1. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.
2. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 100 percent of the requested amount
3. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.
4. Point of Interconnection.
  - a. The Point of Interconnection must be finalized before the close of the Decision Point I Phase.
    - i. Project Developer may only move the location of the Point of Interconnection 1) along the same segment of transmission line, as defined by the two electrical nodes located on the transmission line as modeled in the Phase I Base Case Data, or 2) move the location of the Point of Interconnection to a different breaker position within the same substation, subject to Transmission Owner review and approval. Project Developer may not modify its Point of Interconnection to/from a transmission line from/to a direct connection into a substation.
      - (a) Project Developer must notify Transmission Provider in writing of any changes to its Point of Interconnection prior to the close of Decision Point I. No modifications to the Point of Interconnection will be accepted for any reason after the close of Decision Point I.
5. Generating Facility or Merchant Transmission Facility Site Changes  
Project Developer may specify a change to the project Site only if:

- a. the Project Developer satisfied the requirements for Site Control for both the initial Site proposed in the New Service Request Application and the newly proposed Site; and
  - b. the initial Site and the proposed Site are adjacent parcels.
  - c. Such Site Control is subject to the verification procedures set forth in Tariff, Subpart D, section 309(A)(2)(c) (Decision Point I Site Control verification).
- 6. Equipment Changes
  - a. During Decision Point I, Project Developer may modify its Interconnection Request for updated equipment data. Project Developer shall submit machine modeling data as specified in the PJM Manuals before the close of Decision Point I.

**Tariff, Part VII, Subpart D, section 310**  
**Phase II**

A. Phase II Rules

1. This Tariff, Part VII, Subpart D, section 310 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase II of the Cycle process. After the Decision Point I phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase II of a Cycle will commence. During Phase II of a Cycle, the Transmission Provider shall conduct the Phase II System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VII, Subpart D, section 309, Decision Point I phase, will be included in the Phase II System Impact Study.
  - a. The Phase II System Impact Study analysis will retool load flow results based on decisions made during Decision Point I, and perform short circuit and stability analyses as required.
  - b. The Phase II System Impact Study will identify Affected Systems, if applicable.
    - i. If an Affected System Study Agreement is required, the Transmission Provider shall notify the Project Developer or Eligible Customer prior to the end of Phase II by posting on the Transmission Provider's website of the need for Project Developer or Eligible Customer to enter into an Affected System Study Agreement.
  - c. The Phase II System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.
  - d. Facilities Study. During the Phase II System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VII, Subpart D, section 307.
  - e. Start and Duration of Phase II
    - i. Phase II shall start on the first Business Day immediately following the end of the Decision Point I unless the Decision Point III of the immediately preceding Cycle is still open. In no event shall Phase II of a Cycle commence before the conclusion of the Decision Point III Phase of the immediately preceding Cycle.
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase II within 180 days from the date such Phase II commenced. If the 180<sup>th</sup> day does not fall on a Business Day, Phase II shall be extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase II within 180 days, the Transmission Provider shall notify all impacted Project Developers simultaneously by posting on Transmission Provider's website a

revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase II.

**Tariff, Part VII, Subpart D, section 311**  
**Decision Point II**

A. Requirements

Decision Point II shall commence on the first Business Day immediately following the end of Phase II. New Service Requests that are studied in Phase II will enter Decision Point II. Before the close of Decision Point II, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such new Service Request must meet the requirements set forth below in Tariff, Part VII, Subpart D, section 311(A)(2)(d).
  - a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:
  - b. The applicable Readiness Deposit No. 3
    - i. The Decision Point II Readiness Deposit No. 3 to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase, and the Readiness Deposit No. 2 that was submitted at Decision Point I. The Decision Point II Readiness Deposit No. 3 will be calculated by the Transmission Provider during Phase II, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.
    - ii. The Decision Point II Readiness Deposit No. 3 required amount shall be an amount equal to the greater of:
      - (a) (i) 20 percent of the cost allocation for the Network Upgrades as calculated in Phase II or (ii) the Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase plus the Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I; minus
      - (b) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase, plus the Readiness Deposit No. 2 amount paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I.

- iii. The Readiness Deposit No. 3 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 3).
  - c. Notification in writing that Project Developer or Eligible Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its New Service Request
  - d. Evidence of Site Control. There are no Site Control evidentiary requirements at Decision Point II.
  - e. Evidence of air and water permits (if applicable)
  - f. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
  - g. Submission of New Service Request Data for Phase II System Impact Study data.
  - h. Evidence that Project Developer or Eligible Customer entered into a fully executed Affected System Study Agreement, if applicable to its New Service Request by the later of Decision Point II or 60 days after notification from Transmission Provider that an Affected System Study Agreement is required.
  - i. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.
  - j. If Project Developer or Eligible Customer fails to submit all of the criteria in (b) through (i) above, before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
2. If Project Developer or Eligible Customer submits all elements in (b) through (i) above, then, at the close of the Decision Point II, Transmission Provider will begin the deficiency review of the elements set forth in (b) through (i) above, as follows:

- a. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point II.
- b. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
- c. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase III.
  - i. Transmission Provider's review of the above required elements may run co-extensively with Phase III.
- d. Acceleration at Decision Point II. Upon completion of the Phase II System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.
  - i. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:
    - (a) Security
      - (i) Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.
    - (b) Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
    - (c) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
      - (i) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase II.
        - (1) Such Site Control evidence shall be identical to the Generating Facility or Merchant

Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

- (ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.
    - (1) Such Site Control evidence shall cover 100 percent of the linear distance for identified required Interconnection Facilities associated with a New Service Request.
  - (iii) If applicable, Interconnection Switchyard Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.
    - (1) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- e. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(d)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(d)(i), (ii) and (iii) above.
  - i. If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(d)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled,



and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

- (a) Such condition precedent shall not be extended under any circumstances for any reason.
- (b) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- (c) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.
- (d) For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- (e) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VII, Subpart D, section 311(A)(2)(e)(i)(a) through (d) above (noting the exception provided for Site Control), before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (f) If Project Developer or Eligible Customer submits all elements in Tariff, Part VII, Subpart D, section 311(A)(2)(e)(i)(a) through (d) above, then, at the close of the Decision Point II, Transmission Provider will begin the

deficiency review of the elements set forth in Tariff, Part VII, Subpart D, section 311(A)(2)(e)(i)(a) through (d) above, as follows:

- (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.
- (g) For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point II to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:
  - (h) Security. Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.
  - (i) Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request
  - (j) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
    - (i) Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase II that

extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

- (1) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
- (ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase II that extends through the full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (1) Such Site Control evidence shall cover 100 percent of linear distance for the identified required Interconnection Facilities associated with a New Service Request.
- (iii) Interconnection Switchyard, if applicable, Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase II that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (1) Such Site Control evidence shall cover 100 percent of acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- (iv) PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase II through a date that extends three years beyond the full execution date of the

relevant state level interconnection agreement with the applicable entity

- (v) If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(j)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(j)(i), (ii) and (iii) above.
  - (1) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 311(A)(2)(j)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
    - (1.a) Such condition precedent shall not be extended under any circumstances for any reason.
- (k) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent

Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle

- (l) Evidence of a fully executed state level Interconnection Agreement with the applicable entity
- (m) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- (n) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VII, Subpart D, section 311(A)(2)(a) through (m) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (o) When Project Developer or Eligible Customer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in Tariff, Part VII, Subpart D, section 311(A)(2)(a) through (m) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VII, Subpart D, section 311(A)(2)(a) through (m) above, as follows:
  - (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible

Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VII, Subpart D, section 314.

B. New Service Request Withdraw or Termination at Decision Point II

1. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point II. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point II, the Transmission Provider must receive before the close of the Decision Point II Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
2. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point II requirements, as set forth in this Tariff, Part VII, Subpart D, section 311.
3. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - a. For Readiness Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to Project Developer or Eligible Customer 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during Decision Point I;
    - ii. At the conclusion of the Cycle, refund to Project Developer or Eligible Customer up to 100 percent of Readiness Deposit No. 1 pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).
  - b. For Study Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
  - c. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VII, Subpart D, section 311(B)(3)(a) and (b)(i), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer at the Application Phase and at the Decision Point I

Phase if the Project Developer's Network Upgrade cost from Phase I to Phase II:

- i. increases overall by 25 percent or more; and
- ii. increases by more than \$10,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

4. New Service Request Modification Requests at Decision Point II

- a. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.
- b. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 10 percent of the values studied in Phase II.
- c. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.
- d. Point of Interconnection. The Point of Interconnection may not be changed or modified in any way for any reason at this point in the Cycle process.
- e. Generating Facility or Merchant Transmission Facility Site Changes. Project Developer may specify a change to the project Site only if the Project Developer satisfied the requirements for Site Control for both (i) the initial Site proposed in the New Service Request Application and the newly proposed Site; and (ii) the initial Site and the proposed Site are adjacent parcels. Such Site Control is subject to the verification procedures set forth in Tariff, Part VII, Subpart D, section 313.
- f. Equipment Changes

During Decision Point II, Project Developer is limited to modifying its New Service Request to Permissible Technological Advancement changes only. Project Developer shall submit machine modeling data as specified in the PJM Manuals associated with the Permissible Technological Advancement before the close of Decision Point II.

**Tariff, Part VII, Subpart D, section 312**  
**Phase III**

A. Phase III Rules

1. This Tariff, Part VII, Subpart D, section 312 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase III of the Cycle process. After Decision Point II of a Cycle is completed and a group of valid New Service Requests is established therein, Phase III of a Cycle will commence. During Phase III of a Cycle, the Transmission Provider shall conduct a Phase III System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VII, Subpart D, section 311, Decision Point II, will be included in the Phase III System Impact Study.
  - a. The Phase III System Impact Study analysis will retool load flow, short circuit, and stability results based on decisions made in Decision Point II.
  - b. The Phase III System Impact Study will include a final Affected System study, if applicable.
  - c. Phase III System Impact Study results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.
  - d. Facilities Study. During the Phase III System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VII, Subpart D, section 307 (System Impact Study intro).
  - e. Start and Duration of Phase III
    - i. Phase III shall start on the first Business Day immediately following the end of Decision Point II unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle.
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase III within 180 days from the date such Phase III commenced. If the 180th day does not fall on a Business Day, Phase III shall be extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase III within 180 days, the Transmission Provider shall notify all impacted Project Developers or Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase III.
  - f. Draft Agreement



Prior to the Final Agreement Negotiation Phase, Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX, as applicable to the Project Developer's or Eligible Customer's New Service Request, along with any applicable draft schedules, to the parties to such interconnection related agreement.

**Tariff, Part VII, Subpart D, section 313**  
**Decision Point III**

- A. Decision Point III shall commence on the first Business Day immediately following the end of Phase II, and shall run concurrently with the Final Agreement Negotiation Phase. New Service Requests that are studied in Phase II will enter Decision Point III. Before the close of Decision Point III, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.
1. Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point III for a New Service Request to remain in the Cycle and proceed through the Final Agreement Negotiation Phase as set forth below:
    - a. Security
      - i. Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results.
    - b. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
    - c. Project Developers must present evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, Subpart A, section 302, and is also in accordance with the following additional specifications:
      - i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional one-year term beginning from last day of the relevant Cycle, Phase III.
        - (a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
      - ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence for an additional one-year term beginning from the last day of the relevant Cycle, Phase III.
        - (a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.

- iii. Interconnection Switchyard, if applicable, Site Control evidence for an additional one-year term beginning from the last day of the relevant Cycle, Phase III.
  - (a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- iv. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 313(A)(1)(c)(i), (ii) and (iii) above, then Project Developer or Eligible Customer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer or Eligible Customer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 313(A)(1)(c)(i), (ii) and (iii) above.
  - (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VII, Subpart A, section 302, and in accordance with Tariff, Part VII, Subpart D, section 313(A)(1)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
    - (i) Such condition precedent shall not be extended under any circumstances for any reason.
- d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

- e. Project Developer or Eligible Customer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment. If Project Developer or Eligible Customer does not satisfy these requirements, these requirements can be addressed through a milestone in the applicable interconnection-related service agreement entered into pursuant to Tariff, Part IX.
- f. For state-level, non-jurisdictional interconnection projects, evidence of a fully executed Interconnection Agreement with the applicable entity.
- g. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VII, Subpart D, section 313(A)(1)(a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.

B. If Project Developer or Eligible Customer submits all elements in Tariff, Part VII, Subpart D, section 313(A)(1)(a) through (f) above, then, at the close of the Decision Point III, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VII, Subpart D, section 313(A)(1)(a) through (f) above, as follows:

- 1. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point III.
- 2. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
- 3. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to the Final Agreement Negotiation Phase.

Transmission Provider's review of the above required elements may run co-extensively with the Final Agreement Negotiation Phase.

- 4. If the New Service Request is deemed terminated and withdrawn by the Transmission Provider, then Transmission Provider shall:
  - a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;
  - b. Readiness Deposits will be treated pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).
  - c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up

to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.

5. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point III. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point III, the Transmission Provider must receive before the close of Decision Point III written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request. Following receipt of such written notification from the Project Developer or Eligible Customer, the Transmission Provider shall:
  - a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;
  - b. Readiness Deposits will be treated pursuant to Tariff, Part VII, Subpart A, section 301(A)(3).
  - c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
  - d. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VII, Subpart D, sections 313(B)(4)(b) and (c) and 313(B)(5)(b), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer if the Project Developer's or Eligible Customer's Network Upgrade cost from Phase II to Phase III:
    - i. increases overall by 35 percent or more; and
    - ii. increased by more than \$25,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

C. New Service Request Modification Requests at Decision Point III

New Service Requests may not be changed or modified in any way for any reason during Decision Point III. A New Service Request must be withdrawn and resubmitted in a subsequent Cycle to the extent a Project Developer or Eligible Customer wants to make any changes to such New Service Request at this point in the Cycle process.

**Tariff, Part VII, Subpart D, section 314**  
**Final Agreement Negotiation Phase**

- A. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the end of Phase III, and shall run concurrently with Decision Point III. New Service Requests that enter Decision Point III will also enter the Final Agreement Negotiation Phase. The purpose of the Final Agreement Phase is to negotiate, execute and enter into a final interconnection related service agreement found in Tariff, Part IX, as applicable to a New Service Request or Upgrade Request; adjust the Security obligation based on New Service Requests or Upgrade Request withdrawn during Decision Point III and/or during the Final Agreement Negotiation Phase; and conduct any remaining analyses or updated analyses based on New Service Requests or Upgrade Request withdrawn during Decision Point III. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
1. If a New Service Request or Upgrade Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the New Service Request or Upgrade Request from the Cycle, and adjust the Security obligations of other New Service Requests based on the withdrawal.
- B. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:
1. Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX, as applicable to the Project Developer's or Eligible Customer's New Service Request, along with any applicable draft schedules, to the parties to such interconnection related agreement prior to the start of the Final Agreement Negotiation Phase.
- a. Subject to any withdrawn New Service Requests during Decision Point III that require Transmission Provider to update study results, the draft interconnection related agreement shall be prepared using the study results available from Phase III or the most-recently completed studies conducted during the Final Agreement Negotiation Phase.
- i. If a different New Service Request is withdrawn during Decision Point III after a draft agreement has been tendered to Project Developer or Eligible Customer, and that withdrawn New Service Request impacts the Project Developer's or Eligible Customer tendered draft, Transmission Provider shall use Reasonable Efforts to update and reissue the tendered draft within 15 Business Days.
2. Negotiation
- Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60th day is not a Business Day, negotiations shall conclude on the next Business

Day. Upon receipt of the draft agreements, Project Developer or Eligible Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

3. Impasse

If the Project Developer or Eligible Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC, or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

4. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final interconnection related agreement, along with any applicable schedules, to the parties in electronic form.

- a. Not later than 15 Business Days after receipt of the final interconnection related agreement, Project Developer or Eligible Customer shall either:
  - i. execute the final interconnection related service agreement in electronic form and return it to Transmission Provider electronically;
  - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
  - iii. request in writing that Transmission Provider file with FERC the final interconnection related service agreement in unexecuted form
    - (a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.
  - iv. and provide any required adjustments to Security.
- b. If Project Developer or Eligible Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:

- i. execute the final interconnection related agreement in electronic form and return it to Transmission Provider electronically;
  - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
  - iii. request in writing that Transmission Provider file with FERC the final interconnection related serviced agreement in unexecuted form.
    - (a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.
- 5. Parties may not proceed under such interconnection related service agreement until:
  - (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.



**Tariff, Part VII, Subpart E**  
**MISCELLANEOUS**

**Tariff, Part VII, Subpart E, section 315**  
**Assignment of Project Identifier**

- A. When an Application from a Project Developer or an Eligible Customer results in a valid New Service Request, in accordance with Tariff, Part VII, Subpart C, section 306 Transmission Provider shall confirm the assigned Project Identifier to such request. For Project Developers and Eligible Customers, the Project Identifier will indicate the applicable Cycle, and will denote a number that represents the project within the Cycle. The Project Identifier is strictly for identification purposes, and does not indicate priority within a Cycle.
- B. When an Application from a Upgrade Customer results in a valid Upgrade Request, in accordance with Tariff, Part VII, Subpart C, section 306, Transmission Provider shall confirm the assigned Request Number to such request. The Request Number will indicate the serial position and priority.

**Tariff, Part VII, Subpart E, section 316**  
**Service Below Generating Capability**

The Transmission Provider shall consider requests for Interconnection Service below the full electrical generating capability of the Generating Facility. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of determining Interconnection Facilities, Network Upgrades, and associated costs, but may be subject to other studies at the full electrical generating capability of the Generating Facility to ensure the safety and reliability of the system, with the study costs borne by the Project Developer. If after additional studies are complete, Transmission Provider determines that additional Network Upgrades are necessary, then Transmission Provider must: (i) specify which additional Network Upgrade costs are based on which studies; and (ii) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrades costs required for safety and reliability also will be borne by the Project Developer. Project Developers may be subject to additional control technologies as well as testing and validation of these technologies as set forth in the GIA. The necessary control technologies and protection systems shall be established in Tariff, Part IX, Subpart B, Schedule K (Requirements for Interconnection Service Below Full Electrical Generating Capability) of the executed, or requested to be filed unexecuted the GIA.

**Tariff, Part VII, Subpart E, section 317**  
**Behind The Meter Generation**

The following provisions shall apply with respect to Behind The Meter Generation:

A. New Service Requests

A Project Developer that desires to designate any Behind The Meter Generation, in whole or in part, as a Capacity Resource or Energy Resource must submit a New Service Request Application, a form of which is located in Tariff, Part IX, Subpart A.

B. Information Required in New Service Requests

The Project Developer must provide the information set forth in Tariff, Part VII, Subpart C, section 306.

C. Transmission Provider Determination

During the Application Review Phase of a Cycle, Transmission Provider shall determine, based on the information included in the New Service Request Application, whether the proposed project meets the definition in Tariff, Part VII, Subpart A, section 300 for Behind The Meter Generation. In the event that Transmission Provider finds that the subject project does not meet the definition of Behind The Meter Generation, it shall so notify the Project Developer during the deficiency review process pursuant to Tariff, Part VII, Subpart (Application Review rules).

D. Treatment as Energy Resource

Any portion of the capacity of Behind The Meter Generation that a Project Developer identifies in its Application as capacity that it seeks to utilize, directly or indirectly, in Wholesale Transactions, but for which the customer does not seek Capacity Resource status, shall be deemed to be an Energy Resource.

E. Operation as Capacity Resource

To the extent that a Project Developer that owns or operates generation facilities that otherwise would be classified as Behind The Meter Generation elects to operate such facilities as a Capacity Resource, the provisions of the Tariff regarding Behind The Meter Generation shall not apply to such generation facilities for the period such election is in effect.

F. Other Requirements

Behind The Meter Generation for which a New Service Request is not required under Tariff, Part VII may be subject to other interconnection-related requirements of a

Transmission Owner or Electric Distributor with which the generation facility will be interconnected.

**Tariff, Part VII, Subpart E, section 318**  
**Base Case Data**

Transmission Provider shall maintain base case power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on a password-protected website, subject to the confidentiality provisions of Tariff, Part VII, Subpart E, section 327. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent Cycle. Transmission Provider may require Project Developers or Eligible Customers and password-protected website users to sign any required confidentiality agreement(s) before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

**Tariff, Part VII, Subpart E, section 319**  
**Service on Merchant Transmission Facilities**

- A. A Transmission Project Developer that will be a Merchant Transmission Provider shall:
1. At least 90 days prior to the anticipated date of commencement of Interconnection Service under its Generator Interconnection Agreement, provide the Transmission Provider with terms and conditions for reservation, interruption and curtailment priorities for firm and non-firm transmission service on the Merchant Transmission Provider's Merchant Transmission Facilities. Such terms and conditions shall be non-discriminatory and shall be consistent with the terms of the Commission's approval of the Merchant Transmission Provider's right to charge negotiated (market-based) rates for service on its Merchant Transmission Facilities. Transmission Provider shall post such terms and conditions applicable to service on the Merchant Transmission Facilities on its OASIS and shall file them with the Commission as a separate service schedule under the Tariff, with a proposed effective date on or before the anticipated date of commencement of Interconnection Service for the affected Transmission Project Developer; and (2) at least 15 days prior to the anticipated date of commencement of Interconnection Service for Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, provide the Transmission Provider with the results of a Commission-approved process for allocation of Transmission Injection Rights and Transmission Withdrawal Rights associated with such Merchant Transmission Provider's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, and with a listing of any Transmission Injection Rights and/or Transmission Withdrawal Rights not allocated in such process. Transmission Provider shall post such information on its OASIS.
  2. Should the Merchant Transmission Provider fail to provide the Transmission Provider with the terms and conditions for service on the Merchant Transmission Provider's Merchant Transmission Facilities required under Tariff, Part VII, Subpart E, section 319(A)(1), firm and non-firm transmission service on such Merchant Transmission Facilities shall be subject to the terms and conditions regarding reservation, interruption and curtailment priorities applicable to Firm or Non-Firm Point-to-Point Transmission Service on the Transmission System.
  3. Except as otherwise provided under this Tariff, Part VII, Subpart E, section 319, transmission service on, and operation of, Merchant Transmission Facilities shall be subject to the terms and conditions (including in particular, but not limited to, those relating to Transmission Provider's authority in the event of an emergency) applicable to Transmission Service under the Tariff and the Operating Agreement.

**Tariff, Part VII, Subpart E, section 320**  
**Local Furnishing Bonds**

A. Transmission Owners That Own Facilities Financed by Local Furnishing Bonds

This provision is applicable only to a Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of Part IV or Part VI, Transmission Provider shall not be required to provide Interconnection Service to Project Developer pursuant to Part IV or Part VI if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner's facilities that would be used in providing such Interconnection Service.

B. Alternative Procedures for Requesting Interconnection Service

A Transmission Owner that believes the provision of Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner's facilities that would be used in providing such Interconnection Service, it shall so notify Transmission Provider within 30 days after the Transmission Owner receives a copy of the Project Developer's Interconnection Request. If Transmission Provider determines that the provision of Interconnection Service requested by Project Developer would jeopardize the tax-exempt status of the Transmission Owner's local furnishing bonds, it shall so advise the Project Developer within 30 days after receipt of notice of such jeopardy from the affected Transmission Owner. Project Developer thereafter may renew its request for interconnection using the process specified in Tariff, Part I, section 5.2(ii).



**Tariff, Part VII, Subpart E, section 321**  
**Internal Dispute Resolution Procedures**

Any dispute between a Transmission Customer or New Service Customer, an affected Transmission Owner, or the Transmission Provider involving transmission or interconnection service under the Tariff (excluding applications for rate changes or other changes to the Tariff which shall be presented directly to the Commission for resolution) shall be referred to a designated senior representative of each of the parties to the dispute for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within 30 days (or such other period as the parties to the dispute may agree upon) by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

A. To the extent these Internal Dispute Resolution Procedures are invoked with regard to an unpaid invoice, any additional related subsequent unpaid invoices shall be considered to be a part of the initial internal dispute invoked under this section in order to avoid multiple internal dispute claims involving the same matter.

1. If the additional related subsequent unpaid invoices arise after the determination of the initial internal dispute but no new material claims are raised, then these Internal Dispute Resolution Procedures shall not be available with regard to such additional related subsequent unpaid invoices, and the matter shall either be submitted directly to arbitration and resolved in accordance with the arbitration procedures set forth below.
2. To the extent a party repeatedly fails to pay invoices related to the same matter and subsequently invokes these Internal Dispute Resolution Procedures multiple times concerning the same matter, the Transmission Provider may refer the matter to the Federal Energy Regulatory Commission Office of Enforcement.

B. Non-Binding Dispute Resolution Procedures:

If a party has submitted a notice of dispute pursuant to Tariff, Part I, section 7.1 and the parties are unable to resolve the dispute through unassisted or assisted negotiation within the 30 days (or such other period as the parties to the dispute may agree upon) provided in that section, and the parties cannot reach mutual agreement to pursue Tariff, Part I, section 7.2 arbitration process, a party may request that Transmission Provider engage in non-binding dispute resolution pursuant to this Tariff, Part VII, Subpart E, section 321 by providing written notice to Transmission Provider. Conversely, either party may file a request for non-binding dispute resolution pursuant to this section without first seeking mutual agreement to pursue Tariff, Part I, section 7.2 arbitration process. The process in this section shall serve as an alternative to, and not a replacement of, the Tariff, Part I, section 12.2 arbitration process. Pursuant to this process, the Transmission Provider must within 30 days of receipt of the request for this non-binding dispute resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with either party. Unless otherwise agreed to by the parties, the decision-maker shall render a decision within 60 days of appointment and shall notify the parties in writing of such decision and reasons therefore.

This decision-maker shall be authorized only to interpret and apply the provisions of the Tariff and relevant service agreement and shall have no power to modify or change any provision of the Tariff or relevant service agreement in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Tariff, Part I, section 12.2 arbitration, or in a Federal Power Act, section 206 complaint. Each party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each party to the dispute.

**Tariff, Part VII, Subpart E, section 322**  
**Responsibilities of Transmission Provider and Transmission Owners**

Transmission Provider shall be responsible for the preparation of all studies required by the Tariff. Transmission Provider may contract with consultants, including the affected Transmission Owner(s), to obtain services or expertise with respect to any such study, including but not limited to (1) the need for Interconnection Facilities, Network Upgrades, and Merchant Transmission Upgrades, (2) estimates of costs and construction times required by all such studies, and (3) information regarding distribution facilities. Transmission Owner(s) shall supply such information and data reasonably required by Transmission Provider to perform its obligations under this Part VII.

**Tariff, Part VII, Subpart E, section 323**  
**Additional Upgrades**

In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a New Service Request or Upgrade Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the New Service Request or Upgrade Request, a New Service Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its New Service Request or Upgrade Request. The remaining costs shall be borne by the Transmission Owners in accordance with Operating Agreement, Schedule 6 and, subject to FERC approval, may be included in the revenue requirements of the Transmission Owners.

**Tariff, Part VII, Subpart E, section 324**  
**IDR Transfer Agreement**

A. Effect of IDR Transfer Agreement

A Project Developer may modify its cost responsibility for Network Upgrades and/or Distribution Upgrades as determined under this Tariff, Part VII, Subpart E, section 324 by submitting an IDR Transfer Agreement in accordance with Tariff, Part VII, Subpart E, section 324(B) that transfers to the Project Developer Incremental Deliverability Rights associated with Merchant Transmission Facilities. As provided in Tariff, Part VII, Subpart E, section 324(B), the Project Developer's cost responsibility shall be modified only if it elects to terminate, and Transmission Provider confirms termination of, its participation in and cost responsibility for any Network Upgrade or Distribution Upgrade.

B. IDR Transfer Agreements

1. Purpose

A Project Developer (hereafter in this Tariff, Part VII, Subpart E, section 324(B) the "Buyer Customer") may acquire Incremental Deliverability Rights assigned to another Project Developer (hereafter in this Tariff, Part VII, Subpart E, section 324(B) the "Seller Customer") by entering into an IDR Transfer Agreement with the Seller Customer. Subject to the terms of this Tariff, Part VII, Subpart E, section 324(B) the Buyer Customer may rely upon such Incremental Deliverability Rights to satisfy, in whole or in part, its responsibility for Network Upgrades and/or Distribution Upgrades otherwise necessary to accommodate the Buyer Customer's Interconnection Request.

2. Requirements

A Buyer Customer may rely upon Incremental Deliverability Rights to satisfy, in whole or in part, the deliverability requirements applicable to its Interconnection Request only if it submits to Transmission Provider an IDR Transfer Agreement executed by both the Buyer Customer and the Seller Customer and only if such agreement meets all of the following requirements:

a. Required Elements

Any IDR Transfer Agreement submitted to Transmission Provider under this section:

- i. shall identify the Buyer Customer and the Seller Customer by full legal name, including the name of a contact person, with address and telephone number, for each party;

- ii. shall identify the System Impact Study in which the Transmission Provider determined and assigned the Incremental Deliverability Rights transferred under the agreement;
- iii. if the Seller Customer acquired the Incremental Deliverability Rights to be transferred under the proffered agreement from another party, shall describe the chain of title of such Incremental Deliverability Rights from their original holder to the Seller Customer;
- iv. shall provide for the unconditional and irrevocable transfer of the subject Incremental Deliverability Rights to the Buyer Customer;
- v. shall include a warranty of the Seller Customer to the Buyer Customer and to the Transmission Provider that the Seller Customer holds, or has a legal right to acquire, the Incremental Deliverability Rights to be transferred under the proffered agreement;
- vi. shall identify the location and shall state unequivocally the quantity of Incremental Deliverability Rights transferred under the agreement, provided that the transferred quantity may not exceed the total quantity of Incremental Deliverability Rights that the Seller Customer holds or has legal rights to acquire at the relevant location; and
- vii. shall identify any IDR Transfer Agreement under which the Seller Customer previously transferred any Incremental Deliverability Rights associated with the same location.

b. Optional Election

When it submits the IDR Transfer Agreement to Transmission Provider, the Buyer Customer also (a) may identify any Network Upgrade or Distribution Upgrade for which the Buyer Customer has been assigned cost responsibility in association with a then-pending Interconnection Request submitted by it and for which it believes the Incremental Deliverability Rights transferred to it under the proffered IDR Transfer Agreement would satisfy the deliverability requirement applicable to such Interconnection Request; and (b) shall state whether it chooses to terminate its participation in (and cost responsibility for) any such Network Upgrade or Distribution Upgrade.

3. Subsequent Election

A Buyer Customer that has submitted a valid IDR Transfer Agreement may elect to terminate its participation in any Network Upgrade or Distribution Upgrade for

which it has not previously made such an election, at any time prior to its execution of an Interconnection Service Agreement related to the Interconnection Request with respect to which it was assigned responsibility for the affected facility or upgrade. The Buyer Customer must notify Transmission Provider in writing of such an election and its election shall be subject to Transmission Provider's determination and confirmation under Tariff, Part VII, Subpart E, section 324(B).

4. Confirmation by Transmission Provider:

- a. Transmission Provider shall determine whether and to what extent the Incremental Deliverability Rights transferred under an IDR Transfer Agreement would satisfy the deliverability requirements applicable to the Buyer Customer's Interconnection Request. Transmission Provider shall notify the parties to the IDR Transfer Agreement of its determination within 30 days after receipt of the agreement. If the Transmission Provider determines that the IDRs transferred under the proffered agreement would not satisfy, in whole or in part, the deliverability requirement applicable to the Buyer Customer's Interconnection Request, its notice to the parties shall explain the reasons for its determination and, to the extent of Transmission Provider's negative determination, the parties' IDR Transfer Agreement shall not be queued as an Interconnection Request pursuant to Tariff, Part VII, Subpart E, section 324. Any dispute regarding Transmission Provider's determination may be submitted to dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5.
- b. To the extent that an election of the Buyer Customer under Tariff, Part VII, Subpart E, sections 324(B)(2)(b) and 324(B)(3) to terminate participation in any Network Upgrade or Distribution Upgrade is consistent with Transmission Provider's determination, Transmission Provider shall confirm Buyer's termination election and shall recalculate accordingly the Buyer Customer's cost responsibility under Tariff, Part VII, Subpart D, section 307(A)(5), as applicable. Transmission Provider shall provide its confirmation, along with any recalculation of cost responsibility, under this section in writing to the Buyer Customer within 30 days after receipt of notice of the Buyer Customer's election to terminate participation.

5. Effect of Election on Interconnection Request

In the event that the Buyer Customer, pursuant to a confirmed election under this section 324(B), terminates its participation in any Network Upgrade or Distribution Upgrade and the Interconnection Request underlying the Incremental Deliverability Rights acquired by the Buyer Customer under its IDR Transfer Agreement subsequently is terminated and withdrawn, or deemed to be so, then the Buyer Customer's New Service Request also shall be deemed to be concurrently terminated and withdrawn.

6. Effect on Interconnection Studies

Each IDR Transfer Agreement shall be deemed to be a New Service Request and shall be queued, and shall be reflected as appropriate in subsequent System Impact Studies, with other New Service Requests received under the Tariff. The Buyer Customer shall be the Project Developer for purposes of application of the provisions of Tariff, Part VII, including, in the event that Transmission Provider determines that further analysis of the relevant IDRs is necessary, provisions relating to responsibility for the costs of Interconnection Studies.



**Tariff, Part VII, Subpart E, section 325**  
**Regional Transmission Expansion Plan**

- A. Any Interconnection Facilities, Direct Assignment Facilities, Distribution Upgrades, or Network Upgrades constructed to accommodate a New Service Request or an Affected System facility shall be included in the Regional Transmission Expansion Plan upon their identification in an interconnection-related agreement in the form set forth in Tariff, Part IX. For purposes of this Part VII, Subpart E, section 325, an Affected System facility is a facility, that in the event that interconnection of a new or expanded generation or transmission facility with an Affected System, requires Distribution Upgrades or Network Upgrades to the Transmission Provider's Transmission System.
- B. In the event that termination of a New Service Customer's participation in a previously identified Network Upgrade or Distribution Upgrade pursuant to Tariff, Part VII, Subpart E, section 324, eliminates the need for such upgrade, Transmission Provider shall offer all New Service Customers whose New Service Requests preceded the IDR Transfer Agreement that facilitated such termination an opportunity to pursue and pay for (in whole or in part) such upgrade.
- C. Transmission Provider shall remove from the Regional Transmission Expansion Plan any Network Upgrade or Distribution Upgrade in the event that the need for such upgrade is eliminated due to termination of a New Service Customer's participation in such upgrade and other New Service Customers do not pursue and pay for the upgrade pursuant to Tariff, Part VII, Subpart E, section 325(B).

**Tariff, Part VII, Subpart E, section 326**  
**Transmission Owner Construction Obligation for Necessary Facilities and Upgrades**

A. Construction Obligation

The determination of the Transmission Owners' obligations to build the necessary facilities and upgrades to accommodate New Service Requests, or interconnections with Affected Systems in accordance with Tariff, Part VII, Subpart G, section 336, shall be made in the same manner as such responsibilities are determined under Operating Agreement, Schedule 6. Except to the extent otherwise provided in a Generation Interconnection Agreement or Construction Service Agreement entered into pursuant to this Tariff, Part VII, the Transmission Owners shall own all Interconnection Facilities and Network Upgrades constructed to accommodate New Service Requests.

B. Alternative Facilities and Upgrades

Upon completion of the studies of a New Service Request or Upgrade Request prescribed in the Tariff, the Transmission Provider shall recommend the necessary facilities and upgrades to accommodate the New Service Request or Upgrade Request, and the Transmission Owner's construction obligation to build such facilities and upgrades. The Transmission Owner(s), or the Project Developer, Eligible Customer or Upgrade Customer, may offer alternatives to the Transmission Provider's recommendation. If, based upon its review of the relative costs and benefits, the ability of the alternative(s) to accommodate the New Service Request or Upgrade Request, and the alternative's(s') impact on the reliability of the Transmission System, the Transmission Provider does not adopt such alternative(s), the Transmission Owner(s), or the Project Developer, Eligible Customer, or Upgrade Customer, may require that the alternative(s) be submitted to Dispute Resolution in accordance with Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. The affected Project Developer, Eligible Customer, Upgrade Customer may participate in any such Dispute Resolution process.

## **Tariff, Part VII, Subpart E, section 327**

### **Confidentiality**

Except as otherwise provided in this Tariff, Part VII, Subpart E, section 327, all information provided to Transmission Provider by Project Developers, Eligible Customers, or Upgrade Customers relating to any study of a New Service Request or Upgrade Request, required under the Tariff shall be deemed Confidential Information under Tariff, Part VII, Subpart E, section 327(A). Upon completion of each study, the study will be listed on Transmission Provider's website and, to the extent required by Commission regulations, will be made publicly available upon request. To the extent that Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of any of the studies required under the Tariff, the consultants and/or Transmission Owner(s) shall keep all information provided by Project Developers confidential, and shall use such information solely for the purpose of the study for which it was provided and for no other purpose.

#### **A. Confidential Information**

For purposes of this Tariff, Part VII, Subpart E, section 327(A), the term "party" refers to Project Developer, Eligible Customer, Upgrade Customer, Transmission Provider, or a Transmission Owner, as applicable, and the term "parties" refers to all such entities collectively, or to any two or more of them, as the context indicates. Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the party providing the information orally informs the party receiving the information that the information is confidential. If requested by any party, the disclosing party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting party may disclose such writing to an appropriate Governmental Authority. Any party shall be responsible for the costs associated with affording confidential treatment to its information.

##### **1. Term**

During the longest of the terms of (as and to the extent applicable) interconnection-related service agreement set forth in Tariff, Part IX and for a period of three years after the expiration or termination thereof, and except as otherwise provided in this Tariff, Part VII, Subpart E, section 327(A), each party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other party.

##### **2. Scope**

Confidential Information shall not include information that the receiving party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving party; (ii) was in the lawful possession of the receiving party on a non-confidential basis before receiving it from the disclosing party; (iii) was supplied to the receiving party without restriction by a third party, who, to the

knowledge of the receiving party, after due inquiry, was under no obligation to the disclosing party to keep such information confidential; (iv) was independently developed by the receiving party without reference to Confidential Information of the disclosing party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving party or breach of the requirements of this Tariff, Part VII, Subpart E, section 327(A); or (vi) is required, in accordance with Tariff, Part VII, Subpart E, section 327(A)(7) below, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Tariff or any agreement entered into pursuant thereto. Information designated as Confidential Information shall no longer be deemed confidential if the party that designated the information as confidential notifies the other parties that it no longer is confidential.

3. Release of Confidential Information

No party shall disclose Confidential Information to any other person, except to its Affiliates (limited by the Commission's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be, or may be considering, providing financing to or equity participation in Project Developer, Eligible Customer, or Upgrade Customer, or to potential purchasers or assignees of Project Developer, Eligible Customer, or Upgrade Customer, on a need-to-know basis in connection with the interconnected-related service agreement, unless such person has first been advised of the confidentiality provisions of this Tariff, Part VII, Subpart E, section 327(A) and has agreed to comply with such provisions. Notwithstanding the foregoing, a party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Tariff, Part VII, Subpart E, section 327(A).

4. Rights

Each party retains all rights, title, and interest in the Confidential Information that it discloses to any other party. A party's disclosure to another party of Confidential Information shall not be deemed a waiver by any party or any other person or entity of the right to protect the Confidential Information from public disclosure.

5. No Warranties

By providing Confidential Information, no party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no party obligates itself to provide any particular information or Confidential Information to any other party nor to enter into any further agreements or proceed with any other relationship or joint venture.

6. Standard of Care

Each party shall use at least the same standard of care to protect Confidential Information it receives as the party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each party may use Confidential Information solely to fulfill its obligations to the other parties under this Tariff, Part VII or any agreement entered into pursuant to this Tariff, Part VII.

7. Order of Disclosure

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that party shall provide the party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing party may seek an appropriate protective order or waive compliance with the terms of this Tariff, Part VII or any applicable agreement entered into pursuant to this Tariff, Part VII. Notwithstanding the absence of a protective order or agreement, or waiver, the party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the party is legally compelled to disclose. Each party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

8. Termination of Agreement(s)

Upon termination of any agreement entered into pursuant to this Tariff, Part VII for any reason, each party shall, within 10 calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

9. Disclosure to FERC or its Staff

Notwithstanding anything in this Tariff, Part VII, Subpart E, section 327(A) to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the parties that is otherwise required to be maintained in confidence pursuant to this Tariff, Part VII or any agreement entered into pursuant to this Tariff, Part VII, the party receiving such request shall provide the requested information to FERC or its staff within the time provided for in the request for information.

In providing the information to FERC or its staff, the party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other parties prior to the release of the Confidential Information to the Commission or its staff. A party shall

notify the other party(ies) to any agreement entered into pursuant to this Tariff, Part VII when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

10. Other Disclosures

Subject to the exception in Tariff, Part VII, Subpart E, section 327(A)(9), no party shall disclose Confidential Information of another party to any person not employed or retained by the disclosing party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing party to be required in connection with a dispute between or among the parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Tariff, Part VII or any agreement entered into pursuant to this Tariff, Part VII, or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another party's Confidential Information under this Tariff, Part VII, Subpart E, section 327(A)(10), the disclosing party shall promptly notify the other parties in writing and shall assert confidentiality and cooperate with the other parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order, or other reasonable measures.

11. Information in Public Domain

This confidentiality provision shall not apply to any information that was or is hereafter in the public domain, except as a result of a breach of this confidentiality provision.

12. Return or Destruction of Confidential Information

If a party provides any Confidential Information to another party in the course of an audit or inspection, the providing party may request the other party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other party that it has complied with such request.

**Tariff, Part VII, Subpart E, section 328**  
**Capacity Interconnection Rights**

A. Purpose

Capacity Interconnection Rights shall entitle the holder to deliver the output of a Generation Capacity Resource at the bus where the Generation Capacity Resource interconnects to the Transmission System. The Transmission Provider shall plan the enhancement and expansion of the Transmission System in accordance with Operating Agreement, Schedule 6 such that the holder of Capacity Interconnection Rights can integrate its Capacity Resources in a manner comparable to that in which each Transmission Owner integrates its Capacity Resources to serve its Native Load Customers.

B. Receipt of Capacity Interconnection Rights

Generation accredited under the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA") as a Generation Capacity Resource prior to the original effective date of Tariff, Part IV shall have Capacity Interconnection Rights commensurate with the size in megawatts of the accredited generation. When a Generation Project Developer's generation is accredited as deliverable through the applicable procedures of the Tariff, the Generation Project Developer also shall receive Capacity Interconnection Rights commensurate with the size in megawatts of the generation as identified in the Generation Interconnection Agreement. Pursuant to the applicable terms of RAA, Schedule 10, a Transmission Project Developer may combine Incremental Deliverability Rights associated with Merchant Transmission Facilities with generation capacity that is not otherwise accredited as a Generation Capacity Resource for the purposes of obtaining accreditation of such generation as a Generation Capacity Resource and associated Capacity Interconnection Rights.

C. Loss of Capacity Interconnection Rights

1. Operational Standards

To retain Capacity Interconnection Rights, the Generation Capacity Resource associated with the rights must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with RAA, Schedule 9 and the PJM Manuals. Generation Capacity Resources that meet these operational standards shall retain their Capacity Interconnection Rights regardless of whether they are available as a Generation Capacity Resource or are making sales outside the PJM Region.

2. Failure to Meet Operational Standards

This Tariff, Part VII, Subpart E, section 328 shall apply only in circumstances other than Deactivation of a Generation Capacity Resource. In the event a Generation Capacity Resource fails to meet the operational standards set forth in Tariff, Part

VII, Subpart E, section 328(C)(1) for any consecutive three-year period (with the first such period commencing on the date Generation Project Developer must demonstrate commercial operation of the generating unit(s) as specified in the Generation Interconnection Agreement), the holder of the Capacity Interconnection Rights associated with such Generation Capacity Resource will lose its Capacity Interconnection Rights in an amount commensurate with the loss of generating capability. Any period during which the Generation Capacity Resource fails to meet the standards set forth in Tariff, Part VII, Subpart E, section 328(C)(1) as a result of an event that meets the standards of a Force Majeure event as defined in Tariff, Part I, section 1 shall be excluded from such consecutive three-year period, provided that the holder of the Capacity Interconnection Rights exercises due diligence to remedy the event. A Generation Capacity Resource that loses Capacity Interconnection Rights pursuant to this section may continue Interconnection Service, to the extent of such lost rights, as an Energy Resource in accordance with (and for the remaining term of) its Generation Interconnection Agreement and/or applicable terms of the Tariff.

### 3. Replacement of Generation

In the event of the Deactivation of a Generation Capacity Resource (in accordance with Tariff, Part V and any Applicable Standards), or removal of Capacity Resource status (in accordance with Tariff, Attachment DD, section 6.6 or Tariff, Attachment DD, section 6.6A), any Capacity Interconnection Rights associated with such Generating Facility shall terminate one year from the Deactivation Date, or one year from the date the Capacity Resource status change takes effect, unless the holder of such rights (including any holder that acquired the rights after Deactivation or removal of Capacity Resource status) has submitted a completed Generation Interconnection Request up to one year after the Deactivation Date, or up to one year from the date the Capacity Resource status changes take effect, which claims the same Capacity Interconnection Rights in accordance with Tariff, Part VII, Subpart C, section 306(D). A Generation Project Developer must submit any claim for Capacity Interconnection Rights from deactivating units concurrently with its Application for Interconnection Service, and the claim must be received by Transmission Provider prior to the Application Deadline, or Transmission Provider will not process the claim. Such new Generation Interconnection Request may include a request to increase Capacity Interconnection Rights in addition to the replacement of the previously deactivated amount, or amount removed from Capacity Resource status, as a single Generation Interconnection Request. Transmission Provider may perform thermal, short circuit, and/or stability studies, as necessary and in accordance with the PJM Manuals, due to any changes in the electrical characteristics of any newly proposed equipment, or where there is a change in Point of Interconnection, which may result in the loss of a portion or all of the Capacity Interconnection Rights as determined by such studies.

Upon execution of a Generation Interconnection Agreement reflecting its new Generation Interconnection Request, the holder of the Capacity Interconnection



Rights will retain only such rights that are commensurate with the size in megawatts of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights associated with the facility upon Deactivation or removal of Capacity Resource status. Any desired increase in Capacity Interconnection Rights must be reflected in the new Generation Interconnection Request and be accredited through the applicable procedures in Tariff, Part IV and Tariff, Part VI. In the event the new Generation Interconnection Request to which this section refers is, or is deemed to be, terminated and/or withdrawn for any reason at any time, the pertinent Capacity Interconnection Rights shall not terminate until the end of the one-year period from the Deactivation Date, or the end of the one year period from the date the Capacity Resource status change takes effect.

4. Transfer of Capacity Interconnection Rights

Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by Transmission Provider regarding such transfer and notice to Transmission Provider of any Generating Facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in Tariff, Part VII, Subpart E, section 328(C) regarding loss of Capacity Interconnection Rights.

**Tariff, Part VII, Subpart E, section 329**  
**Incremental Rights**

A. Incremental Auction Revenue Rights

1. Right of Transmission Project Developer or Upgrade Customer to Incremental Auction Revenue Rights

A Transmission Project Developer or Upgrade Customer that (a) pursuant to this Tariff, Part VII reimburses Transmission Provider for the costs of constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, shall be entitled to receive the Incremental Auction Revenue Rights as determined in accordance with this Tariff, Part VII, Subpart E, section 329(A). However, a Transmission Project Developer that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System shall be entitled to Incremental Auction Revenue Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Transmission Project Developer has elected, pursuant to Tariff, Part VII, Subpart E, section 330 to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

2. Procedures for Assigning Incremental Auction Revenue Rights

No less than 45 days prior to the in-service date, as determined by the Office of the Interconnection, of the applicable transmission facility or upgrade related to a New Service Request or Upgrade Request, the Office of the Interconnection shall notify the Transmission Project Developer or Upgrade Customer that has responsibility to reimburse the costs of, or responsibility for, constructing or completing the transmission facility or upgrade, that initial requests for Incremental Auction Revenue Rights associated with the transmission facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with Tariff, Part VII, Subpart E, section 329(A)(3).

In round two, two-thirds of the Incremental Auction Revenue Rights available for each requested point-to-point combination in that round will be assigned in accordance with Tariff, Part VII, Subpart E, section 329(A)(3). In round three, all

available Incremental Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with Tariff, Part VII, Subpart E, section 329(A)(3). In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental Auction Revenue Rights assignment in rounds one and two will result in the Incremental Auction Revenue Rights being available for the next round. The Incremental Auction Revenue Rights assignments made in round three will be final and binding. For each round, a request for Incremental Auction Revenue Rights shall specify a single point-to-point combination for which the Transmission Project Developer or Upgrade Customer desires Incremental Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the upgrade.

3. Determination of Incremental Auction Revenue Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Auction Revenue Rights to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VII, Subpart E, section 329(A)(2) using the tools described in Tariff, Attachment K, including an assessment of the simultaneous feasibility of any Incremental Auction Revenue Rights and all other outstanding Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system Auction Revenue Rights capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate New Service Requests or Upgrade Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the Auction Revenue Rights capability, including the impact of any new transmission facilities or upgrades. For each point-to-point combination, the Incremental Auction Revenue Rights capability shall be the difference between the Auction Revenue Rights capability in the base system analysis and the Auction Revenue Rights capability in the analysis including the impact of the new transmission facilities and upgrades. When multiple Transmission Project Developers or Upgrade Customers have cost responsibility for the same new transmission facility or upgrade, Incremental Auction Revenue Rights shall be assigned to each Transmission Project Developer or Upgrade Customer in proportion to the Transmission Project Developer's or Upgrade Customer's relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or

interfaces of the point-to-point combinations selected by the Transmission Project Developer or Upgrade Customer.

4. Duration of Incremental Auction Revenue Rights

Incremental Auction Revenue Rights received by a Transmission Project Developer or Upgrade Customer pursuant to this Tariff, Part VII, Subpart E, section 329(A) shall be available as of the first day of the first month that the Network Upgrades required to accommodate its New Service Request or Upgrade Request that are associated with the Incremental Auction Revenue Rights are included in the transmission system model for the monthly FTR auction and shall continue to be available for 30 years or for the life of the associated facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all Auction Revenue Rights (including Incremental Auction Revenue Rights) in accordance with Tariff, Attachment K - Appendix. At any time during this 30-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this 30-year Auction Revenue Right, the Transmission Project Developer or Upgrade Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the Transmission Project Developer or Upgrade Customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to Tariff, Attachment K – Appendix, section 7.4.2) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to Tariff, Attachment K – Appendix, section 7.5. A Transmission Project Developer or Upgrade Customer may return Incremental Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding Auction Revenue Rights following the return of such Auction Revenue Rights. In the event a Transmission Project Developer or Upgrade Customer returns Incremental Auction Revenue Rights, the Transmission Project Developer or Upgrade Customer shall have no further rights regarding such Incremental Auction Revenue Rights.

5. Value of Incremental Auction Revenue Rights

The value of Incremental Auction Revenue Right(s) to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VII, Subpart E, section 329(A)(2) that become effective at the beginning of a Planning Period shall be determined in the same manner as annually allocated Auction Revenue Right(s) based on the nodal prices resulting from the annual Financial Transmission Rights auction. The value of such Incremental Auction Revenue Rights that become effective after the commencement of a Planning Period shall be determined on a monthly basis for each month in the Planning Period beginning with the month the Incremental Auction Revenue Right(s) becomes effective. The value of such Incremental Auction Revenue Right shall be equal to the megawatt amount of the Incremental Auction Revenue Rights multiplied by the LMP differential between

the source and sink nodes of the corresponding FTR obligations in each prompt-month FTR auction that occurs from the effective date of the Incremental Auction Revenue Rights through the end of the relevant Planning Period. For each Planning Period thereafter, the value of such Incremental Auction Revenue Rights shall be determined in the same manner as Incremental Auction Revenue Rights that became effective at the beginning of a Planning Period.

6. Rate-based Facilities

No Incremental Auction Revenue Rights shall be received by a Transmission Project Developer, Eligible Customer, or Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

B. Incremental Capacity Transfer Rights

1. Right of Transmission Project Developer or Upgrade Customer to Incremental Capacity Transfer Rights

A Transmission Project Developer that interconnects Merchant Transmission Facilities with the Transmission System shall be entitled to receive any Incremental Capacity Transfer Rights that are associated with the interconnection of such Merchant Transmission Facilities as determined in accordance with this Tariff, Part VII, Subpart E, section 329(B). In addition, an Upgrade Customer that (a) reimburses Transmission Provider for the costs of constructing or completing Customer-Funded Upgrades, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Customer-Funded Upgrades shall be entitled to receive any Incremental Capacity Transfer Rights associated with such required facilities and upgrades as determined in accordance with this Tariff, Part VII, Subpart E, section 329(B).

a. Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities

A Transmission Project Developer (a) that interconnects Merchant D.C. transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Capacity Transfer Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under Tariff, Attachment C.

2. Procedures for Assigning Incremental Capacity Transfer Rights

After execution of a Study Agreement but prior to the issuance of an Interconnection Agreement or Upgrade Construction Service Agreement, a Transmission Project Developer or Upgrade Customer may request the Office of the Interconnection to determine the Incremental Capacity Transfer Rights as measured by the increase in Capacity Emergency Transfer Limit resulting from the interconnection or addition of Merchant Transmission Facilities or a Customer-Funded Upgrade identified in the System Impact Study for the related New Service Request. At the time of such request, the Transmission Project Developer or Upgrade Customer must also specify no more than three Locational Deliverability Areas in which to determine the Incremental Capacity Transfer Rights. Subject to the limitation of Tariff, Part VII, Subpart E, section 329(B)(1)(a), the Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with Merchant Transmission Facilities to the Transmission Project Developer that is interconnecting such facilities. The Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with a Customer-Funded Upgrade to the Upgrade Customer(s) bearing cost responsibility for such facility or upgrade in proportion to each Upgrade Customer's cost responsibility for the facility or upgrade.

3. Determination of Incremental Capacity Transfer Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Capacity Transfer Rights to be provided to Transmission Project Developers or Upgrade Customers in accordance with the applicable terms of the Reliability Pricing Model, in Tariff, Attachment DD, and pursuant to the procedures specified in the PJM Manuals.

4. Duration of Incremental Capacity Transfer Rights

Incremental Capacity Transfer Rights received by a Transmission Project Developer or Upgrade Customer shall be effective for 30 years from, as applicable, commencement of Interconnection Service, Transmission Service, or Network Service for the affected Transmission Project Developer or Upgrade Customer or the life of the pertinent facility or upgrade, whichever is shorter, subject to any subsequent pro-rata reallocations of all Capacity Transfer Rights (including Incremental Capacity Transfer Rights) in accordance with the PJM Manuals.

5. Rate-based Facilities

No Incremental Capacity Transfer Rights shall be received by a Transmission Project Developer or Upgrade Customer with respect to transmission investment

that is included in the rate base of a public utility and on which a regulated return is earned.

C. Incremental Deliverability Rights

1. Right of Transmission Interconnection Customer to Incremental Deliverability Rights

A Transmission Project Developer shall be entitled to receive the Incremental Deliverability Rights associated with its Merchant Transmission Facilities as determined in accordance with this section, provided, however, that a Transmission Project Developer that proposes to interconnect Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area shall be entitled to Incremental Deliverability Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to Tariff, Part VII, Subpart E, section 330, to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

2. Procedures for Assigning Incremental Deliverability Rights

Transmission Provider shall include in the System Impact Study a determination of the Incremental Deliverability Rights associated with the Transmission Project Developer's Merchant Transmission Facilities. Transmission Provider shall post on its OASIS the Incremental Deliverability Rights that it assigns to the Transmission Project Developer under this section 329(C)(2).

3. Determination of Incremental Deliverability Rights to be Provided to Transmission Project Developer

Transmission Provider shall determine the Incremental Deliverability Rights to be provided to a Transmission Project Developer associated with proposed Merchant Transmission Facilities under Tariff, Part VII, Subpart E, section 329(C)(2) pursuant to procedures specified in the PJM Manuals.

4. Duration of Incremental Deliverability Rights

Incremental Deliverability Rights assigned to a Transmission Project Developer shall be effective until the earlier of the date that is one year after the commencement of Interconnection Service for such customer or the date that such Transmission Project Developer's New Service Request is withdrawn and terminated, or deemed to be so, in accordance with the Tariff. Notwithstanding the preceding sentence, Incremental Deliverability Rights that are transferred pursuant to an IDR Transfer Agreement under the Tariff shall be deemed to be Capacity

Interconnection Rights of the generation owner that acquires them under such agreement upon commencement of Interconnection Service related to the generation owner's Generating Facility and shall remain effective for the life of such Generating Facility, or for the life of the Merchant Transmission Facilities associated with the transferred IDRs, whichever is shorter. The deemed conversion of IDRs to Capacity Interconnection Rights under this Tariff, Part VII, Subpart E, section 329(C)(4) shall not affect application to such IDRs of the other provisions of this Tariff, Part VII, Subpart E, section 329(C). A Transmission Project Developer may return Incremental Deliverability Rights that it no longer desires at any time. In the event that a Transmission Project developer returns Incremental Deliverability Rights, it shall have no further rights regarding such Incremental Deliverability Rights.

5. Transfer of Incremental Deliverability Rights

Incremental Deliverability Rights may be sold or otherwise transferred at any time after they are assigned pursuant to Tariff, Part VII, Subpart E, section 329(C)(2), subject to execution and submission of an IDR Transfer Agreement in accordance with the Tariff. The transfer of Incremental Deliverability Rights shall not itself extend the periods set forth in Tariff, Part VII, Subpart E, section 329(C)(7) regarding loss of Incremental Deliverability Rights.

6. Effectiveness of Incremental Deliverability Rights

Incremental Deliverability Rights shall not entitle the holder thereof to use the capability associated with such rights unless and until Transmission Provider commences Interconnection Service related to the Merchant Transmission Facilities associated with such rights.

7. Loss of Incremental Deliverability Rights

Incremental Deliverability Rights shall be extinguished (a) in the event that the New Service Request of the Transmission Project Developer to which the rights were assigned is withdrawn and terminated, or deemed to be so, as provided in the Tariff, without regard for whether the rights have been transferred pursuant to an IDR Transfer Agreement, or (b) such rights are not transferred pursuant to an IDR Transfer Agreement on or before the date that is one year after the commencement of Interconnection Service related to the Merchant Transmission Facilities with which the rights are associated.

8. Rate-based Facilities

No Incremental Deliverability Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.



**Tariff, Part VII, Subpart E, section 330**  
**Rights for Transmission Interconnections**

A. Transmission Injection Rights and Transmission Withdrawal Rights

1. Purpose

Transmission Injection Rights shall entitle the holder, as provided in this Tariff, Part VII, Subpart E, section 330, to schedule energy transmitted on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities for injection into the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System. Transmission Withdrawal Rights shall entitle the holder, as provided in this Tariff, Part VII, Subpart E, section 330, to schedule for transmission on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities energy to be withdrawn from the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System.

2. Receipt of Transmission Injection Rights and Transmission Withdrawal Rights

Subject to the terms of this section 330, a Transmission Project Developer that constructs Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with the Transmission System and with another control area outside the PJM Region shall be entitled to receive Transmission Injection Rights and/or Transmission Withdrawal Rights at each terminal where such Transmission Project Developer's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. A Transmission Project Developer that is granted Firm Transmission Withdrawal Rights and/or transmission service customers that have a Point of Delivery at the border of the PJM Region where the Transmission System interconnects with the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, may be responsible for a reasonable allocation of transmission upgrade costs added to the Regional Transmission Expansion Plan, in accordance with Tariff, Part I, section 3E and Tariff, Schedule 12. Notwithstanding the foregoing, any Transmission Injection Rights and Transmission Withdrawal Rights awarded to a Transmission Project Developer that interconnects Controllable A.C. Merchant Transmission Facilities shall be, throughout the duration of the Service Agreement applicable to such interconnection, conditioned on such Transmission Project Developer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

a. Total Capability

A Transmission Project Developer or other party may hold Transmission Injection Rights and Transmission Withdrawal Rights simultaneously at the same terminal on the Transmission System. However, neither the aggregate Transmission Injection Rights nor the aggregate Transmission Withdrawal Rights held at a terminal may exceed the Nominal Rated Capability of the interconnected Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, as stated in the associated Service Agreement(s).

3. Determination of Transmission Injection Rights and Transmission Withdrawal Rights to be Provided to Transmission Project Developer

The Office of the Interconnection shall determine the Transmission Injection Rights and the Transmission Withdrawal Rights associated with Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities to be provided to eligible Transmission Project Developer(s) pursuant to the procedures specified in the PJM Manuals. The Office of the Interconnection shall state in the System Impact Studies the Transmission Injection Rights and Transmission Withdrawal Rights (including the quantity of each type of such rights) to be made available to the Transmission Project Developer at the terminal(s) where the pertinent Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. Such rights shall become available to the Transmission Project Developer pursuant to the Interconnection Agreement and upon commencement of Interconnection Service thereunder.

4. Duration of Transmission Injection Rights and Transmission Withdrawal Rights

Subject to the terms of Tariff, Part VII, Subpart E, section 330(A)(7), Transmission Injection Rights and/or Transmission Withdrawal Rights received by a Transmission Project Developer shall be effective for the life of the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities.

5. Rate-based Facilities

No Transmission Injection Rights or Transmission Withdrawal Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

6. Transfer of Transmission Injection Rights and Transmission Withdrawal Rights

Transmission Injection Rights and/or Transmission Withdrawal Rights may be sold or otherwise transferred subject to compliance with such procedures as

Transmission Provider may establish, by publication in the PJM Manuals, regarding such transfer and required notice to Transmission Provider of use of such rights after the transfer. The transfer of Transmission Injection Rights or of Transmission Withdrawal Rights shall not itself extend the periods set forth in Tariff, Part VII, Subpart E, section 330(A)(7) regarding loss of such rights.

7. Loss of Transmission Injection Rights and Transmission Withdrawal Rights

a. Operational Standards

To retain Transmission Injection Rights and Transmission Withdrawal Rights, the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with applicable criteria stated in the PJM Manuals. Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that meet these operational standards shall retain their Transmission Injection Rights and Transmission Withdrawal Rights regardless of whether they are used to transmit energy within or to points outside the PJM Region.

b. Failure to Meet Operational Standards

In the event that any Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities fail to meet the operational standards set forth in this Tariff, Part VII, Subpart E, section 330(A)(7) for any consecutive three-year period, the holder(s) of the associated Transmission Injection Rights and Transmission Withdrawal Rights will lose such rights in an amount reflecting the loss of first contingency transfer capability. Any period during which the transmission facility fails to meet the standards set forth in this Tariff, Part VII, Subpart E, section 330(A)(7) as a result of an event that meets the standards of a Force Majeure event shall be excluded from such consecutive three-year period, provided that the owner of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities exercises due diligence to remedy the event.

B. Interconnection Rights for Certain Transmission Interconnections

1. Qualification to Receive Certain Rights

In order to obtain the rights associated with Merchant Transmission Facilities (other than Merchant Network Upgrades) provided under the Tariff, prior to the commencement of Interconnection Service associated with such facilities, a Transmission Interconnection Customer that interconnects or adds Merchant Transmission Facilities (other than Merchant Network Upgrades) to the

Transmission System must become and remain a signatory to the Consolidated Transmission Owners Agreement.

2. Upgrades to Merchant Transmission Facilities

In the event that Transmission Provider determines in accordance with the Regional Transmission Expansion Planning Protocol of Operating Agreement, Schedule 6 that an addition or upgrade to Merchant A.C. Transmission Facilities is necessary, the owner of such Merchant A.C. Transmission Facilities shall undertake such addition or upgrade and shall operate and maintain all facilities so constructed or installed in accordance with Good Utility Practice and with applicable terms of the Operating Agreement and the Consolidated Transmission Owners Agreement, as applicable. Cost responsibility for each such addition or upgrade shall be assigned in accordance with Operating Agreement, Schedule 6. Each Transmission Owner to whom cost responsibility for such an upgrade is assigned shall further be responsible for all costs of operating and maintaining the addition or upgrade in proportion to its respective assigned cost responsibilities.

3. Limited Duration of Rights in Certain Cases

Notwithstanding any other provision of this Tariff, Part VII, Subpart E, section 330, in the case of any Merchant Transmission Facilities that solely involves advancing the construction of a transmission enhancement or expansion other than a Merchant Transmission Facility that is included in the Regional Transmission Expansion Plan, any rights available to such facility under this Tariff, Part VII, Subpart E, section 330 shall be limited in duration to the period from the inception of Interconnection Service for the affected Merchant Transmission Facilities until the time when the Regional Transmission Expansion Plan originally provided for the pertinent transmission enhancement or expansion to be completed.

**Tariff, Part VII, Subpart E, section 331**  
**Milestones**

- A. In order to proceed with Generation Interconnection Agreement, within 60 days after receipt of the Phase III System Impact Study (or, if no Phase III System Impact Study was required, then after the results of either the Phase I or Phase II System Impact Study were provided on Transmission Provider's website):
1. Project Developer must demonstrate that it has:
    - a. entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; and
    - b. obtained any necessary local, county, and state site permits; and
    - c. signed a memorandum of understanding for the acquisition of major equipment; and
    - d. if applicable, obtained any necessary local, county, and state siting permits or other required approvals for the construction of its proposed Merchant D.C. Transmission Facilities or Merchant Controllable A.C. Transmission Facilities.
- B. The Transmission Provider may include any additional related milestone dates beyond those included in Tariff, Part IX, Subpart B in the Generation Interconnection Agreement for the construction of the project Developer's generation project that, if not met, shall relieve the Transmission Provider and the Transmission Owner(s) from the requirement to construct the necessary facilities and upgrades.
1. If the milestone dates in the Generation Interconnection Agreement are not met, such Generation Interconnection Agreement may be deemed to be terminated and Transmission Provider may cancel such agreement with the Federal Energy Regulatory Commission, and the New Service Agreement may simultaneously be deemed to be terminated and withdrawn.
  2. Such milestones may include site acquisition, permitting, regulatory certifications (if required), acquisition of any necessary third-party financial commitments, commercial operation, and similar events.
  3. The Transmission Provider may reasonably extend any such milestone dates (including those required in order to proceed with an Generation Interconnection Agreement) in the event of delays not caused by the Project Developer, such as unforeseen regulatory or construction delays that could not be remedied by the Project Developer through the exercise of due diligence.

4. The Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B, provides Project Developer shall also have a one-time option to extend any milestone (other than any milestone related to Site Control) for a total period of one year regardless of cause. Other milestone dates stated in the Generation Interconnection Agreement shall be deemed to be extended coextensively with Project Developer's use this provision.
5. Termination and withdrawal of a New Service Request for failure to meet a milestone shall not relieve the Project Developer from reimbursing the Transmission Provider (for the benefit of the affected Transmission Owner(s)) for the costs incurred prior to such termination and withdrawal. Applicable provisions of the Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the CSA or the applicable Generation Interconnection Agreement was in effect.

**Tariff, Part VII, Subpart E, section 332**  
**Winter Capacity Interconnection Rights**

By August 31 of each calendar year, PJM shall solicit requests from Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD. Such additional Capacity Interconnection Rights would be for a one-year period as specified by PJM in the solicitation. Responses to such solicitation must be submitted by such interested Generation Owners by October 31 prior to the upcoming Base Residual Auction. Such requests shall be studied for deliverability similar to any Generation Project Developer that seeks to submit a New Service Request; however, such requests shall not be required to submit a New Service Request. PJM shall study such requests in a manner so as to prevent infringement on available system capabilities of any resource which is already in service, or which has an executed service agreement from Tariff, Part IX, or that has a valid New Service Request in a Cycle.

**Tariff, Part VII, Subpart E, section 333**  
**Interconnection Studies Processing Time and Metrics**

**A. Phase I System Impact Studies Processing Time**

1. Number of New Service Requests that had Phase I System Impact Studies completed within the six month reporting period,
2. Number of New Service Requests that had Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 120 days, as determined in conformance with Tariff, Part VII, Subpart D, section 308(A)(1)(b).
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase I System Impact Studies exceeding 120 days, as determined in conformance with Tariff, Part VII, Subpart D, section 308(A)(1)(b).
4. Mean time (in days), for Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period, from the date when Transmission Provider initiated the performance of the System Impact Studies to the date when Transmission Provider provided the completed Phase I System Impact Study to Project Developers.
5. Percentage of New Service Requests with Phase I System Impact Studies exceeding 120 days as determined in conformance with Tariff, Part VII, Subpart D, section 308(A)(1)(b) to complete this six month reporting period, calculated as the sum of this section 333(A)(2) plus 333(A)(3) divided by the sum of 333(A)(1) plus 333(A)(3).

**B. Phase II System Impact Studies Processing Time**

1. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period.
2. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 310(A)(1)(e) after the date the end of Decision Point I.
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 310(A)(1)(e) after the end of Decision Point I.



4. Mean time (in days), for Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period from the day after the end of Decision Point to the date when Transmission Provider provided the completed Phase II Interconnection System Impact Study to Project Developers.
5. Percentage of New Service Requests with Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 310(A)(1)(e), to complete this six month reporting period, calculated as the sum of section 333(B)(2) plus 333(B)(3) divided by the sum of section 333(B)(1) plus 333(B)(3)).

C. Phase III System Impact Studies Processing Time

1. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period.
2. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 312(A)(1)(e) after the end of Decision Point II.
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase III System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 312(A)(1)(e) after the end of Decision Point II.
4. Mean time (in days), for Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period, from the day after the end of Decision Point II to the date when Transmission Provider provided the completed Phase III Interconnection System Impact Study to the Project Developers.
5. Percentage of New Service Requests with Phase III System Impact Studies exceeding the sum of 180 days as determined in conformance with Tariff, Part VII, Subpart D, section 312(A)(1)(e) to complete this six month reporting period, calculated as the sum of section 333(C)(2) plus 333(C)(3) divided by the sum of section 333(C)(1) plus 333(C)(3)).

D. Withdrawn New Service Requests

1. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period.

2. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period before the start of Planning Phase I.
3. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period from start of Phase I, to at or before the end of Decision Point I.
4. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point I to at or before the end of Decision Point II.
5. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point II to before execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
6. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue after execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
7. Mean time (in days), for all withdrawn New Service Requests, from the date when the request was determined to be valid to when Transmission Provider received the request to withdraw from the Cycle.

E. Posting Requirements

Transmission Provider is required to post on its website the measures in Tariff, Part VII, Subpart E, sections 333(A) through 333(D) for each six-month reporting period within 30 days of the end of the reporting period; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day. Transmission Provider will keep the measures posted on its website for three calendar years with the first required reporting year to be 2020.

F. Additional Compliance Requirements

In the event that any of the values calculated in Tariff, Part VII, Subpart E, section 333(A)(5), Tariff, Part VII, Subpart E, section 333(B)(5) or Tariff, Part VII, Subpart E, section 333(C)(5) exceeds 25 percent for two consecutive reporting periods, Transmission Provider will have to comply with the measures below for the next two six-month reporting periods and must continue reporting this information until Transmission Provider reports two consecutive six-month reporting periods without the values calculated in Tariff, Part VII, Subpart E, 333(A)(5), Tariff, Part VII, Subpart E, section 333(B)(5) or Tariff, Part VII, Subpart E, section 333(B)(5) exceeding 25 percent for two consecutive six-month reporting periods:

1. Transmission Provider must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an New Service Request that exceeded its deadline (i.e., 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the reporting period.
2. Transmission Provider shall aggregate the total number of employee hours and third party consultant hours expended towards interconnection studies within its coordinated region that reporting period and post on its website. This information is to be posted within 30 days of the end of the reporting period.

**Tariff, Part VII, Subpart E, section 334**  
**Transmission Provider Website Postings**

Transmission Provider shall maintain, on Transmission Provider's website, with regard to Project Developers, Eligible Customers and Upgrade Customers, the following:

- A. the Project Identifier;
- B. the proposed or incremental Maximum Facility Output and Capacity Interconnection Rights;
- C. the location of the project by state;
- D. the station or transmission line or lines where the interconnection will be made;
- E. the project's projected in-service date;
- F. the project's status;
- G. the type of service requested;
- H. the availability of any related studies;
- I. the type of project to be constructed.

**Tariff, Part VII, Subpart F**  
**WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL**  
**AGREEMENTS**

**Tariff, Part VII, Subpart F, section 335**  
**Wholesale Market Participation Agreement/Non-Jurisdictional Agreements**

- A. In some instances, Generation Project Developer may physically connect its Generating Facility to non-jurisdictional distribution or sub-transmission facilities in order to access the electrical Point of Interconnection on the Transmission System (the “POI”), for the purpose of engaging in FERC-jurisdictional Wholesale Transactions. In those instances, Generation Project Developer must enter into both a (1) non-jurisdictional interconnection agreement with the owner or operator of the non-jurisdictional distribution or sub-transmission facilities, which governs the physical connection of the Generating Facility to those non-jurisdictional facilities; and (2) a three-party Wholesale Market Participation Agreement (“WMPA”) with PJM and the affected Transmission Owner in order to effectuate Wholesale Transactions in PJM’s markets.
- B. Generation Project Developer shall follow the Application Rules of Tariff, Part VII, Subpart C, section 306 that apply to a Generating Facility, and shall complete the Form of Application and System Impact Studies Agreement set forth in Tariff, Part IX, Subpart A (the “Application”). In the Application, Generation Project Developer shall indicate its intent to physically connect its Generating Facility to distribution or sub-transmission facilities that currently are not subject to FERC jurisdiction, for the purpose of injecting energy at the POI and engaging in FERC-jurisdictional Wholesale Transactions.
- C. Generation Project Developer shall provide with the Application a copy of the executed interconnection agreement that governs the physical connection of the Generating Facility to the non-jurisdictional distribution or sub-transmission facilities, if the interconnection agreement is available. If the interconnection agreement is not yet available, Generation Project Developer shall provide with the Application all available documentation demonstrating that Generation Project Developer has requested or applied for interconnection through the relevant non-jurisdictional process, and Generation Project Developer shall provide a status report.
- D. In order to proceed to the execution of a WMPA, Generation Project Developer must demonstrate that it has executed the non-jurisdictional interconnection agreement by no later than Decision Point III in the applicable Cycle.

**Tariff, Part VII, Subpart G**  
**AFFECTED SYSTEM RULES**

**Tariff, Part VII, Subpart G, section 336**  
**Affected System Rules**

A. New Service Request Affected System Rules Where Affected System is an Electric System other than Transmission Provider's Transmission System

1. The Transmission Provider will coordinate with Affected System Operators the conduct of any studies required to determine the impact of a New Service Request on any Affected System and will include those results in the Phase II System Impact Study, if available from the Affected System.
  - a. The Transmission Provider will invite such Affected System Operators to participate in meetings held with the Project Developer as necessary, as determined by the Transmission Provider.
  - b. The Project Developer or Eligible Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate the New Service Request.
  - c. Transmission Provider shall contact any potential Affected System Operators and provide or otherwise coordinate information regarding each relevant New Service Request as required for the Affected System Operator's studies of the effects of such request.
  - d. If an affected system study agreement is required by the Affected System Operator, in order to remain in the relevant Cycle, Project Developer or Eligible Customer shall enter into an affected system study agreement with the Affected System Operator the later of: (i) the conclusion of Decision Point II of the relevant Cycle, or (ii) 60 days of Transmission Provider sending notification to Project Developer or Eligible Customer of the need to enter into such Affected System Study Agreement. If Project Developer or Eligible Customer fails to comply with these requirements, its New Service Request at issue shall be deemed terminated and withdrawn.
  - e. Affected System Study results will be provided by Phase II of the relevant Cycle, if available. To the extent Affected System results are included in the Phase II System Impact Study, the Project Developer shall be provided the opportunity to review such study results consistent with Tariff, Part VII, Subpart D, section 310, as applicable
  - f.
    - i. The Project Developer or Eligible Customer shall be responsible for the costs of any identified facilities commensurate with the Affected System Operator's tariff's allocation of responsibility for such costs to such Project Developer or Eligible Customer if their project



request has been initiated pursuant to such Affected System Operator's tariff.

- ii. Neither the Transmission Provider, the relevant Transmission Owner(s) associated with such New Service Request, nor the Affected System Operator shall be responsible for making arrangements for any necessary engineering, permitting, and/or construction of transmission or distribution facilities on any Affected System or for obtaining any regulatory approval for such facilities.

- (a) The Transmission Provider and the relevant Transmission Owner(s) will undertake Reasonable Efforts to assist the Project Developer or Eligible Customer in obtaining such arrangements, including, without limitation, providing any information or data required by such other Affected System Operator pursuant to Good Utility Practice.

- 2. In no event shall the need for upgrades to an Affected System delay Initial Operation of a Project Developer's Generating Facility or Merchant Transmission Facility. Notwithstanding the start of Initial Operation, Transmission Provider reserves the right to limit Generating Facility injections in the event of potential Affected System impacts, in accordance with Good Utility Practice. Total injections may be limited pending coordination and completion of any necessary deliverability studies by the Affect System Operator.

B. Affected System Rules Where Transmission Provider's Transmission System is the Affected System

- 1. An Affected System Customer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider's Transmission System must contact Transmission Provider as set forth in the PJM Manuals. Upon contact by the Affected System Customer, Transmission Provider will provide Affected System Customer with an Affected System Customer Facility Study Agreement (a form of which is found in Tariff, Part IX). The Affected System Customer must electronically sign Affected System Customer Facility Study Agreement, and concurrently provide the required Study Deposit, by wire transfer, of \$100,000.
  - a. Affected System Customer shall include the project identification or reference number assigned to the Affected System Facility by the Affected System Operator and attach the relevant Affected System Operator Study that identified the need for such Facilities Study Agreement.
    - i. Transmission Provider shall assign to Affected System Customer's project the same project identification or reference number used by the Affected System Operator.

- b. Transmission Provider shall not start the review of the Affected System Customer Facility Study Agreement until such agreement is complete and the required Study Deposit is received by the Transmission Provider.
  - c. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
    - i. Affected System Customer is responsible for, and must pay, all actual study costs.
    - ii. If Transmission Provider sends Affected System Customer notification of additional study costs, then Affected System Customer must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Affected System Customer Facility Study Agreement. If Affected System Customer fails to complete either (i) or (ii), then Transmission Provider shall deem the Affected System Customer Facility Study Agreement to be terminated and withdrawn.
- 2. Transmission Provider shall cooperate with the Affected System Operator in all matters related to the conduct of studies and the determination of modifications to Transmission Provider's Transmission System.
- 3. Upon receipt of the Affected System Customer Facility Study report, Transmission Provider and the Affected System Customer shall enter into a stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades if a Construction Service Agreement is required, or for each set of Common Use Upgrades on the system of such Transmission Owner if a Network Upgrade Cost Responsibility Agreement is required. Transmission Provider shall provide in electronic form a draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form.
  - a. For purposes of applying the stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) to the construction of such upgrades, the developer of the Affected System Facility shall be deemed to be a Project Developer pursuant to Tariff, Part VII.
  - b. Such stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) shall be negotiated and executed within 60 days of the Transmission Provider's issuance of a draft version thereof. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day. The 60 days shall run concurrently with the relevant Cycle process.

- i. Security is required within 30 days of the Transmission Provider's issuance of the draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX). The Security obligation may be adjusted based on additional factors, including, but not limited to, New Service Requests or Upgrade Requests being withdrawn in the relevant Cycle. If the 30th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
  - ii. Parties may use not more than 60 days to conduct negotiations concerning the draft Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement. Upon receipt of the draft agreement(s), Affected System Customer and Transmission Owner(s), as applicable, shall have no more than 20 Business Days to return written comments on the draft agreement(s). Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised draft(s) of the agreement(s) in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.
- c. If the Affected System Customer or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement with the FERC.
- d. Not later than 15 Business Days after receipt of the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement, Project Developer or Affected System Customer shall elect one of the following:
  - i. to execute the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form and return it to Transmission Provider electronically;
  - ii. to request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or

- iii. to request in writing that Transmission Provider file with FERC the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement unexecuted, with terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.
- e. If Affected System Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:
  - i. execute the final Construction Service Agreement in electronic form and return it to Transmission Provider electronically;
  - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
  - iii. request in writing that Transmission Provider file with FERC the final Construction Service Agreement in unexecuted form.
    - (a) The unexecuted Construction Service Agreement shall contain terms and conditions deemed appropriate by Transmission Provider.
- f. Parties may not proceed under such Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

**Tariff, Part VII, Subpart H**  
**UPGRADE REQUESTS**

**Tariff, Part VII, Subpart H, section 337**  
**Upgrade Requests**

**A. Applicability**

Tariff, Part VII Subpart H applies to valid Upgrade Requests submitted on or after October 1, 2020 and up to and including September 10, 2021, and sets forth the procedures and other terms governing the Transmission Provider's administration of Upgrade Requests for Upgrade Customers; procedures and other terms regarding studies and other processing of Upgrade Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to Upgrade Customers.

1. The Upgrade Request process applies to:
  - a. Incremental Auction Revenue Rights (IARRs) requested Pursuant to the Operating Agreement of the PJM Interconnection, L.L.C. (Operating Agreement), Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8; and
  - b. Merchant Network Upgrades that either upgrade facilities or advance existing Network Upgrades

**B. Overview**

1. Upgrade Requests are initiated by submission of a complete and executed Upgrade Application and Studies Agreement (a form of which is located in Tariff, Part IX, Subpart K).
  - a. Upgrade Requests are processed serially, in the order in which an Upgrade Request is received.
    - i. An Upgrade Request shall be assigned a Request Number.
    - ii. Priority for Upgrade Requests is determined by the Request Number assigned.
    - iii. If the Upgrade Request is withdrawn or deemed to be terminated, such Upgrade Request project shall concurrently lose its priority position and will not be included in any further studies.
  - b. Transmission Provider will use Reasonable Efforts to process an Upgrade Request within 15 months of receiving a valid Upgrade Request.
    - i. A valid Upgrade Request that completes the Upgrade Request process shall ultimately enter into an Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E)
    - ii. If the Transmission Provider is unable to process an Upgrade Request within 15 months of receiving a valid Upgrade Request, the

Transmission Provider shall notify the impacted Upgrade Customer by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete the Upgrade Request process.

2. Required Study Deposits and Readiness Deposits.

- a. Upgrade Customers must submit, by wire transfer, a \$150,000 Study Deposit together with a completed and fully executed Upgrade Request. Ten percent of the Study Deposit is non-refundable. Upgrade Customers are responsible for actual study costs, which may exceed the Study Deposit amount.
  - i. If a Study Deposit monies remain after the System Impact Study is completed and any outstanding monies owed by Upgrade Customer in connection with outstanding invoices related to the present or prior Upgrade Requests or other New Service Requests have been paid, such remaining deposit monies shall be either:
    - (a) If Upgrade Customer decides to remain in the Upgrade Request process, applied to the Facilities Study; or
    - (b) If Upgrade Customer decides to withdraw its Upgrade Request from the Upgrade Request process, such remaining monies shall be returned, less actual study costs incurred, to the Upgrade Customer at the conclusion of the required studies for the Upgrade Request.
  - ii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
    - (a) Upgrade Customer is responsible for, and must pay, all actual study costs.
    - (b) If Transmission Provider sends Upgrade Customer notification of additional study costs, then Upgrade Customer must either: (i) pay all additional study costs within 20 days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Upgrade Request. If Upgrade Customer fails to complete either (i) or (ii), then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn.
- b. If, after receiving the System Impact Study report, Upgrade Customer decides to remain in the Upgrade Request process, then Upgrade Customer must submit by wire transfer a Readiness Deposit within 30 days from the date that Transmission Provider provides the System Impact Study Report. The Readiness Deposit shall equal 20 percent of the cost of the Network

Upgrades identified in the Upgrade Customer's System Impact Study. If the 30th day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.

- i. Readiness Deposit refunds will be handled as follows:
  - (a) If the Upgrade Request is withdrawn or terminated after the Readiness Deposit has been provided, the Readiness Deposit refund amount will be determined by point at which the Upgrade Request was withdrawn or terminated, and the need for any additional subsequent restudies as a result of the withdraw or termination.
  - (b) If the project proceeds to a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), the Readiness Deposit will be refunded upon Upgrade Customer fully executing such agreement.
- c. Study Deposits and Readiness Deposits are non-transferrable. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific Upgrade Request be applied in whole or in part to a different Upgrade Request, a New Service Request, or any other type of request.
3. Upgrade Request scope cannot include upgrades that are already included in the Regional Transmission Expansion Plan (with the exception of advancements) or subject to an existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.
4. No Incremental Auction Revenue Rights shall be received by an Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.
5. An Upgrade Customer cannot transfer, combine, swap or exchange all or part of an Upgrade Request with any other Upgrade Request or any other New Service Request within the same cycle.
6. Tariff, Part VII, Subpart C (Base Case Data) requirements shall apply to Upgrade Requests. Transmission Provider will coordinate with Affected Systems as needed as set forth in the PJM Manuals.
7. Prior to entering into a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), an Upgrade Customer may assign its Upgrade Request to another entity only if the acquiring entity accepts and acquires all rights and obligations as identified in the Upgrade Request for such project.



8. Cost Allocation: Each Upgrade Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its Upgrade Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such Upgrade Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the Upgrade Request; or the construction of Supplemental Projects.
9. Where the Upgrade Request calls for accelerating the construction of a Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Upgrade Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

C. Initiating an Upgrade Request

An Upgrade Customer must submit to Transmission Provider, electronically through Transmission Provider's website, a completed and signed Upgrade Application and Studies Agreement ("Application"), a form of which is provided in Tariff, Part IX, Subpart K, including the required Study Deposit.

1. A Request Number shall be assigned based upon the date and time a completed and executed Upgrade Application and Studies Agreement and deposit is received by the Transmission Provider.
2. A valid Upgrade Request shall be established when the Transmission Provider receives the last required agreement element, including the required deposits, from the Upgrade Customer, and the deficiency review for such Upgrade Request is complete.
  - a. Application Requirements for Upgrade Requests Pursuant to Operating Agreement, Schedule 1, section 7.8

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

- i. The MW amount of requested Incremental Auction Revenue Rights (IARRs), including the source and sink locations and desired commencement date, and;
- ii. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VII, Subpart H, section 337(B)(2), above.

b. Application Requirements for Merchant Network Upgrade Requests

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

- i. the MVA or MW amount by which the normal or emergency rating of the identified facility is to be increased, together with the desired in-service date; or the Regional Transmission Expansion Plan project number and planned and requested advancement dates;
- ii. the substation or transmission facility or facilities where the upgrade(s) will be made;
- iii. the increase in capability (in MW or MVA) of the proposed Merchant Network Upgrade;
- iv. if requesting Incremental Capacity Transfer Rights (ICTRs), identification of up to three Locational Deliverability Areas (LDAs) in which to determine the ICTRs;
5. the planned date the proposed Merchant Network Upgrade will be in service, such date to be no more than seven years from the date the request is received by the Transmission Provider, unless the Upgrade Customer demonstrates that engineering, permitting, and construction of the Merchant Network Upgrade will take more than seven years; and
6. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VII, Subpart H, section 337(B)(2), above.

D. Deficiency Review

Upon receiving a completed and executed Application, together with the Study Deposit, Transmission Provider will review the Application and establish the validity of the request, beginning with a deficiency review, as follows:

1. Transmission Provider will exercise Reasonable Efforts to inform Upgrade Customer of Application deficiencies within 15 Business Days after Transmission Provider's receipt of the completed Application.

2. Upgrade Customer then has 10 Business Days to respond to Transmission Provider's deficiency determination.
3. Transmission Provider then will exercise Reasonable Efforts to review Upgrade Customer's response within 15 Business Days, and then will either validate or reject the Application.

E. System Impact Study

After receiving a valid Upgrade Request, the Transmission Provider, in collaboration with the Transmission Owner, shall conduct a System Impact Study. Prior to the commencement of the System Impact Study, the Transmission Provider may have a scoping meeting with the Upgrade Customer to discuss the Upgrade Request.

1. System Impact Study Requirements

The System Impact Study shall identify the system constraints, identified with specificity by transmission element or flowgate, relating to the Upgrade Request included therein and any resulting Network Upgrades or Contingent Facilities required to accommodate such Upgrade Request.

The System Impact Study shall also include:

- a. the list and facility loading of all reliability criteria violations specific to the Upgrade Request.
- b. estimates of cost responsibility and construction lead times for new facilities and system upgrades.
- c. include the amount of incremental rights available, as applicable

2. Contingent Facilities.

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Network Upgrades, upon which the Upgrade Customer's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the Upgrade Request or reassessment of the unbuilt Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies), including why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall also provide, upon request of the Upgrade Customer, the Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

a. Minimum Thresholds to Identify Contingent Facilities

(i) Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least five percent distribution factor (DFAX) or

contributing at least five percent of the facility rating in the applicable model.

(ii) Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

(iii) Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

3. System Impact Study Results

Transmission Provider shall conduct a System Impact Study, and provide the Upgrade Customer a System Impact report on Transmission Provider's website.

To proceed with the Upgrade Request process, within 30 days of Transmission Provider issuing the System Impact Study report, Transmission Provider must receive from the Upgrade Customer:

- a. a Readiness Deposit, by wire transfer, equal to 20 percent of the cost allocation for the Network Upgrades as calculated in the System Impact Study report.
- b. Notification in writing that Upgrade Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its Upgrade Request.

If the 30th day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.

- c. If Transmission Provider does not receive the Readiness Deposit equal to 20 percent from the Upgrade Customer within 30 days of Transmission Provider issuing the System Impact Study report, then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn, and the Upgrade Request will be removed from all studies and will lose its priority position.
- d. No modifications of any type for any reason are permitted to the Upgrade Request at this point in the Upgrade Request process.
- e. Upgrade Customer may not elect Option to Build after such date.

4. If the Readiness Deposit is received by the Transmission Provider within 30 days of the Transmission Provider issuing the System Impact Study report, Transmission Provider will proceed with the Facilities Study for the Upgrade Request.

F. Facilities Study

The Facilities Study will provide the final details regarding the type, scope and construction schedule of Network Upgrades and any other facilities that may be required to accommodate the Upgrade Request, and will provide the Upgrade Customer with a final estimate of the Upgrade Customer's cost responsibility for the Upgrade Request. Upon completion of the Facilities Study the Transmission Provider will provide the Facilities Study report on Transmission Provider's website, and provide a draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E).

G. Upgrade Customer Final Agreement Negotiation Phase

1. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the tendering of the Facilities Study. The purpose of the Final Agreement Negotiation Phase is to negotiate and enter into a final Upgrade Construction Service Agreement found in Tariff, Part IX, Subpart E; conduct any remaining analyses or updated analyses and adjust the Security obligation based on higher priority Upgrade Request(s) withdrawn during the Final Agreement Negotiation Phase. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
  - a. If an Upgrade Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the Upgrade Request from the Cycle, and adjust the Security obligations of other Upgrade Requests based on the withdrawal.
2. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:

Transmission Provider shall provide in electronic form a draft Upgrade Construction Service Agreement to the parties to such agreement prior to the start of the Final Agreement Negotiation Phase.

  - a. Security is required within 30 days of the Transmission Provider's issuance of the draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E). If the 30th day does not fall on a Business Day, the security due date shall be extended to end on the next Business Day.
  - b. Negotiation

Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60th day is not a Business Day, negotiations shall conclude on the next Business Day. Upon receipt of the draft agreements, Upgrade Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements

in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

c. Impasse

If the Upgrade Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

d. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final Upgrade Construction Service Agreement, to the parties in electronic form.

i. Not later than 15 Business Days after receipt of the final interconnection related agreement, Upgrade Customer shall elect one of the following:

- (a) to execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;
- (b) to request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
- (c) to request in writing that Transmission Provider file with FERC the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement unexecuted, with terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.

ii. If an Upgrade Customer executes the final Upgrade Construction Service Agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:

- (a) execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;

- (b) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
- (c) request in writing that Transmission Provider file with FERC the final Upgrade Construction Service Agreement in unexecuted form.

The unexecuted Upgrade Construction Service Agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the Upgrade Request.

- iii. Parties may not proceed under such Upgrade Construction Service Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

#### H. Upgrade Construction Service Agreement

In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Upgrade Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system. In order to exercise the Option to Build, as set forth in Upgrade Construction Service Agreement, Tariff, Part IX, Subpart E, Appendix III, section 6.2.1, Upgrade Customer must provide Transmission Provider and the Transmission Owner with written notice of its election to exercise the option no later than 30 days from the date the Upgrade Customer receives the results of the Facilities Study (or the System Impact performed, if a Facilities Study was not required).

##### 1. Cost Reimbursement

Pursuant to the Upgrade Construction Service Agreement, a Upgrade Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owners) for the Costs, determined in accordance with Tariff, Part VII, Subpart D, section 307(A)(5), of constructing Distribution Upgrades, and/or Network Upgrades necessary to accommodate its New Service Request to the extent that the Transmission Owner is responsible for building such facilities pursuant to Tariff, Part VII and the applicable Upgrade Construction Service Agreement. The Upgrade Construction Service Agreement shall obligate the Upgrade Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the Transmission Owner's expenditures for the design, engineering, and construction of the facilities that it is responsible for building pursuant to the Upgrade Construction Service Agreement are made. The Transmission Provider shall distribute the revenues received under this Tariff, Part VII, Subpart H, section 337(H)(1) to the affected Transmission Owner(s).

2. Upgrade-Related Rights

The Upgrade Construction Service Agreement shall specify Upgrade-Related Rights to which the Upgrade Customer is entitled pursuant to Tariff, Part VII, Subpart E, sections 324, 328, 329, and 330, except to the extent the applicable terms of Tariff, Part VII, Subpart E, sections 324, 328, 329, and 330 provide otherwise.

3. Specification of Transmission Owners Responsible for Facilities and Upgrades

The Facilities Study (or the System Impact Study, if a Facilities Study is not required) shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Upgrade Construction Service Agreement, for the construction of facilities and upgrades, determined in a manner consistent with Operating Agreement, Schedule 6.

I. Withdraw or Termination

1. If an Upgrade Customer decides to withdraw its Upgrade Request, Transmission Provider must receive written notification from the Upgrade Customer of Upgrade Customer's decision to withdraw its Upgrade Request.
2. Transmission Provider may deem an Upgrade Request terminated and withdrawn for failing to meet any of the requirements, as set forth in this Tariff, Part VII, Subpart H.
3. If an Upgrade Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the Upgrade Request process and all relevant models, and, as applicable, the Readiness Deposits and Study Deposits will be disbursed as follows:
  - a. For Readiness Deposits: At the conclusion of Transmission Provider's Facility Study, refund to the Upgrade Customer 100 percent of Readiness Deposit paid by the Upgrade Customer.
  - b. For Study Deposits: At the point at which the Upgrade Customer requested to withdraw the Upgrade Request or the Transmission Provider terminated the Upgrade Request, refund to the Upgrade Customer up to 90 percent of its Study Deposit submitted with its Upgrade Request during the Application less any actual costs for studies conducted up to and including the point of withdraw or termination of such Upgrade Request.
  - c. Up to and including the point of withdraw or termination of such Upgrade Request.

J. Transmission Provider Website Postings

The Transmission Provider shall maintain on the Transmission Provider's website a list of all Upgrade Requests. The list will identify, as applicable:

1. the increase in capability in megawatts (MW) or megavolt-amperes (MVA);
2. the megawatt amount of requested Incremental Auction Revenue Rights (IARRs);



3. the station or transmission line or lines where the upgrade(s) will be made;
4. the requested source and sink locations
5. the proposed in-service or commencement date;
6. the status of the Upgrade Request, including its Request Number;
7. the availability of any studies related to the Upgrade Request;
8. the date of the Upgrade Request; and
9. for each Upgrade Request that has not resulted in a completed upgrade, an explanation of why it was not completed.

**Tariff, Part VII, sections 338 – 399**  
**[Reserved]**

**Tariff, Part IX**

**FORMS OF INTERCONNECTION-RELATED AGREEMENTS**

### **Tariff, Part IX, Section 500, Execution Deadlines**

Unless otherwise stated in a specific agreement, the following provisions shall apply to any agreement under Tariff, Part IX, between Transmission Provider, a Project Developer, Eligible Customer or Upgrade Customer, and, where applicable, a Transmission Owner. In addition to any other requirements under such agreement, no later than 15 Business Days after Transmission Provider's tender for execution of such agreement, Project Developer, Eligible Customer or Upgrade Customer, shall either: (i) execute the agreement; (ii) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or (iii) request in writing that the agreement be filed unexecuted with FERC. Such agreement shall be deemed to be terminated and withdrawn if Project Developer, Eligible Customer or Upgrade Customer, fails to comply with these requirements. If a Transmission Owner is party to the agreement, following tender of the agreement and no later than 15 Business Days after PJM sends notification to the relevant Transmission Owner that the Project Developer, Eligible Customer or Upgrade Customer has executed the agreement, Transmission Owner shall either: (i) execute the agreement; (ii) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or (iii) request in writing that the agreement be filed unexecuted with FERC. Following execution by Transmission Owner (or by the Project Developer if there is not Transmission Owner that is subject to the agreement) Transmission Provider shall either: (i) execute the agreement; (ii) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or (iii) file with FERC the agreement in unexecuted form. Transmission Provider may also file the agreement with FERC in unexecuted form if Transmission Owner does not comply with the requirements above.

With the filing of any unexecuted agreement, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between the parties.

## **Tariff, Part IX, Subpart A**

### **Form of Application and Studies Agreement**

1. This Application and Studies Agreement (“Application” or “Agreement”), dated \_\_\_\_\_, is entered into by and between \_\_\_\_\_ (Project Developer or Eligible Customer, hereafter “Applicant”) and PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”) (individually a “Party” and together the “Parties”) pursuant to PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part VIII, Subpart B. Capitalized terms used in this Application, unless otherwise indicated, shall have the meanings ascribed to them in Tariff, Part VIII, Subpart A, section 400.
2. Prior to the Application Deadline, Applicant must electronically provide to Transmission Provider through the PJM website or OASIS, as applicable, all applicable information identified below, which is then subject to validation during the Application Phase as set forth in Tariff, Part VIII, Subparts B and C and the PJM Manuals. Only valid New Service Requests will proceed past the Application Phase.
3. Before Transmission Provider will review or process the Application, in addition to submitting a completed and signed Application prior to the Application Deadline, Applicant must electronically submit to Transmission Provider prior to the Application Deadline the (i) required cash Study Deposit by wire transfer and (ii) required Readiness Deposit by wire transfer or letter of credit. Applicant’s wire transfer(s) or letter(s) of credit must specify the Application reference number to which the Study Deposit and Readiness Deposit correspond, or Transmission Provider will not review or process the Application.

### **SECTION 1: APPLICANT INFORMATION**

4. Name, address, telephone number, and e-mail address of Applicant. If Applicant has designated an agent, include the agent’s contact information.

Applicant

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Applicant’s Agent (if applicable)

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Agent's contact person: \_\_\_\_\_

5. An Internal Revenue Service Form W-9 or comparable state-issued document for Applicant.
6. Documentation proving the existence of a legally binding relationship between Applicant and any entity with a vested interest in this Application and associated project (*e.g.*, a parent company, a subsidiary, or financing company acting as agent for Applicant). Such documentation may include, but is not limited to, Applicant's Articles of Organization and Operating Agreement describing the nature of the legally binding relationship.
7. Applicant's banking information, or the banking information of any entity with a legally binding relationship to Applicant that wishes to make payments and receive refunds on behalf of Applicant, in association with this Application and corresponding project:

Bank Name: \_\_\_\_\_

Account Holder Name: \_\_\_\_\_

ABA number: \_\_\_\_\_

Account Number: \_\_\_\_\_

Company: \_\_\_\_\_

Tax Reporting Name: \_\_\_\_\_

Tax ID: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

8. If the Application is a request for long-term firm transmission service, see section 3.
9. Location of the proposed Point of Interconnection (POI) to the Transmission System, including the substation name or the name of the line to be tapped (including the voltage), the estimated distance from the substation endpoints of a line tap, address, and GPS coordinates.

POI substation name: \_\_\_\_\_ or  
POI line name: \_\_\_\_\_ (endpoint 1) to \_\_\_\_\_ (endpoint 2)  
POI Distance from endpoint 1: \_\_\_\_\_ miles  
POI Distance from endpoint 2: \_\_\_\_\_ miles  
Interconnection voltage: \_\_\_\_\_ kV  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
GPS Coordinates: \_\_\_\_\_ N \_\_\_\_\_ W

10. If the project is a Merchant Transmission Facility, see section 4.

## SECTION 2: GENERATING FACILITY SPECIFICATIONS

11. Specify the nature of the Generating Facility project.

\_\_\_\_\_ New Generating Facility

\_\_\_\_\_ Increase in generation capability of an existing Generating Facility

\_\_\_\_\_ Replacement of existing Generating Facility with no increase in generation capability

12. Specify the type of Interconnection Service requested for the Generating Facility.

\_\_\_\_\_ Energy Resource only

\_\_\_\_\_ Capacity Resource (includes Energy Resource) with Capacity Interconnection Rights

13. Provide the following information about the Generating Facility:

- a. Generating Facility location and site plan:

Provide a physical address or equivalent written description of the location of the Generating Facility, as well as global positioning system (GPS) coordinates. When known, provide GPS coordinates for the location of the Generating Facility's main power transformer(s).

Provide a current site plan in PDF depicting the (1) property boundaries; (2) Generating Facility layout, including the Generating Facility's collector substation (if applicable) or interconnection switchyard (if required); and (3) Interconnection

Facilities extending from the Generating Facility's main power transformer(s) to the proposed POI.

b. Generating Facility Site Control:

In accordance with Tariff, Part VIII, Subpart B, section 402, provide evidence of an ownership interest in, or right to acquire or control through a deed, lease, or option for at least a one-year term beginning from the Application Deadline, 100 percent of the Site for the Generating Facility, including the location of the high-voltage side of the Generating Facility's main power transformer(s). In addition, provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further at PJM's request, Applicant shall provide copies of landowner attestations or county recordings.

c. Will the Generating Facility physically connect to distribution or sub-transmission facilities currently not subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC), for the purpose of injecting energy at the POI and engaging in FERC-jurisdictional Wholesale Transactions, as described in Tariff, Part VIII, Subpart F? (Y/N)

If yes, if available, provide with this Application a copy of the executed interconnection agreement between Applicant and the owner of the distribution or sub-transmission facilities to which the Generating Facility will physically connect. If the two-party interconnection agreement is not yet available, provide any available documentation demonstrating that Applicant has requested or applied for interconnection through the relevant non-jurisdictional process, and provide a status report.

d. For the Generating Facility, has Applicant obtained, or does Applicant intend to obtain, Qualifying Facility status under the Public Utility Regulatory Policies Act? (Y/N)

If yes, provide evidence of Qualifying Facility status or eligibility. Further, verify that Applicant intends that the Qualifying Facility will engage in Wholesale Transactions in PJM's FERC-jurisdictional wholesale markets (Y/N).

e. Will the Generating Facility share Project Developer's Interconnection Facilities with another Generating Facility, either existing or planned? (Y/N)



If yes, demonstrate that the relevant parties have entered into, or will enter into, a shared facilities agreement with respect to the shared Interconnection Facilities.

f. Maximum Facility Output and Capacity Interconnection Rights:

i. For a new Generating Facility, provide the following information:

Total Requested Maximum Facility Output (maximum injection at the POI), in Megawatts	
Total Requested Capacity Interconnection Rights, in Megawatts	

ii. For a requested increase in generation capability of an existing Generating Facility, identify the Generating Facility and provide the following information:

	Existing	Requested Increase	Total
Maximum Facility Output (maximum injection at the POI), in Megawatts			
Capacity Interconnection Rights, in Megawatts			

iii. For a new Behind the Meter Generating Facility, provide the following information:

Gross Output in Megawatts	
Behind the Meter Load in Megawatts (the sum of auxiliary load and any other load to be served behind the meter)	
Total Requested Maximum Facility Output (maximum injection at the POI), in Megawatts	

Total Requested Capacity Interconnection Rights, in Megawatts	
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- iv. For a requested increase in generation capability of an existing Behind the Meter Generating Facility, identify the Generating Facility and provide the following information:

	Existing	Increase	Total
Gross Output in Megawatts			
Behind the Meter Load in Megawatts (the sum of auxiliary load and any other load to be served behind the meter)			
Maximum Facility Output (maximum injection at the POI), in Megawatts			
Capacity Interconnection Rights, in Megawatts			

- g. Provide a description of the equipment configuration and electrical design specifications for the Generating Facility, as further defined in the PJM Manuals and reflected in the single-line diagram.
- h. Specify the fuel type of the Generating Facility.
- i. If the Generating Facility will be a multi-fuel Generating Facility, or if a proposed increase in generation capability of an existing Generating Facility will create a multi-fuel Generating Facility, describe the physical and electrical configuration in as much detail as possible.
- j. If the Generating Facility will include storage device(s), will the storage device(s) be charged using energy from the Transmission System at any time? (Y/N)

If yes, specify the maximum that will be withdrawn from the Transmission System at any time: \_\_\_\_ MWh (or kWh)

If yes, provide other technical and operating information on the storage device(s) as set forth in the PJM Manuals, including MWh stockpile and hour class, as applicable.

- k. If the Generating Facility will include storage, provide the primary frequency response operating range for the electric storage component, as described in the PJM Manuals.

Minimum State of Charge: \_\_\_\_\_ Maximum State of Charge: \_\_\_\_\_

- l. For a Behind the Meter Generating Facility, provide the following information (note that all of the provisions in Tariff, Part VIII, Subpart E, section 415 apply):
  - i. Identify the type and size of the load co-located (or to be co-located) with the Generating Facility, and attach a detailed single-line diagram in PDF depicting the electrical location of the load in relation to the Generating Facility.
  - ii. Describe the electrical connections between the Generating Facility and the co-located load, as shown in the single-line diagram.
- m. Provide the date that the new Generating Facility, or the increase in generation capability of an existing Generating Facility, will be in service.
- n. Provide other relevant information for the Generating Facility including, but not limited to, identifying whether Applicant has submitted a previous Application; and, if this Application proposes an increase in generation capability of a Generating Facility, identify whether the Generating Facility is subject to an existing PJM Service Agreement; and, if so, provide those details.

**SECTION 3: LONG-TERM FIRM TRANSMISSION SERVICE**

14. Request:

OASIS Request	Start	Stop	Amount	Path	Date & Time Request

15. **PURPOSE:** A Phase I System Impact Study, incorporated within a Cycle's System Impact Studies, is used to determine whether the Transmission System is adequate to accommodate all or part of an Applicant's request for long-term firm transmission service under Tariff, Part II (POINT-TO-POINT TRANSMISSION SERVICE) and Tariff, Part III (NETWORK INTEGRATION TRANSMISSION SERVICE). The FERC comparability standard is applied in evaluating the impact of all requests.
16. **SCOPE OF WORK AND STUDY DEPOSIT:** PJM will perform a Phase I System Impact Study to determine if the PJM network has sufficient capability to grant Applicant's request for long-term firm transmission service, based on expected system conditions and topology. The required cash Study Deposit for the Phase I System Impact Study, as described in Tariff, Part VIII, Subpart B, section 403(A), is due prior to the Application Deadline.
17. **NETWORK ANALYSIS AND DELIVERABILITY TEST:** PJM evaluates requests for long-term firm transmission service using deliverability tests commensurate with the testing employed for evaluating Interconnection Requests. The energy from a Generating Facility or the energy delivered using long-term firm transmission service that is ultimately committed to meet resource requirements must be deliverable to where it is needed in the event of a system emergency. Therefore, there must be sufficient transmission network transfer capability within the control area. PJM determines the sufficiency of network transfer capability through a series of "deliverability tests." All Interconnection Requests and long-term firm transmission service requests in PJM are subjected to the same deliverability tests. The FERC comparability standard is applied in evaluating the impact of all requests.
18. Skip to section 5.

#### **SECTION 4: MERCHANT TRANSMISSION FACILITY SPECIFICATIONS**

19. Applicant requests interconnection to the Transmission System of Merchant Transmission Facilities with the following specifications:
  - a. Location of proposed facilities:  

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  - b. Substation(s) where Applicant proposes to interconnect or add its facilities:  

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  - c. Proposed voltage and nominal capability of new facilities or increase in capability of existing facilities:  

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d. Description of proposed facilities and equipment:

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e. Planned date the proposed facilities or increase in capability will be in service:

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f. Will the proposed facilities be Merchant A.C. or Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities?

A.C. \_\_\_\_\_ or D.C. \_\_\_\_\_ or Controllable A.C. \_\_\_\_\_

i. If the proposed facilities will be Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, does Applicant elect to receive either:

\_\_\_\_\_ (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR)

OR

\_\_\_\_\_ (2) Incremental Deliverability Rights, Incremental Auction Revenue Rights, and Incremental Available Transfer Capability Revenue Rights.

If Applicant elects (1) above, provide the following:

\_\_\_\_\_ Total project MWs to be evaluated as Firm (capacity) injection for TIR.

\_\_\_\_\_ Total project MWs to be evaluated as Non-firm (energy) injection for TIR.

\_\_\_\_\_ Total project MWs to be evaluated as Firm (capacity) withdrawal for TWR.

\_\_\_\_\_ Total project MWs to be evaluated a Non-firm (energy) withdrawal for TWR.

If Applicant elects (2) above, state the location on the Transmission System where Applicant proposes to receive Incremental Deliverability Rights associated with its proposed facilities:

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ii. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Applicant contractually binds itself in the Service Agreement related to its project always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the Service Agreement will provide Applicant with the same types of transmission rights that are available under the Tariff for Merchant D.C. Transmission Facilities. For purposes of this Agreement, Applicant represents that, should it execute a Service Agreement for its project described herein, it will agree in the Service Agreement to operate its facilities continuously in a controllable mode.

iii. If the proposed facilities will be Merchant A.C. Transmission Facilities without continuous controllability as described in the preceding paragraph, specify the location on the Transmission System where Applicant proposes to receive any Incremental Deliverability Rights associated with its proposed facilities:

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20. Site Control: In accordance with Tariff, Part VIII, Subpart A, section 402, provide evidence of an ownership interest in, or right to acquire or control through a deed, lease, or option for at least a one-year term beginning from the Application Deadline, 100 percent of the Site for Applicant's major equipment (e.g., converter station). In addition, provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further at PJM's request, Applicant shall provide copies of landowner attestations or county recordings.

## **SECTION 5: SCOPE AND TIMING OF SYSTEM IMPACT STUDIES**

21. Transmission Provider, in consultation with the affected Transmission Owner(s), will conduct System Impact Studies, in three phases, to provide Applicant with information on the required Interconnection Facilities and Network Upgrades needed to support Applicant's New Service Request.
22. Consistent with Tariff, Part VIII, Subparts C and D, the Phase I System Impact Study begins at the end of the 90-day Application Review Phase, and runs for 120 days followed by a 30-day Decision Point I period for withdrawal or modification. If no withdrawal, the Phase II System Impact Study begins at the end of the Decision Point I period and runs for 180 days followed by a 30-day Decision Point II period for withdrawal or modification. If no withdrawal, the Phase III System Impact Study begins at the end of the Decision Point II period and runs for 180 days followed by release of the Phase III System Impact Study report and the start of final agreement negotiations. If a phase or period does not end on a Business Day, the phase or period shall be extended to end on the next Business Day.
23. The System Impact Studies include good faith estimates that attempt to determine the cost

of necessary facilities, and upgrades to existing facilities, to accommodate Applicant's New Service Request, and to identify Applicant's cost responsibility, but those estimates shall not be deemed final or binding. The scope of the System Impact Studies may include, but are not limited to, short circuit analyses, stability analyses, an interconnection facilities study, and a system upgrades facilities study.

24. The System Impact Studies necessarily will employ various assumptions regarding Applicant's New Service Request, other New Service Requests, and PJM's Regional Transmission Expansion Plan at the time of study. IN NO EVENT SHALL THIS AGREEMENT OR THE SYSTEM IMPACT STUDIES IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR TRANSMISSION OWNERS TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF APPLICANT EITHER AT THIS POINT IN TIME OR IN THE FUTURE.
25. Consistent with Tariff, Part VIII, Subpart G, Transmission Provider will coordinate with Affected System Operators the conduct of studies required to determine the impact of a New Service Request on any Affected System, and will include those results in the Phase II System Impact Study if available from the Affected System. Applicant will cooperate with Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate Applicant's New Service Request.

#### **SECTION 6: CONFIDENTIALITY**

26. Applicant agrees to provide all information requested by Transmission Provider necessary to complete and review this Application. Subject to this section 6, and to the extent required by Tariff, Part VIII, Subpart E, section 425, information provided pursuant to this Application shall be and remain confidential.
27. Upon completion of each System Impact Study for a New Service Request, the corresponding reports will be listed on Transmission Provider's website and, to the extent required by Tariff, Part VIII, Subpart E, section 425 or Commission regulations, will be made publicly available. Applicant acknowledges and consents to such disclosures as may be required under Tariff, Part VIII, Subpart E, section 425 or Commission regulations.
28. Applicant acknowledges that, consistent with the confidentiality provisions of Tariff, Part VIII, Subpart E, section 425, Transmission Provider may contract with consultants, including Transmission Owners, to provide services or expertise in the study process, and Transmission Provider may disseminate information as necessary to those consultants, and rely upon them to conduct part or all of the System Impact Studies.

#### **SECTION 7: COST RESPONSIBILITY**

29. Transmission Provider shall apply Applicant's Study Deposit in payment of the invoices for the costs of the System Impact Studies.

30. Actual study costs may exceed the Study Deposit. Notwithstanding the amount of the Study Deposit, Applicant shall reimburse Transmission Provider for all, or for Applicant's allocated portion of, the actual cost of the System Impact Studies in accordance with Applicant's cost responsibility. Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 days (or, if the 20<sup>th</sup> day is not a Business Day, then the next Business Day) of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.

## **SECTION 8: DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

31. In completing the System Impact Studies, Transmission Provider, Transmission Owner(s), and any other subcontractors employed by Transmission Provider must rely on information provided by Applicant and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDIES. Applicant acknowledges that it has not relied on any representations or warranties not specifically set forth herein, and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the System Impact Studies prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by Transmission Provider or Transmission Owner(s) to provide Interconnection Service or transmission service to or on behalf of Applicant either at this time or in the future.
32. In no event will Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this agreement or otherwise, even if Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of Transmission Provider's obligations under this Agreement.

## **SECTION 9: MISCELLANEOUS**

33. Any notice, demand, or request required or permitted to be given by any Party to another



and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

Applicant:

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34. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
35. This Agreement, or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties.
36. This Agreement shall be binding upon the Parties, their heirs, executors, administrators, successors, and assigns.
37. This Agreement shall become effective on the date it is executed by both Parties and shall remain in effect until the earlier of (a) the date on which Applicant enters into a final Service Agreement with PJM (and Transmission Owner as applicable) in accordance with Tariff, Part VIII, Subpart D or (b) termination or withdrawal of this Application.
38. **Governing Law, Regulatory Authority, and Rules:**  
This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal laws and/or laws of the State of Delaware without regard to conflicts of law provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
39. **No Third-Party Beneficiaries:**

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest, and where permitted their assigns.

40. Multiple Counterparts:

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all of which constitute one and the same instrument.

41. No Partnership:

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

42. Severability:

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

43. Reservation of Rights:

Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; and Applicant shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

Applicant: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

**Tariff, Part IX, Subpart B**

**FORM OF  
GENERATION INTERCONNECTION AGREEMENT COMBINED WITH  
CONSTRUCTION SERVICE AGREEMENT**

Service Agreement No. [   ]

(Project Identifier #\_\_\_\_)

**GENERATION INTERCONNECTION AGREEMENT**

**By and Between**

**PJM INTERCONNECTION, L.L.C.**

**And**

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**And**

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**GENERATION INTERCONNECTION AGREEMENT**

**By and Between**  
**PJM Interconnection, L.L.C.**  
**And**  
**[Name of Project Developer]**  
**And**  
**[Name of Transmission Owner]**  
(Project Identifier #\_\_)

- 1.0 Parties. This Generation Interconnection Agreement (“GIA”) including the Specifications, Schedules and Appendices attached hereto and incorporated herein, is entered into by and between PJM Interconnection, L.L.C., the Regional Transmission Organization for the PJM Region (hereinafter “Transmission Provider” or “PJM”), \_\_\_\_\_ (“Project Developer” [OPTIONAL: or “[short name]”]) and \_\_\_\_\_ (“Transmission Owner” [OPTIONAL: or “[short name]”]). All capitalized terms herein shall have the meanings set forth in the appended definitions of such terms as stated in Part I of the PJM Open Access Transmission Tariff (“Tariff”). [Use as/when applicable: This GIA supersedes the \_\_\_\_\_ {insert details to identify the agreement being superseded, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}]. [Use as/when applicable: Pursuant to the terms of an Agreement to Amend signed by all Parties effective {INSERT DATE}, this GIA reflects amends the {ISA/GIA} entered into by {Party 1}, {Party 2}, and Transmission Provider effective {INSERT DATE} and designated as Service Agreement No. {INSERT NUMBER}.]
- 2.0 Authority. This GIA is entered into pursuant to the Generation Interconnection Procedures set forth in [instruction: {use Part VII if this is a transition period GIA subject to Tariff, Part VII} {use Part VIII if this a new rules GIA subject to Part VIII}] of the Tariff. Project Developer has requested a Generation Interconnection Agreement under the Tariff, and Transmission Provider has determined that Project Developer is eligible under the Tariff to obtain this GIA. The standard terms and conditions for interconnection as set forth in Appendix 2 to this GIA are hereby specifically incorporated as provisions of this GIA. Transmission Provider, Transmission Owner, and Project Developer agree to and assume all of the rights and obligations of the Transmission Provider, Transmission Owner, and Project Developer, respectively, as set forth in Appendix 2 to this GIA.
- 3.0 Generating Facility or Merchant Transmission Facility Specifications. Attached are Specifications for the Generating Facility or Merchant Transmission Facility that Project Developer proposes to interconnect with the Transmission System. Project Developer represents and warrants that, upon completion of construction of such facilities, it will own or control the Generating Facility or Merchant Transmission Facility identified in section 1.0 of the Specifications attached hereto and made a part hereof. In the event that Project Developer will not own the Generating Facility or Merchant Transmission Facility, Project

Developer represents and warrants that it is authorized by the owner(s) thereof to enter into this GIA and to represent such control.

- 4.0 Effective Date. Subject to any necessary regulatory acceptance, this GIA shall become effective on the date it is executed by all Interconnection Parties, or, if the agreement is filed with FERC unexecuted, upon the date specified by FERC. This GIA shall terminate on such date as mutually agreed upon by the parties, unless earlier terminated in accordance with the terms set forth in Appendix 2 to this GIA. The term of the GIA shall be as provided in section 1.3 of Appendix 2 to this GIA. Interconnection Service shall commence as provided in section 1.2 of Appendix 2 to this GIA.
- 5.0 Security. In accord with the GIP, Project Developer shall provide the Transmission Provider (for the benefit of the Transmission Owner) with a letter of credit from an agreed provider or other form of security reasonably acceptable to the Transmissions Provider and that names the Transmission Provider as beneficiary ("Security") in the amount of \$\_\_\_\_\_. Such Security can also be applied to unpaid Cancellation Costs and for completion of some or all of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades. This amount represents the sum of the estimated Costs, determined in accordance with the GIP for which the Project Developer will be responsible, less any Costs already paid by Project Developer. Project Developer acknowledges that its ultimate cost responsibility will be based upon the actual Costs of the facilities described in the Specifications, whether greater or lesser than the amount of the payment security provided under this section.
- 6.0 Project Specific Milestones. In addition to the milestones stated in the GIP as applicable, during the term of this GIA, Project Developer shall ensure that it meets each of the following development milestones:

[Specify Project Specific Milestones]

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand (sections should be renumbered as appropriate):]

- 6.1 Substantial Site work completed. On or before \_\_\_\_\_, Project Developer must demonstrate completion of at least 20 percent of project site construction. At this time, Project Developer must submit to Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Project Developer Interconnection Facilities.
- 6.2 Delivery of major electrical equipment. On or before \_\_\_\_\_, Project Developer must demonstrate that \_\_\_\_ generating units have been delivered to Project Developer's project site.  
[Instructions: the following provisions can be used be as mutually agreed upon, and as an alternative to the milestones set forth in the GIP (renumber sections as appropriate):]

6.2.1 \_\_\_\_\_ Fuel delivery agreement and water agreement. Project Developer must demonstrate it has entered into a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnection by \_\_\_\_\_.

6.2.2 \_\_\_\_\_ Local, county, and state site permits. Project Developer must obtain all necessary local, county, and state site permits by \_\_\_\_\_.

[Instruction to be used if the Project Developer has not provided evidence of the 100 percent Site Control for the Project Developer's Interconnection Facilities, and any Transmission Owner's Interconnection Facilities or Transmission Owner Upgrades at the Point of Interconnection that the Project Developer will develop prior to entering to a GIA (renumber remaining sections as appropriate):]

6.2.3 Project Developer shall provide evidence of 100 percent Site Control for the Generating Facility or Merchant Transmission Facility, Interconnection Facilities, and, if applicable, the Stand Alone Network Upgrades necessary to interconnect the project to the Transmission System consistent with GIP no later than six months after the effective date of this GIA. Notwithstanding any other provisions of this GIA, no extension of this milestone shall be granted and if the Project Developer fails to meet this milestone, its Interconnection Request and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

6.3 Commercial Operation. On or before \_\_\_\_\_, Project Developer must demonstrate commercial operation of all generating units in order to achieve the full Maximum Facility Output set forth in section 1.0(c) of the Specifications to this GIA. Failure to achieve this Maximum Facility Output may result in a permanent reduction in Maximum Facility Output of the Generating Facility, and if, necessary, a permanent reduction of the Capacity Interconnection Rights, to the level achieved. Demonstrating commercial operation includes achieving Initial Operation in accordance with section 1.4 of Appendix 2 to this GIA and making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[Instructions: If this GIA is for an incremental increase in output for a facility that already is in commercial operation (i.e., an uprate), then, instead of the above, use the following language for the Commercial Operation milestone.]

[For an uprate where MFO and CIRs will increase, use this alternate language:]

Commercial Operation. On or before \_\_\_\_\_, Project Developer must demonstrate commercial operation of an incremental increase over Project



Developer's previous interconnection, as set forth in Specifications, section 1.0(c) of this GIA for increases in Maximum Facility Output and in Specifications, section 2.1 of this GIA for increases in Capacity Interconnection Rights. This incremental increase is a result of the Interconnection Request associated with this GIA. Failure to achieve this Maximum Facility Output shall result in a permanent reduction in Maximum Facility Output of the Generating Facility, and if, necessary, a permanent reduction of the Capacity Interconnection Rights, to the level achieved. Demonstrating commercial operation includes making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[For CIR-only uprates, use the alternate language that follows. The September 1, \_\_\_\_\_ date for CIR-only uprates is meant to align with Summer Capability Testing for the unit(s). Without this Commercial Operation milestone that is specific to CIR-only uprates, it can be difficult to implement or enforce a Commercial Operation milestone for CIR-only uprates, because the unit is already in Commercial Operation at its specified MFO:]

Commercial Operation. On or before September 1, \_\_\_\_\_, Project Developer must demonstrate commercial operation of an incremental increase in Capacity Interconnection Rights over Project Developer's previous interconnection, as set forth in Specifications, section 2.1 of this GIA. Failure to achieve this level of Capacity Interconnection Rights shall result in a permanent reduction of the Capacity Interconnection Rights to the level achieved. This incremental increase in Capacity Interconnection Rights is a result of the Interconnection Request associated with this GIA. Demonstrating commercial operation includes making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[Additional instructions (separate from the Commercial Operation Date provisions): if a specific situation requires a separate Construction Service Agreement by a certain date then use the following:]

Construction Service Agreement. On or before \_\_\_\_\_, Project Developer must have either (a) executed a Construction Service Agreement for Interconnection Facilities or Transmission Owner Upgrades for which Project Developer has cost responsibility; (b) requested dispute resolution under section 12 of the PJM Tariff, or if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"); or (c) requested that the Transmission Provider file the Construction Service Agreement unexecuted with FERC.

- 6.4 Within one month following commercial operation of generating unit(s), Project Developer must provide certified documentation demonstrating that “as-built” Generating Facility or the Merchant Transmission Facilities, and Project Developer Interconnection Facilities are in accordance with applicable PJM studies and agreements. Project Developer must also provide PJM with “as-built” electrical modeling data or confirm that previously submitted data remains valid.

**[Add Additional Project Specific Milestones as appropriate]**

Project Developer shall demonstrate the occurrence of each of the foregoing milestones to Transmission Provider’s reasonable satisfaction. Transmission Provider may reasonably extend any such milestone dates, in the event of delays that Project Developer (i) did not cause and (ii) could not have remedied through the exercise of due diligence. Project Developer shall also have a one-time option to extend its milestone (other than any milestone related to Site Control) for a total period of one year regardless of cause. This option may only be applied one time for an Interconnection Request, and may only be applied to one single milestone specified in this GIA. Other milestone dates stated in this GIA shall be deemed to be extended coextensively with Project Developer’s use of this provision. Once this extension is used, it is no longer available with regard to any other milestones or other deadlines in this GIA. If the Project Developer fails to meet any of the milestones set forth above, including any extended milestones, its Interconnection Request shall be terminated and withdrawn, in accordance with the provisions of Appendix 2, sections 15 and 16. Transmission Provider shall take all necessary steps to effectuate this termination, including submitting the necessary filings with FERC.

- 7.0 Provision of Interconnection Service. Transmission Provider and Transmission Owner agree to provide for the interconnection to the Transmission System in the PJM Region of Project Developer’s Generating Facility or Merchant Transmission Facility identified in the Specifications in accordance with the GIP, the Operating Agreement, and this GIA, as they may be amended from time to time.
- 8.0 Assumption of Tariff Obligations. Project Developer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement and the PJM Manuals.
- 9.0 System Impact Study(ies) and/or Facilities Study(ies). In analyzing and preparing the [System Impact Study(ies) and/or Facilities Study(ies)], and in designing and constructing the Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades and/or Transmission Owner Interconnection Facilities described in the Specifications attached to this GIA, Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely on information provided by Project Developer and possibly by third parties and may not have control over

the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(s), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR TRANSMISSION OWNER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDY(IES) AND/OR FACILITIES STUDY(IES) OF THE DISTRIBUTION UPGRADES, NETWORK UPGRADES, STAND ALONE NETWORK UPGRADES AND/OR TRANSMISSION OWNER INTERCONNECTION FACILITIES. Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

10.0 Construction of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades

10.1. Cost Responsibility. Project Developer shall be responsible for and shall pay upon demand all Costs associated with the interconnection of the Generating Facility or Merchant Transmission Facility as specified in the GIP. These Costs may include, but are not limited to, a Distribution Upgrades charge, Network Upgrades charge, Stand Alone Network Upgrades charge, Transmission Owner Interconnection Facilities charge and other charges. A description of the facilities required and an estimate of the Costs of these facilities are included in sections 3.0 and 4.0 of the Specifications to this GIA.

10.2. Billing and Payments. Transmission Provider shall bill the Project Developer for the Costs associated with the facilities contemplated by this GIA, estimates of which are set forth in the Specifications to this GIA, and the Project Developer shall pay such Costs, in accordance with section 11 of Appendix 2 to this GIA and the applicable provisions of Schedule L. Upon receipt of each of Project Developer's payments of such bills, Transmission Provider shall reimburse the applicable Transmission Owner. Project Developer requests that Transmission Provider provide a quarterly cost reconciliation:

\_\_\_\_\_ Yes

\_\_\_\_\_ No

10.3. Contract Option. In the event that the Project Developer and Transmission Owner agree to utilize the Negotiated Contract Option as set forth in Schedule L, Appendix 1 to establish, subject to FERC acceptance, non-standard terms regarding cost responsibility, payment, billing and/or financing, the terms of sections 10.1 and/or 10.2 of this section 10.0 shall be superseded to the extent required to conform to

such negotiated terms, as stated in Schedule L to this GIA. The Negotiated Option can only be used in connection with a Network Upgrade subject to the Network Upgrade Cost Responsibility Agreement if all Project Developers and the relevant Transmission Owner agree.

\_\_\_\_\_ Yes

\_\_\_\_\_ No

#### 10.4 Interconnection Construction Terms and Conditions

10.4.1 Schedule L of this GIA sets forth the additional terms and conditions of service that apply in the event there are any there are Project Developer Interconnection Facilities, Transmission Owner Interconnection Facilities, or Transmission Owner Upgrades subject to this Agreement. In the event there is an additional Transmission Owner listed in Specification section 3.0(c), Transmission Provider, Project Developer and the additional Transmission Owner shall be required to enter into a separate Interconnection Construction Service Agreement in the form set forth in Tariff, Part IX, Subpart J. In the event there are any Common Use Upgrades listed in Specification section 3.0 of this GIA, Transmission Provider and Project Developer, along with the other relevant Project Developers, shall also be required to enter into a separate Network Upgrade Cost Responsibility Agreement in the form set forth in Tariff, Part IX, Subpart H.

10.4.2 In the event that the Project Developer elects to construct some or all of the Transmission Owner Interconnection Facilities or Stand Alone Network Upgrades under the Option to Build, billing and payment for the Costs associated with the facilities contemplated by this GIA shall relate only to such portion of the Interconnection Facilities and Transmission Owner Upgrades as the Transmission Owner is responsible for building.

#### 11.0 Interconnection Specifications

11.1 Point of Interconnection. The Point of Interconnection shall be as identified on the one-line diagram attached as Schedule B to this GIA.

11.2 List and Ownership of Interconnection Facilities and Transmission Owner Upgrades. The Interconnection Facilities and Transmission Owner Upgrades and Transmission Owner Upgrades to be constructed and ownership of the components thereof are identified in section 3.0 of the Specifications attached to this GIA.

11.3 Ownership and Location of Metering Equipment. The Metering Equipment to be constructed, the capability of the Metering Equipment to be constructed, and the ownership thereof, are identified on the attached Schedule C to this GIA.

11.4 Applicable Technical Standards. The Applicable Technical Requirements and Standards that apply to the Generating Facility or Merchant Transmission Facility and the Interconnection Facilities and Transmission Owner Upgrades are identified in Schedule D to this GIA.

## 12.0 Power Factor Requirement.

Consistent with section 4.6 of Appendix 2 to this GIA, the power factor requirement is as follows:

[For Generation Project Developers]

{The following language should be included for new large and small synchronous generation facilities that will have the Tariff specified power factor. This section does not apply if the Interconnection Request is for an incremental increase in generating capability.}

The Project Developer shall design its Generating Facility with the ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{Include the following language if the Interconnection Request is for an incremental increase in capacity or energy output to a synchronized generation facility}

The existing \_\_ MW portion of the Generating Facility shall retain its existing ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

The increase of \_\_ MW to the Generating Facility associated with this GIA shall be designed with the ability to maintain a power factor of at least 1.0 (unity) to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{For new wind or non-synchronous generation facilities which have submitted a New Service Request. after November 1, 2016, the following applies:}

The Generation Project Developer shall design its [wind-powered] [non-synchronous] Generating Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue after November 1, 2016, and were not commercially operable prior to November 1, 2016 include the following requirements:}

The existing [wind-powered] [non-synchronous] \_\_ MW portion of the Customer Facility

shall retain the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

The increase of \_\_\_ MW to the [wind-powered] [non-synchronous] Customer Facility associated with this GIA shall be designed with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

[For Transmission Project Developers]

{The following language should be included only for new Merchant Transmission Facilities}

Transmission Project Developer shall design its Merchant D.C. Transmission Facilities and/ or Controllable A.C. Merchant Transmission Facilities, to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when such Generating Facility is operating at any level within its approved operating range.

- 13.0 Charges. In accordance with sections 10 and 11 of Appendix 2 to this GIA, the Project Developer shall pay to the Transmission Provider the charges applicable after Initial Operation, as set forth in Schedule E to this GIA. Promptly after receipt of such payments, the Transmission Provider shall forward such payments to the appropriate Transmission Owner.
- 14.0 Third Party Beneficiaries. No third party beneficiary rights are created under this GIA, except, however, that, subject to modification of the payment terms stated in section 10 of this GIA pursuant to the Negotiated Contract Option, payment obligations imposed on Project Developer under this GIA are agreed and acknowledged to be for the benefit of the Transmission Owner(s). Project Developer expressly agrees that the Transmission Owner(s) shall be entitled to take such legal recourse as it deems appropriate against Project Developer for the payment of any Costs or charges authorized under this GIA or the GIP with respect to Interconnection Service for which Project Developer fails, in whole or in part, to pay as provided in this GIA, the GIP and/or the Operating Agreement.
- 15.0 Waiver. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this GIA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 16.0 Amendment. Except as set forth in Appendix 2, section 12.0 of this GIA, this GIA or any part thereof, may not be amended, modified, or waived other than by a written document signed by all parties hereto. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.

17.0 Construction With Other Parts of The Tariff. This GIA shall not be construed as an application for service under Part II or Part III of the Tariff.

18.0 Notices. Any notice or request made by either party regarding this GIA shall be made, in accordance with the terms of Appendix 2 to this GIA, to the representatives of the other party and as applicable, to the Transmission Owner(s), as indicated below:

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

Project Developer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Transmission Owner:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

19.0 Incorporation of Other Documents. All portions of the Tariff and the Operating Agreement pertinent to the subject matter of this GIA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.

20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service. Subject to FERC approval, the parties agree that the terms and conditions set forth in Schedule F hereto are hereby incorporated herein by reference and be made a part of this GIA. In the event of any conflict between a provision of Schedule F that FERC has accepted and any provision of Appendix 2 to this GIA that relates to the same subject matter, the pertinent provision of Schedule F shall control.

21.0 Addendum of Project Developer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status. To the extent required, in accordance with section 24.1 of Appendix 2 to this GIA, Schedule G to this GIA shall set forth the Project Developer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

22.0 Addendum of Interconnection Requirements for all Wind or Non-synchronous Generation Facilities. To the extent required, Schedule H to this GIA sets forth interconnection requirements for a wind or non-synchronous generation facilities and is hereby incorporated by reference and made a part of this GIA.

- 23.0 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All interconnection parties agree to comply with all infrastructure security requirements of the North American Electric Reliability Corporation. All Transmission Providers, Transmission Owners, market participants, and Project Developers interconnected with electric systems are to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 24.0 This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction.



IN WITNESS WHEREOF, Transmission Provider, Project Developer and Transmission Owner have caused this GIA to be executed by their respective authorized officials.

(Project Identifier #\_\_\_\_)

Transmission Provider: **PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**SPECIFICATIONS FOR  
GENERATION INTERCONNECTION AGREEMENT**

**By and Among  
PJM INTERCONNECTION, L.L.C.**

**And  
[Name of Project Developer]  
And  
[Name of Transmission Owner]  
(Project Identifier # \_\_\_\_)**

1.0 Description of [Generating Facility] [Merchant Transmission Facilities] to be interconnected with the Transmission System in the PJM Region:

a. Name of Generating Facility or Merchant Transmission Facility:

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b. Location of Generating Facility or Merchant Transmission Facility:

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c. Size in megawatts of Generating Facility or Merchant Transmission Facility:

{The following language should be included only for generating units

For Generation Project Developer:

{Use the following language for all resources}

Maximum Facility Output of \_\_\_\_\_ MW

{Include the following language for Energy Storage Resources}

Maximum load capacity of \_\_\_\_\_ MW)

Minimum State of Charge: \_\_\_\_\_; and

Maximum State of Charge: \_\_\_\_\_.

{The following language applies when a Generation Interconnection Request involves an increase of the capacity of an existing Generating Facility:

The stated size of the generating unit includes an increase in the Maximum Facility Output of the generating unit of \_\_\_ MW over Project Developer’s previous interconnection. This increase is a result of the Interconnection Request associated with this Generation Interconnection Agreement.}

{The following language should be included only for Merchant Transmission Facilities

For Transmission Project Developer:

Nominal Rated Capability: \_\_\_\_\_ MW}

d. Description of the equipment configuration:

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## 2.0 Rights

[for Generation Project Developers]

2.1 Capacity Interconnection Rights: {Instructions: this section will not apply if the Generating Facility is exclusively an Energy Resource and thus is granted no CIRs; see alternate section 2.1 below}

Pursuant to and subject to the applicable terms of the GIP, the Project Developer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Generation Interconnection Agreement in the amount of \_\_\_ MW. {Instructions: this number is the total of the Capacity Interconnection Rights that are granted as a result of the Interconnection Request, plus any prior Capacity Interconnection Rights}

{OR: Instructions: include the following options when the projected Initial Operation is in advance of the study year used for the System Impact Study and Capacity Interconnection Rights are only interim until the study year:}

Pursuant to and subject to the applicable terms of the GIP, the Project Developer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Generation Interconnection Agreement in the amount of \_\_\_ MW commencing \_\_\_\_\_ {e.g., June 1, 2023}. During the time period from the effective date of this GIA until \_\_\_\_\_ {e.g., May 31, 2023} (the “interim

time period”), the Project Developer may be awarded interim Capacity Interconnection Rights in the amount not to exceed \_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and the results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_\_ {e.g., May 31, 2023}.

{OR: Instructions: include the following options when there are a combination of previously awarded CIRs and interim CIRs that have a termination date or event:}

Pursuant to and subject to the applicable terms of the GIP, the Project Developer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this GIA in the amount of \_\_\_\_ MW commencing \_\_\_\_ {e.g., June 1, 2023}. From the effective date of this GIA until \_\_\_\_\_ {e.g., May 31, 2023} (the “interim time period”), in addition to the \_\_\_\_ MW of Capacity Interconnection Rights the Project Developer had at the same Point of Interconnection prior to its Interconnection Request associated with this GIA, the Project Developer also may be awarded interim Capacity Interconnection Rights in an amount not to exceed \_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_\_ {e.g., May 31, 2023}.

{OR: Instructions: include the following language in the case of combined Cycle Positions with a combination of (1) already studied, and confirmed deliverable, CIRs for the first Interconnection Request; and (2) potential interim CIRs for the second Interconnection Request, subject to an interim deliverability study:}

Pursuant to and subject to the applicable terms of the Tariff, the Project Developer shall have Capacity Interconnection Rights at the Point of Interconnection specified in this GIA in the amount of \_\_\_\_ MW commencing \_\_\_\_ {e.g., June 1, 2023}. From the effective date of this GIA until \_\_\_\_\_ {e.g., May 31, 2023} (the “interim time period”), in addition to the \_\_\_\_\_ MW of Capacity Interconnection Rights the Project Developer will have commencing \_\_\_\_\_ {e.g., June 1, 2022} at the Point of Interconnection pursuant to the \_\_\_\_\_ Interconnection Request, the Project Developer also may be awarded interim Capacity Interconnection Rights at the Point of Interconnection in an amount not to exceed \_\_\_\_ MW pursuant to the \_\_\_\_\_ Interconnection Request. Accordingly, during the interim time period, the Project Developer shall have \_\_\_\_ MW of previously studied and awarded Capacity Interconnection Rights, and may be awarded interim Capacity Interconnection

Rights in an amount not to exceed \_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_ {e.g., May 31, 2023}.

{Add to address partial deactivations:}

Pursuant to and subject to the applicable terms of the Tariff, the Interconnection Customer shall have Capacity Interconnection Rights at the Point of Interconnection specified in this Interconnection Service Agreement in the amount of \_\_\_\_ MW commencing \_\_\_\_ {e.g., June 1, 2022}. From the effective date of this GIA until \_\_\_\_ {e.g., May 31, 2023} (the "interim time period"), in addition to the \_\_\_\_ MW of Capacity Interconnection Rights the Interconnection Customer will have commencing \_\_\_\_ {e.g., June 1, 2023} at the Point of Interconnection pursuant to the \_\_\_\_ Interconnection Request, the Interconnection Customer also may be awarded interim Capacity Interconnection Rights at the Point of Interconnection in an amount not to exceed \_\_\_\_ MW pursuant to the \_\_\_\_ Interconnection Request. Accordingly, during the interim time period, the Interconnection Customer shall have \_\_\_\_ MW of previously studied and awarded Capacity Interconnection Rights, and may be awarded interim Capacity Interconnection Rights in an amount not to exceed \_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_ {e.g., May 31, 2023}.

{OR: Instruction: include the following language to the extent applicable for interconnection of additional generation at an existing Generating Facility:}

The amount of Capacity Interconnection Rights specified above (\_\_\_\_ MW) includes \_\_\_\_ MW of Capacity Interconnection Rights that the Project Developer had at the same Point(s) of Interconnection prior to its Interconnection Request associated with this GIA, and \_\_\_\_ MW of Capacity Interconnection Rights granted as a result of such Interconnection Request.

{OR: Instructions: include the following language when the CIRs are only interim and have a termination date or event:}

Project Developer shall have \_\_\_\_ MW of Capacity Interconnection Rights for the time period from \_\_\_\_ to \_\_\_\_\_. These Capacity Interconnection Rights are interim

and will terminate upon {Instructions: explain circumstances – e.g. interim agreement; completion of another facility, etc.}

- 2.2 To the extent that any portion of the Generating Facility described in section 1.0 is not a Capacity Resource with Capacity Interconnection Rights, such portion of the Generating Facility shall be an Energy Resource. PJM reserves the right to limit total injections to the Maximum Facility Output in the event reliability would be affected by output greater than such quantity.

{Instructions: this version of section 2.1 will be used in lieu of section 2.1 above when a Generating Facility will be an Energy Resource and therefore will not be granted any CIRs:}

- [2.3 The generating unit(s) described in section 1.0 shall be an Energy Resource. Pursuant to this GIA, the generating unit will be permitted to inject \_\_\_\_ MW (nominal) into the system. PJM reserves the right to limit injections to this quantity in the event reliability would be affected by output greater than such quantity. ]

[for Transmission Project Developers]

- 2.4 Transmission Injection Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to the GIP, Project Developer shall have Transmission Injection Rights at each indicated Point of Interconnection in the following quantity(ies):

- 2.5 Transmission Withdrawal Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to the GIP, Project Developer shall have Transmission Withdrawal Rights at each indicated Point of Interconnection in the following quantity(ies):

[Include section 2.3 only if customer is interconnecting Controllable A.C. Merchant Transmission Facilities]

- 2.6 Project Developer is interconnecting Controllable A.C. Merchant Transmission Facilities as defined in the Part I of the Tariff, and has elected, pursuant to the GIP, to receive Transmission Injection Rights and Transmission Withdrawal Rights in lieu of the other applicable rights for which it may be eligible the GIP. Accordingly, Project Developer hereby agrees that the Transmission Injection Rights and Transmission Withdrawal Rights awarded to it pursuant to the GIP and this GIA are, and throughout the duration of this GIA shall be, conditioned on Project Developer's continuous operation of its Controllable A.C. Merchant Transmission

Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

{Instructions – use for Merchant Transmission Developers as applicable}

2.7 Incremental Deliverability Rights:

Pursuant to Tariff, Part VIII, Subpart E, section 427(C), Project Developer shall have Incremental Deliverability Rights at each indicated Point of Interconnection in the following quantity(ies):

2.8 Incremental Auction Revenue Rights:

Pursuant to Tariff, Part VIII, Subpart E, section 427(A), Project Developer shall have Incremental Auction Revenue Rights in the following quantities:

2.9 Incremental Capacity Transfer Rights:

Pursuant to Tariff, Part VIII, Subpart E, section 427(B), Project Developer shall have Incremental Capacity Transfer Rights between the following associated source(s) and sink(s) in the indicated quantities:

3.0 Construction Responsibility and Ownership of Interconnection Facilities and Transmission Owner Upgrades/Scope of Work.

a. Project Developer.

(1) Project Developer shall construct and, unless otherwise indicated, shall own, the following Interconnection Facilities:

**[Specify Facilities to Be Constructed or state “None”]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Project Developer has sole cost responsibility
- ii. Facilities for which a Network Upgrade Cost Responsibility Agreement is required.

(2) In the event that Project Developer has exercised the Option to Build, it is hereby permitted to build in accordance with and subject to the conditions and limitations set forth in Attachment L, the following portions of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades which constitute or are part of the Generating Facility or Merchant Transmission Facility:

**[Specify Facilities to Be Constructed or state “None”]**

Ownership of the facilities built by Project Developer pursuant to the Option to Build shall be as provided in Schedule L.

- b. Transmission Owner {or Name of Transmission Owners if more than one Transmission Owner}

**[Specify Facilities to Be Constructed and Owned or state “None”]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Project Developer has sole cost responsibility
  - ii. Facilities for which a Network Upgrade Cost Responsibility Agreement is required.
- c. [if applicable, include the following][Name of any additional Transmission Owner constructing facilities with which Project Developer and Transmission Provider will also execute an Interconnection Construction Service Agreement]

**[Specify Facilities to Be Constructed and Owned]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Project Developer has sole cost responsibility
  - ii. Facilities for which a Network Upgrade Cost Responsibility Agreement is required.
- d. [if applicable] Additional Contingent Facilities which must be completed prior to Commercial Operation of the Generating Facility or Merchant Transmission Facility

**[Specify Facilities to Be Constructed and Owned]**

- 4.0 Subject to modification pursuant to the Negotiated Contract Option and/or the Option to Build, Project Developer shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with Appendix 2, section 11 of this GIA and Schedule L, section 9.0 {instruction - to be included if there is an additional Transmission Owner that has a separate CSA [and in Appendix 2, section 3.2.3.2 of the Construction Service Agreement with **[insert Transmission Owner name].**]} {Instruction - to be included if there is a Network Upgrade Cost Responsibility Agreement [and in **[insert reference to NUCRA provisions]**]}



4.1 Transmission Owner Interconnection Facilities Charge: \$\_\_\_\_\_

**[Optional: Provide Charge and Identify Transmission Owner]**

4.2 Network Upgrades Charge: \$\_\_\_\_\_

**[Optional: Provide Breakdown of Charge Based on Transmission Owner responsibilities and costs subject to the Network Upgrade Cost Responsibility Agreement]**

4.3 Distribution Upgrades Charge: \$\_\_\_\_\_

**[Optional: Provide Breakdown of Charge Based on Transmission Owner responsibilities]**

4.4 Other Charges: \$\_\_\_\_\_

**[Optional: Provide Breakdown of Charge Based on Transmission Owner responsibilities]**

4.5 Cost breakdown:

\$ Direct Labor  
\$ Direct Material  
\$ Indirect Labor  
\$ Indirect Material

**[Additional items for breakdown as necessary]**

\$ Total

4.6 Security Amount Breakdown:

\$ Estimated Cost of Network Upgrades, Distribution Upgrades, and Other Charges

plus \$ Option to Build Security for Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades (including Cancellation Costs)

\$ Sum of Security required for costs listed in Specifications sections 4.1 through 4.4 of this GIA

less \$ Portion of Costs already paid by Project Developer

\$ Net Security {Instructions: **if the resultant is negative, use:** reduction with this GIA; **if the resultant is zero or positive use:** amount required} {Instructions: this value should be in section 5.0 of this GIA}

## **APPENDICES:**

- **APPENDIX 1 - DEFINITIONS**
- **APPENDIX 2 - STANDARD TERMS AND CONDITIONS FOR INTERCONNECTIONS**

## **SCHEDULES:**

- **SCHEDULE A - CUSTOMER FACILITY LOCATION/SITE PLAN**
- **SCHEDULE B - SINGLE-LINE DIAGRAM**
- **SCHEDULE C - LIST OF METERING EQUIPMENT**
- **SCHEDULE D - APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS**
- **SCHEDULE E - SCHEDULE OF CHARGES**
- **SCHEDULE F - SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**
- **SCHEDULE G - PROJECT DEVELOPER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS**
- **SCHEDULE H - INTERCONNECTION REQUIREMENTS FOR ALL WIND, SOLAR AND NON-SYNCHRONOUS GENERATION FACILITIES**
- **SCHEDULE I – INTERCONNECTION SPECIFICATIONS FOR AN ENERGY STORAGE RESOURCE**
- **SCHEDULE J – SCHEDULE OF TERMS AND CONDITIONS FOR SURPLUS INTERCONNECTION SERVICE**
- **SCHEDULE K – REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL ELECTRICAL GENERATING CAPABILITY**
- **SCHEDULE L – INTERCONNECTION CONSTRUCTION TERMS AND CONDITIONS**
- **SCHEDULE L, APPENDIX 1 – NEGOTIATED CONTRACT OPTION TERMS**

## **APPENDIX 1**

### **DEFINITIONS**

**From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement**

## **APPENDIX 2**

### **STANDARD TERMS AND CONDITIONS FOR INTERCONNECTIONS**

## **1 Commencement, Term of and Conditions Precedent to Interconnection Service**

### **1.1 Commencement Date:**

The effective date of a Generation Interconnection Agreement shall be the date provided in section 4.0 of the Generation Interconnection Agreement. Interconnection Service under this Generation Interconnection Agreement shall commence upon the satisfaction of the conditions precedent set forth in section 1.2 below.

### **1.2 Conditions Precedent:**

The following conditions must be satisfied prior to the commencement of Interconnection Service under this Generation Interconnection Agreement:

(a) This Generation Interconnection Agreement, if filed with FERC, shall have been accepted for filing by the FERC;

(b) All requirements for Initial Operation as specified in section 1.4 below shall have been met and Initial Operation of the Generating Facility or Merchant Transmission Facility shall have been completed.

(c) Project Developer shall be in compliance with all Applicable Technical Requirements and Standards for interconnection under the Tariff (as determined by the Transmission Provider).

### **1.3 Term:**

This Generation Interconnection Agreement shall remain in full force and effect until it is terminated in accordance with section 16 of this Appendix 2.

### **1.4 Initial Operation:**

The following requirements shall be satisfied prior to Initial Operation of the Generating Facility or Merchant Transmission Facility:

**1.4.1** The construction of all Interconnection Facilities and Transmission Owner Upgrades necessary for the interconnection of the Generating Facility or Merchant Transmission Facility has been completed;

**1.4.2** The Transmission Owner has accepted any Interconnection Facilities and Stand Alone Network Upgrades constructed by Project Developer pursuant to this GIA;

**1.4.3** The Project Developer and the Transmission Owner have all necessary systems and personnel in place to allow for parallel operation of their respective facilities;

**1.4.4** The Transmission Owner has received all applicable documentation for the Interconnection Facilities built by the Project Developer, certified as correct, including, but not limited to, access

to the field copy of marked-up drawings reflecting the as-built condition, pre-operation test reports, and instruction books; and

**1.4.5** Project Developer shall have received any necessary authorization from Transmission Provider to synchronize with the Transmission System or to energize, as applicable per the determination of Transmission Provider, the Generating Facility or Merchant Transmission Facility and Interconnection Facilities.

#### **1.4A Other Interconnection Options**

##### **1.4A.1 Limited Operation:**

If any of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades are not reasonably expected to be completed prior to the Project Developer's planned date of Initial Operation, and provided that the Transmission Owner has accepted the Project Developer Interconnection Facilities pursuant to this GIA, Transmission Provider shall, upon the request and at the expense of Project Developer, perform appropriate power flow or other operating studies on a timely basis to determine the extent to which the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities may operate prior to the completion of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and the Generation Interconnection Agreement. In accordance with the results of such studies and subject to such conditions as Transmission Provider determines to be reasonable and appropriate, Transmission Provider shall (a) permit Project Developer to operate the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, and (b) grant Project Developer limited, interim Interconnection Rights commensurate with the extent to which operation of the Generating Facility or Merchant Transmission Facility is permitted.

##### **1.4A.2 Provisional Interconnection Service:**

Upon the request of Project Developer, and prior to completion of requisite Interconnection Facilities, Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades, or system protection facilities Project Developer may request limited Interconnection Service at the discretion of Transmission Provider based upon an evaluation that will consider the results of available studies, which terms shall be memorialized in the Generation Interconnection Agreement to be tendered by Transmission Provider to Project subject to the execution timelines and provisions set forth in Tariff, Part IX, section 500.

Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Project Developer interconnects without modifications to the Generating Facility or Merchant Transmission Facility or the Transmission System. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or Stand Alone Network Upgrades, or system protection facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or

expanded Generating Facility or Merchant Transmission Facility are in place prior to the commencement of Interconnection Service from the Generating Facility or Merchant Transmission Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Distribution Upgrades, or Stand Alone Network Upgrades, and/or system protection facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility or Merchant Transmission Facility are not currently in place, Transmission Provider will perform a study, at the Project Developer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility or Merchant Transmission Facility shall be studied and updated annually and at the Project Developer's expense. The results will be communicated to the Project Developer in writing upon completion of the study. Project Developer assumes all risk and liabilities with respect to the Provisional Interconnection Service, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, or Stand Alone Network Upgrades, and/or system protection facilities cost responsibilities.

### **1.5 Survival:**

The Generation Interconnection Agreement shall continue in effect after termination to the extent necessary to provide for final billings and payments; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while the Generation Interconnection Agreement was in effect; and to permit each Interconnection Party to have access to the real property, including but not limited to leased property and easements of the other Interconnection Parties pursuant to section 16 of this Appendix 2 to disconnect, remove or salvage its own facilities and equipment.



## **2 Interconnection Service**

### **2.1 Scope of Service:**

Interconnection Service shall be provided to the Project Developer at the Point of Interconnection (a) in the case of interconnection of the Generating Facility of a Generation Project Developer, up to the Maximum Facility Output, and (b) in the case of interconnection of the Merchant Transmission Facility of a Transmission Project Developer, up to the Nominal Rated Capability. The location of the Point of Interconnection shall be mutually agreed by the Interconnected Entities, provided, however, that if the Interconnected Entities are unable to agree on the Point of Interconnection, the Transmission Provider shall determine the Point of Interconnection, provided that Transmission Provider shall not select a Point of Interconnection that would impose excessive costs on either of the Interconnected Entities and shall take material system reliability considerations into account in such selection. Specifications for the Generating Facility or Merchant Transmission Facility and the location of the Point of Interconnection shall be set forth in an appendix to the Generation Interconnection Agreement and shall conform to those stated in the System Impact Study(ies).

### **2.2 Non-Standard Terms:**

The standard terms and conditions of this Appendix 2 shall not apply, to such extent as Transmission Provider determines to be reasonably necessary to accommodate such circumstances, in the event that the Project Developer acquires an ownership interest in facilities which, under the standard terms and conditions of this GIA would be part of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. In such circumstances and to the extent determined by Transmission Provider to be reasonably necessary, non-standard terms and conditions mutually agreed upon by all Interconnection Parties shall apply, subject to FERC and any other necessary regulatory acceptance or approval. In addition, a Project Developer that acquires an ownership interest in such facilities shall become, and shall remain for so long as it retains such interest, a signatory to the Consolidated Transmission Owners Agreement.

### **2.3 No Transmission Services:**

The execution of a Generation Interconnection Agreement does not constitute a request for transmission service, or entitle Project Developer to receive transmission service, under Part II or Part III of the Tariff. Nor does the execution of a Generation Interconnection Agreement obligate the Transmission Owner or Transmission Provider to procure, supply or deliver to Project Developer or the Generating Facility or Merchant Transmission Facility any energy, capacity, Ancillary Services or Station Power (and any associated distribution services).

### **2.4 Use of Distribution Facilities:**

To the extent that a Generation Project Developer uses distribution facilities for the purpose of delivering energy to the Transmission System, Interconnection Service under this Tariff shall include the construction and/or use of such distribution facilities. In such cases, to such extent as Transmission Provider determines to be reasonably necessary to accommodate such

circumstances, the Generation Interconnection Agreement may include non-standard terms and conditions mutually agreed upon by all Interconnection Parties as needed to conform with Applicable Laws and Regulations and Applicable Standards relating to such distribution facilities.

### **3 Modification of Facilities**

#### **3.1 General:**

Subject to Applicable Laws and Regulations and to any applicable requirements or conditions of the Tariff and the Operating Agreement, either Interconnected Entity may undertake modifications to its facilities (“Planned Modifications”). In the event that an Interconnected Entity plans to undertake a modification, that Interconnected Entity, in accordance with Good Utility Practice, shall provide notice to the other Interconnection Parties with sufficient information regarding such modification, including any modification to its project that causes the project’s capacity, location, configuration or technology to differ from any corresponding information provided in the Interconnection Request, so that the other Interconnection Parties may evaluate the potential impact of such modification prior to commencement of the work. The Interconnected Entity desiring to perform such modification shall provide the relevant drawings, plans, specifications and models to the other Interconnection Parties in advance of the beginning of the work. Transmission Provider and the applicable Interconnection Entity shall enter into a Necessary Studies Agreement, a form is located in the Tariff, Part IX, pursuant to which Transmission Provider agrees to conduct the necessary studies to determine whether the Planned Modifications will have a permanent material impact on the Transmission System or would constitute a Material Modification, and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the Planned Modifications.

The Interconnected Entity shall provide the information required by the Necessary Study Agreement and provide the required deposit. Transmission Provider, upon completion of the Necessary Studies, shall provide the Interconnected Entity (i) the type and scope of the permanent material impact, if any, the Planned Modifications will have on the Transmission System; (ii) the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications; and (iii) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications. In the event such Planned Modification have a permanent material impact on the Transmission System or would constitute a Material Modification, Project Developer shall then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

#### **3.2 Interconnection Request:**

This section 3 shall not apply to any proposed modifications by Project Developer to its facilities for which Project Developer must make an Interconnection Request under the Tariff. In such circumstances, the Project Developer and Transmission Provider shall follow the requirements set forth in the GIP.

#### **3.3 Standards:**

Any additions, modifications, or replacements made to an Interconnected Entity's facilities shall be constructed and operated in accordance with Good Utility Practice, Applicable Standards and Applicable Laws and Regulations.

### **3.4 Modification Costs:**

Unless otherwise required by Applicable Laws and Regulations or this Appendix 2 and, with respect to a Transmission Project Developer, subject to the terms of the GIP,:

(a) Project Developer shall not be responsible for the costs of any additions, modifications, or replacements that the Transmission Owner in its discretion or at the direction of Transmission Provider makes to the Interconnection Facilities and Transmission Owner Upgrades or the Transmission System in order to facilitate the interconnection of a third party to the Interconnection Facilities and Transmission Owner Upgrades or the Transmission System, or to provide transmission service under the Tariff to a third party.

(b) Project Developer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities and Transmission Owner Upgrades or the Transmission System that are required, in accord with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, in order to accommodate additions, modifications, or replacements made by Project Developer to the Generating Facility or Merchant Transmission Facility or to the Project Developer Interconnection Facilities.

(c) Project Developer shall be responsible for the costs of any additions, modifications, or replacements to the Project Developer Interconnection Facilities or the Generating Facility or Merchant Transmission Facility that are required, in accord with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, in order to accommodate additions, modifications, or replacements that Transmission Provider or the Transmission Owner makes to the Transmission System or to the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, but only to the extent that Transmission Provider's or the Transmission Owner's changes to the Transmission System or the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades are made pursuant to Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards.

## **4 Operations**

### **4.1 General:**

Each Interconnected Entity shall operate, or shall cause operation of, its facilities in a safe and reliable manner in accord with (i) the terms of this Appendix 2; (ii) Applicable Standards; (iii) applicable rules, procedures and protocols set forth in the Tariff and the Operating Agreement, as any or all may be amended from time to time; (iv) Applicable Laws and Regulations, and (v) Good Utility Practice.

#### **4.1.1 Project Developer Initial Drawings:**

On or before the applicable date specified in the Milestones of the Generation Interconnection Agreement, Project Developer shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Project Developer Interconnection Facilities. Transmission Owner and Transmission Provider shall review the drawings to assess the consistency of Project Developer's design of the Project Developer Interconnection Facilities with the design that was analyzed in the planning model as described in PJM Manuals. After consulting with the Transmission Owner, Transmission Provider shall provide comments on the drawings to Project Developer within 45 days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

##### **4.1.1.1 Effect of Review:**

Transmission Owner's and Transmission Provider's reviews of Project Developer's initial drawings of the Project Developer Interconnection Facilities shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, Project Developer shall make such changes to the design of the Project Developer Interconnection Facilities as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Project Developer Interconnection Facilities meet Applicable Standards and, to the extent that design of the Project Developer Interconnection Facilities is included in the System Impact Study(ies), to ensure that such facilities conform with the System Impact Study(ies).

#### **4.1.2 Project Developer "As-Built" Drawings:**

Within 120 days after the date of Initial Operation, unless the Interconnection Parties agree on another mutually acceptable deadline, the Project Developer shall deliver to the Transmission Provider and the Transmission Owner final, "as-built" drawings, information and documents regarding the Project Developer Interconnection Facilities, including, as and to the extent applicable: a one-line diagram, a site plan showing the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, plan and elevation drawings showing the layout of the Project Developer Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Project Developer's step-up transformers, the facilities connecting the

Generating Facility or Merchant Transmission Facility to the step-up transformers and the Project Developer Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Generating Facility or Merchant Transmission Facility. As applicable, the Project Developer shall provide Transmission Provider and the Transmission Owner Specifications for the excitation system, automatic voltage regulator, Generating Facility or Merchant Transmission Facility control and protection settings, transformer tap settings, and communications. Transmission Provider and Transmission Owner shall have the right to review such drawings, and charge Project Developer their actual costs of conducting such review.

## **4.2 Project Developer Obligations:**

Project Developer shall obtain Transmission Provider's approval prior to either synchronizing with the Transmission System or energizing, as applicable per the determination of Transmission Provider, the Generating Facility or Merchant Transmission Facility or, except in an Emergency Condition, disconnecting the Generating Facility or Merchant Transmission Facility from the Transmission System, and shall coordinate such synchronizations, energizations, and disconnections with the Transmission Owner.

## **4.3 Transmission Project Developer Obligations:**

A Transmission Project Developer that will be a Merchant Transmission Provider is subject to the terms and conditions in the GIP.

## **4.4 Permits and Rights-of-Way:**

Each Interconnected Entity at its own expense shall maintain in full force and effect all permits, licenses, rights-of-way and other authorizations as may be required to maintain the Generating Facility or Merchant Transmission Facility and the Interconnection Facilities and Transmission Owner Upgrades that the entity owns, operates and maintains and, upon reasonable request of the other Interconnected Entity, shall provide copies of such permits, licenses, rights-of-way and other authorizations at its own expense to the requesting party.

## **4.5 No Ancillary Services:**

Except as provided in section 4.6 of this Appendix 2, nothing in this Appendix 2 is intended to obligate the Project Developer to supply Ancillary Services to either Transmission Provider or the Transmission Owner.

## **4.6 Reactive Power and Primary Frequency Response**

### **4.6.1 Reactive Power**

#### **4.6.1.1 Reactive Power Design Criteria**

##### **4.6.1.1.1 New Facilities:**

For all new Generating Facilities to be interconnected pursuant to the Tariff, other than wind-powered and other non-synchronous generation facilities, the Generation Project Developer shall design its Generating Facility to maintain a composite power delivery at continuous rated power output at a power factor of at least 0.95 leading to 0.90 lagging. For all new wind-powered and other non-synchronous generation facilities the Generation Project Developer shall design its Generating Facility with the ability to maintain a composite power delivery at a power factor of at least 0.95 leading to 0.95 lagging across the full range of continuous rated power output. For all wind-powered and other non-synchronous generation facilities that submitted a New Services Request on or after November 1, 2016, the power factor requirement shall be measured at the high-side of the facility substation transformers. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two.

For new generation resources of more than 20 MW, other than wind-powered and other non-synchronous Generating Facilities, the power factor requirement shall be measured at the generator's terminals. For new generation resources of 20 MW or less the power factor requirement shall be measured at the Point of Interconnection. Any different reactive power design criteria that Transmission Provider determines to be appropriate for a wind-powered or other non-synchronous generation facility shall be stated in the Generation Interconnection Agreement.

A Transmission Project Developer interconnecting Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities shall design its Generating Facility to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when the Generating Facility is operating at any level within its approved operating range.

#### **4.6.1.1.2 Increases in Generating Capacity or Energy Output:**

All increases in the capacity or energy output of any generation facility interconnected with the Transmission System, other than wind-powered and other non-synchronous Generating Facilities, shall be designed with the ability to maintain a composite power delivery at continuous rated power output at a power factor for all incremental MW of capacity or energy output, of at least 1.0 (unity) to 0.90 lagging. Wind-powered generation facilities and other non-synchronous generation facilities that submitted a New Services Request on or after November 1, 2016, shall be designed with the ability to maintain a composite power delivery at a power factor for all incremental MW of capacity or energy output of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers across the full range of continuous rated power output. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two.

The power factor requirement associated with increases in capacity or energy output of more than 20 MW to synchronous generation facilities interconnected with the Transmission System shall be measured at the generator's terminals. The power factor requirement associated with increases in capacity or energy output of 20 MW or less to synchronous generation facilities interconnected to

the Transmission System shall be measured at the Point of Interconnection; however, if the aggregate capacity or energy output of Generating Facility is or will be more than 20 MW, the power factor requirement shall be measure at the generator's terminals.

#### **4.6.1.2 Obligation to Supply Reactive Power:**

Project Developer agrees, as and when so directed by Transmission Provider or when so directed by the Transmission Owner acting on behalf or at the direction of Transmission Provider, to operate the Generating Facility to produce reactive power within the design limitations of the Generating Facility pursuant to voltage schedules, reactive power schedules or power factor schedules established by Transmission Provider or, as appropriate, the Transmission Owner. Transmission Provider shall maintain oversight over such schedules to ensure that all sources of reactive power in the PJM Region, as applicable, are treated in an equitable and not unduly discriminatory manner. Project Developer agrees that Transmission Provider and the Transmission Owner, acting on behalf or at the direction of Transmission Provider, may make changes to the schedules that they respectively establish as necessary to maintain the reliability of the Transmission System.

#### **4.6.1.3 Deviations from Schedules:**

In the event that operation of the Generating Facility or Merchant Transmission Facility of an Project Developer causes the Transmission System or the Transmission Owner's facilities to deviate from appropriate voltage schedules and/or reactive power schedules as specified by Transmission Provider or the Transmission Owner's operations control center (acting on behalf or at the direction of Transmission Provider), or that otherwise is inconsistent with Good Utility Practice and results in an unreasonable deterioration of the quality of electric service to other customers of Transmission Provider or the Transmission Owner, the Project Developer shall, upon discovery of the problem or upon notice from Transmission Provider or the Transmission Owner, acting on behalf or at the direction of Transmission Provider, take whatever steps are reasonably necessary to alleviate the situation at its expense, in accord with Good Utility Practice and within the reactive capability of the Generating Facility or Merchant Transmission Facility. In the event that the Project Developer does not alleviate the situation within a reasonable period of time following Transmission Provider's or the Transmission Owner's notice thereof, the Transmission Owner, with Transmission Provider's approval, upon notice to the Project Developer and at the Project Developer's expense, may take appropriate action, including installation on the Transmission System of power factor correction or other equipment, as is reasonably required, consistent with Good Utility Practice, to remedy the situation cited in Transmission Provider's or the Transmission Owner's notice to the Project Developer under this section.

#### **4.6.1.4 Payment for Reactive Power:**

Any payments to the Project Developer for reactive power shall be in accordance with Tariff, Schedule 2.

#### **4.6.2 Primary Frequency Response:**

Generation Project Developer shall ensure the primary frequency response capability of its



Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Generation Project Developer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Generating Facility’s real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Generating Facility’s real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Generation Project Developer shall notify Transmission Provider that the primary frequency response capability of the Generating Facility has been tested and confirmed during commissioning. Once Generation Project Developer has synchronized the Generating Facility with the Transmission System, Generation Project Developer shall operate the Generating Facility consistent with the provisions specified in sections 4.6.2.1 and 4.6.2.2 of this agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Generating Facilities.

#### **4.6.2.1 Governor or Equivalent Controls:**

Whenever the Generating Facility is operated in parallel with the Transmission System, Generation Project Developer shall operate the Generating Facility with its governor or equivalent controls in service and responsive to frequency. Generation Project Developer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Generation Project Developer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Generation Project Developer needs to operate the Generating Facility with its governor or equivalent controls not in service, Generation Project Developer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned

to service. Generation Project Developer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Generation Project Developer shall make Reasonable Efforts to keep outages of the Generating Facility's governor or equivalent controls to a minimum whenever the Generating Facility is operated in parallel with the Transmission System.

#### **4.6.2.2 Timely and Sustained Response:**

Generation Project Developer shall ensure that the Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Generating Facility has operating capability in the direction needed to correct the frequency deviation. Generation Project Developer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

#### **4.6.2.3 Exemptions:**

Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from sections 4.6.2, 4.6.2.1, and 4.6.2.2 of this agreement. Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in section 4.6.2, but shall be otherwise exempt from the operating requirements in sections 4.6.2, 4.6.2.1, 4.6.2.2, and 4.6.2.4 of this agreement.

#### **4.6.2.4 Energy Storage Resources:**

Generation Project Developer interconnecting an Energy Storage Resource shall establish an operating range in Schedule I of this GIA that specifies a minimum state of charge and a maximum state of charge between which the Energy Storage Resource will be required to provide primary frequency response consistent with the conditions set forth in sections 4.6.2, 4.6.2.1, 4.6.2.2, and 4.6.2.3 of this agreement. Schedule I shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the Energy Storage Resource; (5) operational limitations of the Energy Storage Resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Generation Project Developer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If

the operating range is dynamic, then Schedule I must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Generation Project Developer's Energy Storage Resource is required to provide timely and sustained primary frequency response consistent with section 4.6.2.2 of this agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the Energy Storage Resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Generation Project Developer's Energy Storage Resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Generation Project Developer's Energy Storage Resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

#### **4.7 Under- and Over-Frequency and Under- and Over- Voltage Conditions:**

The Generation Project Developer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Generating Facility. The Generation Project Developer shall enable these capabilities such that its Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to section 1.4.4 of Appendix 2 of this Generation Interconnection Agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the PJM Region on a comparable basis. The Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Generation Project Developer's Generating Facility to stay connected to and synchronized with the Transmission System or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the PJM Region on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities in the PJM Region on a comparable basis.

The Transmission System is designed to automatically activate a load-shed program as required by NERC and each Applicable Regional Entity in the event of an under-frequency system disturbance. A Generation Project Developer shall implement under-frequency and over-frequency relay set points for the Generating Facility as required by NERC and each Applicable Regional Entity to ensure “frequency ride through” capability of the Transmission System. The response of a Generation Project Developer’s Generating Facility to frequency deviations of predetermined magnitudes, both under-frequency and over-frequency deviations shall be studied and coordinated with the Transmission Provider in accordance with Good Utility Practice.

#### **4.8 System Protection and Power Quality:**

##### **4.8.1 System Protection:**

Project Developer shall, at its expense, install, operate and maintain such System Protection Facilities as may be required in connection with operation of the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities consistent with Applicable Technical Requirements and Standards. Transmission Owner shall install any System Protection Facilities that may be required, as determined by Transmission Provider, on the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades or the Transmission System in connection with the operation of the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities. Responsibility for the cost of any System Protection Facilities required on the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades or the Transmission System shall be allocated as provided in the GIP.

##### **4.8.2 Power Quality:**

The Generating Facility or Merchant Transmission Facility and Project Developer Interconnection Facilities shall not cause excessive deviations from the power quality criteria set forth in the Applicable Technical Requirements and Standards.

#### **4.9 Access Rights:**

Each Interconnected Entity shall provide the other Interconnected Entity access to areas under its control as reasonably necessary to permit the other Interconnected Entity to perform its obligations under this Appendix 2, including operation and maintenance obligations. An Interconnected Entity that obtains such access shall comply with all safety rules applicable to the area to which access is obtained. Each Interconnected Entity agrees to inform the other Interconnected Entity’s representatives of safety rules applicable to an area.

#### **4.10 Switching and Tagging Rules:**

The Interconnected Entities shall comply with applicable Switching and Tagging Rules in obtaining clearances for work or for switching operations on equipment. Such Switching and Tagging Rules shall be developed in accordance with OSHA standards codified at 29 C.F.R. part

1910, or successor standards. Each Interconnected Entity shall provide the other Interconnected Entity a copy of its Switching and Tagging Rules that are applicable to the other Interconnected Entity's activities.

#### **4.11 Communications and Data Protocol:**

The Interconnected Entities shall comply with any communications and data protocol that the Transmission Provider may establish.

#### **4.12 Nuclear Generating Facilities:**

In the event that the Generating Facility is a nuclear Generating Facility, the Interconnection Parties shall agree to such non-standard terms and conditions as are reasonably necessary to accommodate the Project Developer's satisfaction of Nuclear Regulatory Commission requirements relating to the safety and reliability of operations of such facilities.

## **5 Maintenance**

### **5.1 General:**

Each Interconnected Entity shall maintain, or shall cause the maintenance of, its facilities in a safe and reliable manner in accord with (i) the terms of this Appendix 2; (ii) Applicable Standards; (iii) applicable rules, procedures and protocols set forth in the Tariff and the Operating Agreement, as any or all may be amended from time to time; (iv) Applicable Laws and Regulations, and (v) Good Utility Practice.

### **5.2 Outage Authority and Coordination:**

#### **5.2.1 Coordination:**

The Interconnection Parties agree to confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Generating Facility or Merchant Transmission Facility, the Project Developer Interconnection Facilities and any Transmission Owner Interconnection Facilities. In the event an Interconnection Construction Service Agreement is required, the Construction Parties acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing all Interconnection Facilities. The Interconnection Parties, and where applicable, any Construction Parties, further acknowledge and agree that any such outages shall be coordinated by and through the Transmission Provider.

#### **5.2.2 Authority:**

Each Interconnected Entity may, in accordance with Good Utility Practice, remove from service its facilities that may affect the other Interconnected Entity's facilities in order to perform maintenance or testing or to install or replace equipment. Except in the event of an Emergency Condition, the Project Developer proposing to remove such facilities from service shall provide prior notice of such activities to the Transmission Provider and the Transmission Owner, and the Interconnected Entities shall coordinate all scheduling of planned facility outages with Transmission Provider, in accordance with applicable sections of the Operating Agreement, the PJM Manuals and any other applicable operating guidelines or directives of the Transmission Provider. Subject to the foregoing, the Interconnected Entity scheduling a facility outage shall use Reasonable Efforts to coordinate such outage with the other Interconnected Entity's scheduled outages.

#### **5.2.3 Outages Required for Maintenance:**

Subject to any necessary approval by Transmission Provider, each Interconnected Entity shall provide necessary equipment outages to allow the other Interconnected Entity to perform periodic maintenance, repair or replacement of its facilities and such outages shall be provided at mutually agreeable times, unless conditions arise which an Interconnected Entity believes, in accordance with Good Utility Practice, may endanger persons or property.

#### **5.2.4 Rescheduling of Planned Outages:**

To the extent so provided by the Tariff, the Operating Agreement, and the PJM Manuals, an Interconnected Entity may seek compensation from Transmission Provider for any costs related to rejection by Transmission Provider of a request of such Interconnected Entity for a planned maintenance outage.

#### **5.2.5 Outage Restoration:**

If an outage on an Interconnected Entity's facilities adversely affects the other Interconnected Entity's facilities, the Interconnected Entity that owns or controls the facility that is out of service shall use Reasonable Efforts to restore the facility to service promptly.

#### **5.3 Inspections and Testing:**

Each Interconnected Entity shall perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Generating Facility or Merchant Transmission Facility with the Transmission System in a safe and reliable manner. Each Interconnected Entity shall have the right, upon advance written notice, to request reasonable additional testing of an Interconnected Entity's facilities for good cause, as may be in accordance with Good Utility Practice.

#### **5.4 Right to Observe Testing:**

Each Interconnected Entity shall notify the other Interconnected Entity in advance of its performance of tests of its portion of the Interconnection Facilities. The other Interconnected Entity shall, at its own expense, have the right, but not the obligation, to:

- (a) Observe the other Party's tests and/or inspection of any of its system protection facilities and other protective equipment, including power system stabilizers;
- (b) Review the settings of the other Party's system protection facilities and other protective equipment;
- (c) Review the other Party's maintenance record relative to the Interconnection Facilities, system protection facilities and other protective equipment; and
- (d) Exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party.

#### **5.5 Secondary Systems:**

Each Interconnected Entity agrees to cooperate with the other in the inspection, maintenance, and testing of those Secondary Systems directly affecting the operation of an Interconnected Entity's facilities and equipment which may reasonably be expected to affect the other Interconnected

Entity's facilities. Each Interconnected Entity shall provide advance notice to the other Interconnected Entity before undertaking any work on such equipment, especially in electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.

#### **5.6 Access Rights:**

Each Interconnected Entity shall provide the other Interconnected Entity access to areas under its control as reasonably necessary to permit the other Interconnected Entity to perform its obligations under this Appendix 2, including operation and maintenance obligations. An Interconnected Entity that obtains such access shall comply with all safety rules applicable to the area to which access is obtained. Each Interconnected Entity agrees to inform the other Interconnected Entity's representatives of safety rules applicable to an area.

#### **5.7 Observation of Deficiencies:**

If an Interconnection Party observes any Abnormal Condition on, or becomes aware of a lack of scheduled maintenance and testing with respect to, an Interconnection Party's facilities and equipment that might reasonably be expected to adversely affect the observing Interconnection Party's facilities and equipment, the observing Interconnection Party shall provide prompt notice under the circumstances to the appropriate Interconnection Party, and such Interconnection Party shall consider such notice in accordance with Good Utility Practice. Any Interconnection Party's review, inspection, and approval related to the other Interconnection Party's facilities and equipment shall be limited to the purpose of assessing the safety, reliability, protection, and control of the Transmission System and shall not be construed as confirming or endorsing the design of such facilities and equipment, or as a warranty of any type, including safety, durability, or reliability thereof. Notwithstanding the foregoing, the observing Interconnection Party shall have no liability whatsoever for failure to give a deficiency notice to the other Interconnection Party and the Interconnected Entity that owns the relevant Interconnection Facilities and Transmission Owner Upgrades shall remain fully liable for its failure to determine and correct deficiencies and defects in its facilities and equipment.



## **6 Emergency Operations**

### **6.1 Obligations:**

Subject to Applicable Laws and Regulations, each Interconnection Party shall comply with the Emergency Condition procedures of NERC, the Applicable Regional Entity, Transmission Provider, the Transmission Owner and Project Developer.

### **6.2 Notice:**

Each Interconnection Party shall notify the other parties promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect operation of the Generating Facility or Merchant Transmission Facility, the Project Developer Interconnection Facilities, the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, or the Transmission System. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the facilities and/or operation thereof, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.

### **6.3 Immediate Action:**

An Interconnection Party becoming aware of an Emergency Condition may take such action, including disconnection of the Generating Facility or Merchant Transmission Facility from the Transmission System, as is reasonable and necessary in accord with Good Utility Practice (i) to prevent, avoid, or mitigate injury or danger to, or loss of, life or property; (ii) to preserve the reliability of, in the case of Project Developer, the Generating Facility or Merchant Transmission Facility, or, in the case of Transmission Provider or the Transmission Owner, the Transmission System and interconnected sub-transmission and distribution facilities; or (iii) to expedite restoration of service. Unless, in Project Developer's reasonable judgment, immediate action is required to prevent imminent loss of life or property, Project Developer shall obtain the consent of Transmission Provider and the Transmission Owner prior to performing any manual switching operations at the Generating Facility or Merchant Transmission Facility or the Generation Interconnection Facilities. Each Interconnection Party shall use Reasonable Efforts to minimize the effect of its actions during an Emergency Condition on the facilities and operations of the other Interconnection Parties.

### **6.4 Record-Keeping Obligations:**

Each Interconnection Party shall keep and maintain records of actions taken during an Emergency Condition that may reasonably be expected to affect the other parties' facilities and make such records available for audit in accordance with section 19.3 of this Appendix 2.

## **7 Safety**

### **7.1 General:**

Each Interconnected Entity and, as applicable, each Construction Party shall perform all work under this Appendix 2 that may reasonably be expected to affect the other Interconnected Entity and, as applicable, the other Construction Party in accordance with Good Utility Practice and all Applicable Laws and Regulations pertaining to the safety of persons or property. An Interconnected Entity and, as applicable, a Construction Party performing work within the boundaries of the other Interconnected Entity's facilities and, as applicable, the other Construction Party's facilities must abide by the safety rules applicable to the site. Each party agrees to inform the other party's representatives of applicable safety rules that must be obeyed on the premises. A Construction Party performing work within an area controlled by another Construction Party must abide by the safety rules applicable to the area.

### **7.2 Environmental Releases:**

Each Interconnected Entity and, as applicable, each Construction Party shall notify the other Interconnection Parties and, as applicable, Construction Parties, first orally and promptly thereafter in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities, related to the Generating Facility or Merchant Transmission Facility or the Interconnection Facilities and Transmission Owner Upgrades, any of which may reasonably be expected to affect one or both of the other parties. The notifying party shall (i) provide the notice as soon as possible; (ii) make a good faith effort to provide the notice within 24 hours after the party becomes aware of the occurrence; and (iii) promptly furnish to the other parties copies of any publicly available reports filed with any governmental agencies addressing such events.

## **8 Metering**

### **8.1 General:**

Project Developer shall have the right to install, own, operate, test, and maintain the necessary Metering Equipment. In the event that Project Developer exercises this option, the Transmission Owner shall have the right to install its own check meter(s), at its own expense, at or near the location of the Metering Equipment. If both Project Developer and Transmission Owner install meters, the meter installed by the Project Developer shall control unless it is determined by testing to be inaccurate. If the Project Developer does not exercise the option provided by the first sentence of this section, the Transmission Owner shall have the option to install, own, operate, test and maintain all necessary Metering Equipment at Project Developer's expense. If the Transmission Owner does not exercise this option, the Project Developer shall install, own, operate, test and maintain all necessary Metering Equipment. Transmission Provider shall determine the location where the Metering Equipment shall be installed, after consulting with Project Developer and the Transmission Owner. All Metering Equipment shall be tested prior to any operation of the Generating Facility or Merchant Transmission Facility. Power flows to and from the Generating Facility or Merchant Transmission Facility shall be compensated to the Point of Interconnection, or, upon the mutual agreement of the Transmission Owner and the Project Developer, to another location.

### **8.2 Standards:**

All Metering Equipment installed pursuant to this Appendix 2 to be used for billing and payments shall be revenue quality Metering Equipment and shall satisfy applicable ANSI standards and Transmission Provider's metering standards and requirements. Nothing in this Appendix 2 precludes the use of Metering Equipment for any retail services of the Transmission Owner provided, however, that in such circumstances Applicable Laws and Regulations shall control.

### **8.3 Testing of Metering Equipment:**

The Interconnected Entity that, pursuant to section 8.1 of this Appendix 2, owns the Metering Equipment shall operate, maintain, inspect, and test all Metering Equipment upon installation and at least once every two years thereafter. Upon reasonable request by the other Interconnected Entity, the owner of the Metering Equipment shall inspect or test the Metering Equipment more frequently than every two years, but in no event more frequently than three times in any 24-month period. The owner of the Metering Equipment shall give reasonable notice to the Interconnection Parties of the time when any inspection or test of the owner's Metering Equipment shall take place, and the other parties may have representatives present at the test or inspection. If Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced in order to provide accurate metering. Where the Transmission Owner owns the Metering Equipment, the expense of such adjustment, repair or replacement shall be borne by the Project Developer, except that the Project Developer shall not be responsible for such expenses where the inaccuracy or defect is caused by the Transmission Owner. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than 1 percent from the measurement made by the standard meter used in the test, the owner of the Metering Equipment

shall inform Transmission Provider, and the Transmission Provider shall inform the other Interconnected Entity, of the need to correct all measurements made by the inaccurate meter for the period during which the inaccurate measurements were made, if the period can be determined. If the period of inaccurate measurement cannot be determined, the correction shall be for the period immediately preceding the test of the Metering Equipment that is equal to one-half of the time from the date of the last previous test of the Metering Equipment, provided that the period subject to correction shall not exceed nine months.

#### **8.4 Metering Data:**

At Project Developer's expense, the metered data shall be telemetered (a) to a location designated by Transmission Provider; (b) to a location designated by the Transmission Owner, unless the Transmission Owner agrees otherwise; and (c) to a location designated by Project Developer. Data from the Metering Equipment at the Point of Interconnection shall be used, under normal operating conditions, as the official measurement of the amount of energy delivered from or to the Generating Facility or Merchant Transmission Facility to the Point of Interconnection, provided that the Transmission Provider's rules applicable to Station Power as set forth at Tariff, Attachment K-Appendix, section 1.7.10(d) shall control with respect to a Generation Project Developer's consumption of Station Power.

#### **8.5 Communications**

##### **8.5.1 Project Developer Obligations:**

Project Developer shall install and maintain satisfactory operating communications with Transmission Provider's system dispatcher or its other designated representative and with the Transmission Owner. Project Developer shall provide standard voice line, dedicated voice line, and electronic communications at its Generating Facility or Merchant Transmission Facility control room. Project Developer also shall provide and maintain backup communication links with both Transmission Provider and Transmission Owner for use during abnormal conditions as specified by Transmission Provider and Transmission Owner, respectively. Project Developer further shall provide the dedicated data circuit(s) necessary to provide Project Developer data to the Transmission Provider and Transmission Owner as necessary to conform with Applicable Technical Requirements and Standards.

##### **8.5.2 Remote Terminal Unit:**

Unless otherwise deemed unnecessary by Transmission Provider and Transmission Owner, as indicated in the Generation Interconnection Agreement, prior to any operation of the Generating Facility or Merchant Transmission Facility, a remote terminal unit, or equivalent data collection and transfer equipment acceptable to the Interconnection Parties, shall be installed by Project Developer, or by the Transmission Owner at Project Developer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Provider and Transmission Owner through use of a dedicated point-to-point data circuit(s) as indicated in section 8.5.1 of this Appendix 2. Instantaneous, bi-directional real power and, with respect to a Generation Project Developer's Generating Facility or Merchant Transmission Facility, reactive

power flow information, must be telemetered directly to the location(s) specified by Transmission Provider and the Transmission Owner.

### **8.5.3 Phasor Measurement Units (PMUs):**

A Project Developer entering the New Services Queue on or after October 1, 2012, with a proposed new Generating Facility that has a Maximum Facility Output equal to or greater than 100 MW shall install and maintain, at its expense, phasor measurement units (“PMUs”). PMUs shall be installed on the Generating Facility low side of the generator step-up transformer, unless it is a non-synchronous generation facility, in which case the PMUs shall be installed on the Generating Facility side of the Point of Change of Ownership. The PMUs must be capable of performing phasor measurements at a minimum of 30 samples per second which are synchronized via a high-accuracy satellite clock. To the extent Project Developer installs similar quality equipment, such as relays or digital fault recorders, that can collect data at least at the same rate as PMUs and which data is synchronized via a high-accuracy satellite clock, such equipment would satisfy this requirement. As provided for in the PJM Manuals, a Project Developer shall be required to install and maintain, at its expense, PMU equipment which includes the communication circuit capable of carrying the PMU data to a local data concentrator, and then transporting the information continuously to the Transmission Provider; as well as store the PMU data locally for 30 days. Project Developer shall provide to Transmission Provider all necessary and requested information through the Transmission Provider synchrophasor system, including the following: (a) gross MW and MVAR measured at the Generating Facility side of the generator step-up transformer (or, for a non-synchronous generation facility, to be measured at the Generating Facility side of the Point of Interconnection); (b) generator terminal voltage; (c) generator terminal frequency; and (d) generator field voltage and current, where available. The Transmission Provider will install and provide for the ongoing support and maintenance of the network communications linking the data concentrator to the Transmission Provider. Additional details regarding the requirements and guidelines of PMU data and telecommunication of such data are contained in the PJM Manuals.

## **9 Force Majeure**

### **9.1 Notice:**

An Interconnection Party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify the other parties in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **9.2 Duration of Force Majeure:**

A party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance. The party affected has a continuing notice obligation to the other parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The affected party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such party shall resume performance and give prompt written notice thereof to the other parties.

### **9.3 Obligation to Make Payments:**

Any Interconnection Party's obligation to make payments for services shall not be suspended by Force Majeure.

### **9.4 Definition of Force Majeure:**

For the purposes of this section, shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a party's control that, in any of the foregoing cases, by exercise of due diligence, such party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected party.

## **10 Charges**

### **10.1 Specified Charges:**

If and to the extent required by the Transmission Owner, after the Initial Operation of the Generating Facility or Merchant Transmission Facility, Project Developer shall pay one or more of the types of recurring charges described in this section to compensate the Transmission Owner for costs incurred in performing certain of its obligations under this Appendix 2. All such charges shall be stated in Schedule E of the Generator Interconnection Agreement. Permissible charges under this section may include:

(a) Administration Charge – Any such charge may recover only the costs and expenses incurred by the Transmission Owner in connection with administrative obligations such as the preparation of bills, the processing of Generating Facility- or Merchant Transmission Facility-specific data on energy delivered at the Point of Interconnection and costs incurred in similar types of administrative processes related to Project Developer's Interconnection Service. An Administration Charge shall not be permitted to the extent that the Transmission Owner's other charges to the Project Developer under the same Generator Interconnection Agreement include an allocation of Transmission Owner's administrative and general expenses and/or other corporate overhead costs.

(b) Metering Charge – Any such charge may recover only the Transmission Owner's costs and expenses associated with operation, maintenance, inspection, testing, and carrying or capital replacement charges for any Metering Equipment that is owned by the Transmission Owner.

(c) Telemetry Charge – Any such charge may recover only the Transmission Owner's costs and expenses associated with operation, maintenance, inspection, testing, and carrying or capital replacement charges for any telemetry equipment that is owned by the Transmission Owner and that is used exclusively in conjunction with Interconnection Service for the Project Developer.

(d) Generating Facility or Merchant Transmission Facility Operations and Maintenance Charge – Any such charge may recover only the Transmission Owner's costs and expenses associated with operation, maintenance, inspection, testing, modifications, taxes, and carrying or capital replacement charges for Transmission Owner Interconnection Facilities and Transmission Owner Upgrades related to the Project Developer's Interconnection Service and that are owned by the Transmission Owner, provided that

(i) any such charge shall exclude costs and expenses associated with Transmission Owner Interconnection Facilities and Transmission Owner Upgrades owned by the Transmission Owner that are radial line facilities that serve load in addition to an Project Developer; and

(ii) except as otherwise provided by Applicable Laws and Regulations, any such charge may include only an allocated share, derived in accordance with the allocations

contained in the System Impact Study(ies), of costs and expenses associated with Transmission Owner Interconnection Facilities and Transmission Owner Upgrades owned by the Transmission Owner that are radial line facilities that serve more than one Project Developer. At the discretion of the affected Interconnected Entities, a Generating Facility or Merchant Transmission Facility Operations and Maintenance Charge authorized under this section may apply on a per-incident basis or on a monthly or other periodic basis.

(e) Other Charges – Any other charges applicable to the Project Developer, as mutually agreed upon by the Project Developer and the Transmission Owner.

## **10.2 FERC Filings:**

To the extent required by law or regulation, each Interconnection Party shall seek FERC acceptance or approval of its respective charges or the methodology for the calculation of such charges. If such filing is required, Transmission Owner shall provide Transmission Provider and Project Developer with appropriate cost data, schedules and/or written testimony in support of any charges under this section in such manner and at such time as to allow Transmission Provider to include such materials in its filing of the Generation Interconnection Agreement with the FERC.



## **11 Security, Billing and Payments**

### **11.1 Recurring Charges Pursuant to section 10:**

The following provisions shall apply with respect to recurring charges applicable to Interconnection Service after Initial Operation of the Generating Facility or Merchant Transmission Facility pursuant to section 10 of this Appendix 2.

#### **11.1.1 General:**

Except as, and to the extent, otherwise provided in the Generation Interconnection Agreement, billing and payment of any recurring charges applicable to Interconnection Service after Initial Operation of the Generating Facility or Merchant Transmission Facility pursuant to section 10 of this Appendix 2 shall be in accordance with section 7 of the Tariff. The Transmission Owner shall provide Transmission Provider with all necessary information and supporting data that Transmission Provider may reasonably require to administer billing for and payment of applicable charges under this Appendix 2. Transmission Provider shall remit to the Transmission Owner revenues received in payment of Transmission Owner's charges to Project Developer under this Appendix 2 upon Transmission Provider's receipt of such revenues. At Transmission Provider's reasonable discretion, charges to Project Developer and remittances to Transmission Owner under this Appendix 2 may be netted against other amounts owed by or to such parties under the Tariff.

#### **11.1.2 Billing Disputes:**

In the event of a billing dispute between Transmission Provider and Project Developer, Transmission Provider shall continue to provide interconnection service under this Appendix 2 as long as Project Developer (i) continues to make all payments not in dispute, and (ii) pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Project Developer fails to meet these two requirements for continuation of service, then Transmission Provider shall so inform the Interconnection Parties and may provide notice to Project Developer of a Breach pursuant to section 15 of this Appendix 2. Within 30 days after the resolution of the dispute, the Interconnection Party that owes money to the other Interconnection Party shall pay the amount due with interest calculated in accord with section 11.4.

### **11.2 Costs for Transmission Owner Interconnection Facilities and Transmission Owner Upgrades:**

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Project Developer is responsible.

#### **11.2.1 Adjustments to Security:**

The Security provided by Project Developer at or before execution of the Generation Interconnection Agreement (a) shall be reduced as portions of the work are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Project Developer's cost

responsibility, as determined in accordance with the GIP, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

#### **11.2.2 Invoice:**

The Transmission Owner shall provide Transmission Provider a quarterly statement of the Transmission Owner's scheduled expenditures during the next three months for, as applicable (a) the design, engineering and construction of, and/or for other charges related to, construction of the Interconnection Facilities and Transmission Owner Upgrades for which the Transmission Owner is responsible under the GIA, or (b) in the event that the Project Developer exercises the Option to Build, for the Transmission Owner's oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Project Developer is complying with the Transmission Owner's standards and Specifications for the construction of facilities) associated with Project Developer's building Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Transmission Owner oversight costs shall be consistent with Schedule L of this GIA. Transmission Provider shall bill Project Developer on behalf of the Transmission Owner, for the Transmission Owner's expected Costs during the subsequent three months. Project Developer shall pay each bill within 20 days after receipt thereof. Upon receipt of each of Project Developer's payments of such bills, Transmission Provider shall reimburse the Transmission Owner. Project Developer may request that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of Costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that section 11.2.3 of this Appendix 2 shall govern the timing of the final cost reconciliation upon completion of the work.

#### **11.2.3 Final Invoice:**

Within 120 days after the Transmission Owner completes construction and installation of the Interconnection Facilities and Transmission Owner Upgrades for which the Transmission Owner is responsible under the Generation Interconnection Agreement, Transmission Provider shall provide Project Developer with an accounting of, and the appropriate Interconnection Party, and where applicable, the Construction Party shall make any payment to the other that is necessary to resolve, any difference between (a) Project Developer's responsibility under the Tariff for the actual Cost of such facilities, and (b) Project Developer's previous aggregate payments to Transmission Provider for the Costs of such facilities. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to either the Project Developer or the Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Interconnection Party, and where applicable, the Construction Party owing the payment.

#### **11.2.4 Disputes:**

In the event of a billing dispute between any of the Interconnection Parties, and where applicable, the Construction Parties, Transmission Provider and the Transmission Owner shall continue to

perform their respective obligations pursuant to this Generation Interconnection Agreement and any related Interconnection Construction Service Agreements so long as (a) Project Developer continues to make all payments not in dispute, and (b) the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute, or (c) Project Developer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Project Developer fails to meet any of these requirements, then Transmission Provider shall so inform the other Interconnection Parties and Construction Parties and Transmission Provider or the Transmission Owner may provide notice to Project Developer of a Breach pursuant to section 15 of this Appendix 2.

### **11.3 No Waiver:**

Payment of an invoice shall not relieve Project Developer from any other responsibilities or obligations it has under this Appendix 2, nor shall such payment constitute a waiver of any claims arising hereunder.

### **11.4 Interest:**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

## **12 Assignment**

### **12.1 Assignment with Prior Consent:**

Except as provided in section 12.2 to this Appendix 2, no Interconnection Party shall assign its rights or delegate its duties, or any part of such rights or duties, under the Generation Interconnection Agreement without the written consent of the other Interconnection Parties, which consent shall not be unreasonably withheld, conditioned, or delayed. Any such assignment or delegation made without such written consent shall be null and void. An Interconnection Party may make an assignment in connection with the sale, merger, or transfer of a substantial portion or all of its properties including the Interconnection Facilities and Transmission Owner Upgrades which it owns or will own upon completion of construction and the transfer of title required as set forth in section 23 of this Appendix 2, so long as the assignee in such a sale, merger, or transfer assumes in writing all rights, duties and obligations arising under this Generation Interconnection Agreement. In addition, the Transmission Owner shall be entitled, subject to Applicable Laws and Regulations, to assign the Generation Interconnection Agreement to any Affiliate or successor that owns and operates all or a substantial portion of the Transmission Owner's transmission facilities.

### **12.2 Assignment Without Prior Consent**

#### **12.2.1 Assignment to Owners:**

Project Developer may assign the Generation Interconnection Agreement without the Transmission Owner's or Transmission Provider's prior consent to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, provided that prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical and operational competence to comply with the requirements of this Generation Interconnection Agreement and assumes in a writing provided to the Transmission Owner and Transmission Provider all rights, duties, and obligations of Project Developer arising under this Generation Interconnection Agreement. However, any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Provider, such consent not to be unreasonably withheld, conditioned or delayed. Project Developer shall provide Transmission Provider with notice of any such assignment in accordance with the PJM Manuals.

#### **12.2.2 Assignment to Lenders:**

Project Developer may, without the consent of the Transmission Provider or the Transmission Owner, assign the Generation Interconnection Agreement to any Project Finance Entity(ies), provided that such assignment does not alter or diminish Project Developer's duties and obligations under this Generation Interconnection Agreement. If Project Developer provides the Transmission Owner with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entities as contacts for notice purposes pursuant to section 21 of this Appendix 2, the Transmission Provider or Transmission Owner shall provide notice and

reasonable opportunity for such entity(ies) to cure any Breach under this Generation Interconnection Agreement in accordance with this Generation Interconnection Agreement. Transmission Provider or Transmission Owner shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment and status of the Generation Interconnection Agreement, provided that such documents do not alter or diminish the rights of the Transmission Provider or Transmission Owner under this Generation Interconnection Agreement, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider and/or the Transmission Owner's invoice therefor, Project Developer shall pay the Transmission Provider and/or the Transmission Owner's reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Owner and Transmission Provider.

### **12.3 Successors and Assigns:**

This Generation Interconnection Agreement and all of its provisions are binding upon, and inure to the benefit of, the Interconnection Parties and their respective successors and permitted assigns.

## **13 Insurance**

### **13.1 Required Coverages For Generation Resources Of More Than 20 Megawatts or Merchant Transmission Facilities:**

Each Interconnected Entity and, as applicable, Constructing Entity shall maintain insurance at its own expense as described in paragraphs (a) through (d) below. In addition, if there any construction activities associated with this GIA, each Interconnected Entity and, as applicable, Constructing Entity shall maintain insurance at its own expense as described in paragraph (e). All insurance shall be procured from insurance companies rated "A-", VII, or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities and Transmission Owner Upgrades are or will be located. Failure to maintain required insurance shall be a Breach of the Generation Interconnection Agreement.

(a) Workers Compensation insurance with statutory limits, as required by the state and/or jurisdiction in which the work is to be performed, and employer's liability insurance with limits of not less than one million dollars (\$1,000,000).

(b) Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available, and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.

(c) Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of not less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

(d) Excess and/or Umbrella Liability Insurance with a limit of liability of not less than twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer's liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

(e) In addition, if there are construction activities required in connection with this GIA, the following Professional Liability Insurance requirements shall apply:

Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Interconnected Entity or Constructing Entity's duties, responsibilities and performance outlined in Schedule L to this GIA, with limits of liability as follows:

\$10,000,000 each occurrence

\$10,000,000 aggregate

An Interconnected Entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities and Transmission Owner Upgrades necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 13.1(e), and providing evidence of such insurance to the other Interconnected Entity. Such insurance shall be procured from companies rated “A-”, VII, or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities and Transmission Owner Upgrades are located. Nothing in this section relieves the Interconnected Entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the Interconnected Entity’s insurance obligations under this section become invalid for any reason, including but not limited to, (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the Tariff; Interconnected Entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage.

#### **13.1A Required Coverages for Generation Resources of 20 Megawatts or Less:**

Each Interconnected Entity and, as applicable, Constructing Entity shall maintain the types of insurance as described in section 13.1 paragraphs (a) through (e) in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Additional insurance may be required by the Project Developer, as a function of owning and operating a Generating Facility. All insurance shall be procured from insurance companies rated “A-”, VII, or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities and Transmission Owner Upgrades are located. Failure to maintain required insurance shall be a Breach of the Generation Interconnection Agreement.

#### **13.2 Additional Insureds:**

The Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability policies procured by each Interconnected Entity (the “Insuring Interconnected Entity”) shall include each other Interconnection Party (the “Insured Interconnection Party”), and its respective officers, agents and employees as additional insureds, and as applicable each other Construction Party (“Insured Construction Party”) its officers, agents and employees as additional insureds, providing all standard coverages and covering liability of the Insured Interconnection Party, and as applicable Insured Construction Party arising out of bodily injury and/or property damage (including loss of use) in any way connected with the operations, performance, or lack of performance under this Generation Interconnection Agreement.

#### **13.3 Other Required Terms:**

The above-mentioned insurance policies (except workers' compensation) shall provide the following:

(a) Each policy shall contain provisions that specify that it is primary and non-contributory for any liability arising out of that party's negligence, and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Insuring Interconnected Entity shall be responsible for its respective deductibles or retentions.

(b) If any coverage is written on a Claims First Made Basis, continuous coverage shall be maintained or an extended discovery period will be exercised for a period of not less than two years after termination of the Generation Interconnection Agreement.

(c) Provide for a waiver of all rights of subrogation which the Insuring Interconnected Entity's insurance carrier might exercise against the Insured Interconnection Party.

### **13.3A No Limitation of Liability:**

The requirements contained herein as to the types and limits of all insurance to be maintained by the Interconnected Entities are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Interconnection Parties under the Generation Interconnection Agreement.

### **13.4 Self-Insurance:**

Notwithstanding the foregoing, each Interconnected Entity may self-insure to meet the minimum insurance requirements of this section 13 of this Appendix 2 to the extent it maintains a self-insurance program, provided that such Interconnected Entity's senior secured debt is rated at investment grade or better by Standard & Poor's and its self-insurance program meets the minimum insurance requirements of this section 13. For any period of time that an Interconnected Entity's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under this section 13. In the event that an Interconnected Entity is permitted to self-insure pursuant to this section, it shall notify the other Interconnection Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in section 13.5 of this Appendix 2.

### **13.5 Notices; Certificates of Insurance:**

All policies of insurance shall provide for 30 days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide 30 days prior notice of cancellation or material adverse change, each Interconnected Entity shall provide the other Interconnected Entities with 30 days prior written notice of cancellation or material adverse change to any of the insurance required in this agreement. Each Interconnected Entity shall



provide the other with certificates of insurance prior to Initial Operation of the Generating Facility or Merchant Transmission Facility and thereafter at such time intervals as they shall mutually agree upon, provided that such interval shall not be less than one year. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation included in favor of the other Interconnected Entities.

In the event the construction activities pursuant to Schedule L are required, the following provisions will apply, in addition to the provisions set forth above: Prior to the commencement of work pursuant to Schedule L, the Constructing Entities agree to furnish each other with certificates of insurance evidencing the insurance coverage obtained in accordance with section 13.1 of this Appendix 2.

### **13.6 Subcontractor Insurance:**

In accord with Good Utility Practice, each Interconnected Entity shall require each of its subcontractors to maintain and provide evidence of insurance coverage of types, and in amounts, commensurate with the risks associated with the services provided by the subcontractor. Bonding of contractors or subcontractors shall be at the hiring Interconnected Entity's discretion, but regardless of bonding, the hiring principal shall be responsible for the performance or non-performance of any contractor or subcontractor it hires.

### **13.7 Reporting Incidents:**

The Interconnection Parties shall report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of the Generation Interconnection Agreement.

## **14 Indemnity**

### **14.1 Indemnity:**

Each Interconnection Party shall indemnify and hold harmless the other Interconnection Parties, and the other Interconnection Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying Interconnection Party's breach of any of the representations or warranties made in, or failure of the indemnifying Interconnection Party or any of its subcontractors to perform any of its obligations under, this Generation Interconnection Agreement (including Appendix 2), or (ii) the negligence or willful misconduct of the indemnifying Interconnection Party or its contractors; provided, however, that no Interconnection Party shall have any indemnification obligations under this section 14.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Interconnection Party seeking indemnity.

### **14.2 Indemnity Procedures:**

Promptly after receipt by a Person entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in section 14.1 may apply, the Indemnified Person shall notify the indemnifying Interconnection Party of such fact. Any failure of or delay in such notification shall not affect an Interconnection Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Interconnection Party. The Indemnified Person shall cooperate with the indemnifying Interconnection Party with respect to the matter for which indemnification is claimed. The indemnifying Interconnection Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Interconnection Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Interconnection Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Interconnection Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Interconnection Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying Interconnection Party. Notwithstanding the foregoing, the indemnifying Interconnection Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential

imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the indemnifying Interconnection Party, in such event the indemnifying Interconnection Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

#### **14.3 Indemnified Person:**

If an Indemnified Person is entitled to indemnification under this section 14 as a result of a claim by a third party, and the indemnifying Interconnection Party fails, after notice and reasonable opportunity to proceed under section 14.2 of this Appendix 2, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Interconnection Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

#### **14.4 Amount Owing:**

If an indemnifying Interconnection Party is obligated to indemnify and hold any Indemnified Person harmless under this section 14, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

#### **14.5 Limitation on Damages:**

Except as otherwise provided in this section 14, the liability of an Interconnection Party under this Appendix 2 shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Interconnection Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Interconnection Party, whether in tort, contract or other basis in law or equity for any special, indirect punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 14.5 are without regard to the cause or causes related thereto, including the negligence of any Interconnection Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Interconnection Party's rights to obtain equitable relief as otherwise provided in this Appendix 2. The provisions of this section 14.5 shall survive the termination or expiration of the Generation Interconnection Agreement.

#### **14.6 Limitation of Liability in Event of Breach:**

An Interconnection Party ("Breaching Party") shall have no liability hereunder to the other Interconnection Parties, and the other Interconnection Parties hereby release the Breaching Party, for all claims or damages that either of them incurs that are associated with any interruption in the availability of the Generating Facility or Merchant Transmission Facility, Interconnection Facilities and Transmission Owner Upgrades, Transmission System or Interconnection Service or damages to an Interconnection Party's facilities, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this Generation Interconnection Agreement (including Appendix 2).

#### **14.7 Limited Liability in Emergency Conditions:**

Except as otherwise provided in the Tariff or the Operating Agreement, no Interconnection Party shall be liable to any other Interconnection Party for any action that it takes in responding to an Emergency Condition, so long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or of the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Project Developer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.

## **15 Breach, Cure and Default**

### **15.1 Breach:**

A Breach of this Generation Interconnection Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Appendix 2 or of the other portions of the Generation Interconnection Agreement or any attachments or Schedule hereto, including but not limited to any material breach of a representation, warranty or covenant (other than in subsections (a) and (c)-(e) of this section) made in this Appendix 2 or any provisions of Schedule L;
- (c) Assignment of the Generation Interconnection Agreement in a manner inconsistent with its terms;
- (d) Failure of an Interconnection Party to provide access rights, or an Interconnection Party's attempt to revoke or terminate access rights, that are provided under this Appendix 2; or
- (e) Failure of an Interconnection Party to provide information or data required to be determined under this Appendix 2 to another Interconnection Party for such other Interconnection Party to satisfy its obligations under this Appendix 2.

### **15.2 Continued Operation:**

In the event of a Breach or Default by either Interconnected Entity, and subject to termination of the Generation Interconnection Agreement under section 16 of this Appendix 2, the Interconnected Entities shall continue to operate and maintain, as applicable, such DC power systems, protection and Metering Equipment, telemetering equipment, SCADA equipment, transformers, Secondary Systems, communications equipment, building facilities, software, documentation, structural components, and other facilities and appurtenances that are reasonably necessary for Transmission Provider and the Transmission Owner to operate and maintain the Transmission System and the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades and for Project Developer to operate and maintain the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities, in a safe and reliable manner.

### **15.3 Notice of Breach:**

An Interconnection Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Interconnection Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider or the Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the

notifying Interconnection Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 21 of this Appendix 2.

#### **15.4 Cure and Default:**

An Interconnection Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 15.4 is automatically in Default of this Appendix 2 and of the Generation Interconnection Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

##### **15.4.1 Cure of Breach:**

**15.4.1.1** Except for the event of Breach set forth in section 15.1(a) above, the Breaching Interconnection Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.

**15.4.1.2** In an event of Breach set forth in section 15.1(a), the Breaching Interconnection Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

#### **15.5 Right to Compel Performance:**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Interconnection Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 20.1, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **16 Termination**

### **16.1 Termination of the Generation Interconnection Agreement:**

This Generation Interconnection Agreement and Interconnection Service under this Generation Interconnection Agreement may be terminated by the following means:

#### **16.1.1 By Mutual Consent:**

Interconnection Service may be terminated as of the date on which the Interconnection Parties mutually agree to terminate the Generation Interconnection Agreement.

#### **16.1.2 By Project Developer:**

Subject to its payment of Cancellation Costs, Project Developer may unilaterally terminate the Generation Interconnection Agreement pursuant to Applicable Laws and Regulations upon providing Transmission Provider and the Transmission Owner 60 days prior written notice thereof.

#### **16.1.3 Upon Default of Project Developer:**

Transmission Provider may terminate the Generation Interconnection Agreement upon the Default of Project Developer of its obligations under the Generation Interconnection Agreement by providing Project Developer and the Transmission Owner prior written notice of termination.

#### **16.1.4 Cancellation Cost Responsibility upon Termination:**

In the event of cancellation pursuant to Appendix 2, section 16.1 of this GIA, the Project Developer shall be liable to pay to the Transmission Owner or Transmission Provider all Cancellation Costs in connection with the GIA. Cancellation costs may include costs for Network Upgrades assigned to Project Developer, in accordance with the Tariff and as reflected in this GIA, which remain the responsibility of Project Developer under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Project Developers in the Cycle. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Project Developer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. The Project Developer shall pay the Transmission Provider each bill for Cancellation Costs within 30 days after, as applicable, the Transmission Owner's or Transmission Provider's presentation to the Project Developer of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing party seeks to collect. Upon receipt of each of Project Developer's payments of such bills of the Transmission Owner, Transmission Provider shall reimburse the Transmission Owner for Cancellation Costs incurred by the latter.

### **16.2 Disposition of Facilities upon Termination:**

#### **16.2.1 Disconnection:**

Upon termination of the Generation Interconnection Agreement in accordance with this section 16, Transmission Provider and/or the Transmission Owner shall, in coordination with Project Developer, physically disconnect the Generating Facility or Merchant Transmission Facility from the Transmission System, except to the extent otherwise allowed by this Appendix 2.

#### **16.2.2 Network Facilities:**

At the time of termination, the Transmission Provider and the Interconnected Entities shall keep in place any portion of the Interconnection Facilities and Transmission Owner Upgrades that the Transmission Provider deems necessary for the safety, integrity and/or reliability of the Transmission System. Otherwise, Transmission Provider may, in its discretion, within 30 days following termination of Interconnection Service, require the removal of all or any part of the Interconnection Facilities and Transmission Owner Upgrades.

**16.2.2.1:** In the event that (i) the Generation Interconnection Agreement and Interconnection Service under this Appendix 2 are terminated and (ii) Transmission Provider determines that some or all of the Interconnection Facilities and Transmission Owner Upgrades that are owned by the Project Developer are necessary for the safety, integrity and/or reliability of the Transmission System, Project Developer, subject to Applicable Laws and Regulations, shall transfer to the Transmission Owner title to the Interconnection Facilities and Transmission Owner Upgrades that Transmission Provider has determined to be necessary for the safety, integrity and/or reliability of the Transmission System.

**16.2.2.2:** In the event that removal of some or all of the Interconnection Facilities and Transmission Owner Upgrades is necessary to maintain compliance with Applicable Standards, Project Developer shall be responsible for the costs of any such removal. Project Developer shall have the right to take or retain title to equipment and/or facilities that are removed pursuant to this section; alternatively, in the event that the Project Developer does not wish to retain title to removed equipment and/or facilities that it owns, the Transmission Owner may elect to pay the Project Developer a mutually agreed amount to acquire and own such equipment and/or facilities.

#### **16.2.3 Request for Disposition Determination:**

Project Developer may request a determination from the Transmission Provider whether any Interconnection Facilities and Transmission Owner Upgrades will be removed in the event of any termination of Interconnection Service to the Generating Facility or Merchant Transmission Facility within the following year. Transmission Provider shall respond to that request no later than 60 days after receipt.

#### **16.3 FERC Approval:**

Notwithstanding any other provision of this Appendix 2, no termination hereunder shall become effective until the Interconnected Entities and/or Transmission Provider have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with the



FERC of a notice of termination of the Generation Interconnection Agreement, and acceptance of such notice for filing by the FERC.

#### **16.4 Survival of Rights:**

Termination of this Generation Interconnection Agreement shall not relieve any Interconnection Party of any of its liabilities and obligations arising under this Generation Interconnection Agreement (including Appendix 2) prior to the date on which termination becomes effective, and each Interconnection Party may take whatever judicial or administrative actions it deems desirable or necessary to enforce its rights hereunder. Applicable provisions of this Appendix 2 will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the Generation Interconnection Agreement was in effect.

In the event activities under Schedule L are required, the following provisions will apply, in addition to the provisions set forth above:

The obligations of the Construction Parties hereunder with respect to payments, Cancellation Costs, warranties, liability and indemnification shall survive termination to the extent necessary to provide for the determination and enforcement of said obligations arising from acts or events that occurred while GIA was in effect. In addition, applicable provisions of this GIA will continue in effect after expiration, cancellation or termination to the extent necessary to provide for final billings, payments, and billing adjustments.

## **17 Confidentiality:**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Interconnection Party providing the information orally informs the Interconnection Party receiving the information that the information is confidential. If requested by any Interconnection Party, the disclosing Interconnection Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Interconnection Party may disclose such writing to an appropriate Governmental Authority. Any Interconnection Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **17.1 Term:**

During the term of the Generation Interconnection Agreement, and for a period of three years after the expiration or termination of the Generation Interconnection Agreement, except as otherwise provided in this section 17, each Interconnection Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other Interconnection Party.

### **17.2 Scope:**

Confidential Information shall not include information that the receiving Interconnection Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Interconnection Party; (ii) was in the lawful possession of the receiving Interconnection Party on a non-confidential basis before receiving it from the disclosing Interconnection Party; (iii) was supplied to the receiving Interconnection Party without restriction by a third party, who, to the knowledge of the receiving Interconnection Party, after due inquiry, was under no obligation to the disclosing Interconnection Party to keep such information confidential; (iv) was independently developed by the receiving Interconnection Party without reference to Confidential Information of the disclosing Interconnection Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Interconnection Party or breach of this Appendix 2; or (vi) is required, in accordance with section 17.7 of this Appendix 2, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Generation Interconnection Agreement. Information designated as Confidential Information shall no longer be deemed confidential if the Interconnection Party that designated the information as confidential notifies the other Interconnection Parties that it no longer is confidential.

### **17.3 Release of Confidential Information:**

No Interconnection Party shall disclose Confidential Information to any other person, except to its Affiliates (limited by FERC's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be or considering providing financing to or equity participation in Project Developer or to potential purchasers or assignees of Project Developer, on a need-to-know basis in connection with the Generation Interconnection Agreement, unless such person has first been advised of the confidentiality provisions of this section 17 and has agreed to comply

with such provisions. Notwithstanding the foregoing, an Interconnection Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this section 17.

#### **17.4 Rights:**

Each Interconnection Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Interconnection Party. An Interconnection Party's disclosure to another Interconnection Party of Confidential Information shall not be deemed a waiver by any Interconnection Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **17.5 No Warranties:**

By providing Confidential Information, no Interconnection Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Interconnection Party obligates itself to provide any particular information or Confidential Information to any other Interconnection Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **17.6 Standard of Care:**

Each Interconnection Party shall use at least the same standard of care to protect Confidential Information it receives as the Interconnection Party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Interconnection Party may use Confidential Information solely to fulfill its obligations to the other Interconnection Parties under the Generation Interconnection Agreement or to comply with Applicable Laws and Regulations.

#### **17.7 Order of Disclosure:**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires an Interconnection Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Interconnection Party shall provide the Interconnection Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Interconnection Party may seek an appropriate protective order or waive compliance with the terms of this Appendix 2 or the Generation Interconnection Agreement. Notwithstanding the absence of a protective order or agreement, or waiver, the Interconnection Party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Interconnection Party is legally compelled to disclose. Each Interconnection Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **17.8 Termination of Generation Interconnection Agreement:**

Upon termination of the Generation Interconnection Agreement for any reason, each Interconnection Party shall, within 10 calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

#### **17.9 Remedies:**

The Interconnection Parties agree that monetary damages would be inadequate to compensate an Interconnection Party for another Interconnection Party's Breach of its obligations under this section 17. Each Interconnection Party accordingly agrees that the other Interconnection Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Interconnection Party breaches or threatens to breach its obligations under this section 17, which equitable relief shall be granted without bond or proof of damages, and the receiving Interconnection Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section 17, but shall be in addition to all other remedies available at law or in equity. The Interconnection Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Interconnection Party, however, shall be liable for indirect, incidental or consequential or punitive damages of any nature or kind resulting from or arising in connection with this section 17.

#### **17.10 Disclosure to FERC or its Staff:**

Notwithstanding anything in this section 17 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Interconnection Parties that is otherwise required to be maintained in confidence pursuant to this Generation Interconnection Agreement, the Interconnection Party, shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Interconnection Party must, consistent with 18 C.F.R. § 388.122, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Interconnection Parties are prohibited from notifying the other Interconnection Parties prior to the release of the Confidential Information to FERC or its staff. An Interconnection Party shall notify the other Interconnection Parties to the Generation Interconnection Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Interconnection Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### **17.11 Non-Disclosure:**

Subject to the exception in section 17.10 of this Appendix 2, no Interconnection Party shall disclose Confidential Information of another Interconnection Party to any person not employed or retained by the Interconnection Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Interconnection Party to be required in connection with a

dispute between or among the Interconnection Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Interconnection Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Generation Interconnection Agreement or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Interconnection Party's Confidential Information under this subparagraph, the disclosing Interconnection Party shall promptly notify the other Interconnection Parties in writing and shall assert confidentiality and cooperate with the other Interconnection Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

#### **17.12 Information in the Public Domain:**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

#### **17.13 Return or Destruction of Confidential Information:**

If an Interconnection Party provides any Confidential Information to another Interconnection Party in the course of an audit or inspection, the providing Interconnection Party may request the other party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Interconnection Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other Interconnection Party that it has complied with such request.

## **18 Subcontractors**

### **18.1 Use of Subcontractors:**

Nothing in this Appendix 2 shall prevent the Interconnection Parties from utilizing the services of subcontractors as they deem appropriate to perform their respective obligations hereunder, provided, however, that each Interconnection Party shall require its subcontractors to comply with all applicable terms and conditions of this Appendix 2 in providing such services.

### **18.2 Responsibility of Principal:**

The creation of any subcontract relationship shall not relieve the hiring Interconnection Party of any of its obligations under this Appendix 2. Each Interconnection Party shall be fully responsible to the other Interconnection Parties for the acts and/or omissions of any subcontractor it hires as if no subcontract had been made.

### **18.3 Indemnification by Subcontractors:**

To the fullest extent permitted by law, an Interconnection Party that uses a subcontractor to carry out any of the Interconnection Party's obligations under this Appendix 2 shall require each of its subcontractors to indemnify, hold harmless and defend each other Interconnection Party, its representatives and assigns from and against any and all claims and/or liability for damage to property, injury to or death of any person, including the employees of any Interconnection Party or of any Affiliate of any Interconnection Party, or any other liability incurred by the other Interconnection Party or any of its Affiliates, including all expenses, legal or otherwise, to the extent caused by any act or omission, negligent or otherwise, by such subcontractor and/or its officers, directors, employees, agents and assigns, that arises out of or is connected with the operation of the facilities of either Interconnected Entity described in this Appendix 2; provided, however, that no Interconnection Party or Affiliate thereof shall be entitled to indemnity under this section 18.3 in respect of any injury, loss, or damage to the extent that such loss, injury, or damage results from the negligence or willful misconduct of the Interconnection Party or Affiliate seeking indemnity.

### **18.4 Subcontractors Not Beneficiaries:**

No subcontractor is intended to be, or shall be deemed to be, a third-party beneficiary of a Generation Interconnection Agreement.

## **19 Information Access and Audit Rights**

### **19.1 Information Access:**

Consistent with Applicable Laws and Regulations, each Interconnection Party shall make available such information and/or documents reasonably requested by another Interconnection Party that are necessary to (i) verify the costs incurred by the other Interconnection Party for which the requesting Interconnection Party is responsible under this Appendix 2; and (ii) carry out obligations and responsibilities under this Appendix 2, provided that the Interconnection Parties shall not use such information for purposes other than those set forth in this section 19.1 and to enforce their rights under this Appendix 2.

### **19.2 Reporting of Non-Force Majeure Events:**

Each Interconnection Party shall notify the other Interconnection Parties when it becomes aware of its inability to comply with the provisions of this Appendix 2 for a reason other than an event of force majeure as defined in section 9.4 of this Appendix 2. The parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section shall not entitle the receiving Interconnection Party to allege a cause of action for anticipatory breach of the Generation Interconnection Agreement.

### **19.3 Audit Rights:**

Subject to the requirements of confidentiality under section 17 of this Appendix 2, each Interconnection Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent other Interconnection Party, to audit at its own expense the other Interconnection Party's accounts and records pertaining to such Interconnection Party's performance and/or satisfaction of obligations arising under this Appendix 2. Any audit authorized by this section shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Appendix 2. Any request for audit shall be presented to the Interconnection Party to be audited not later than 24 months after the event as to which the audit is sought. Each Interconnection Party shall preserve all records held by it for the duration of the audit period.

## **20 Disputes**

### **20.1 Submission:**

Any claim or dispute that any Interconnection Party may have against another arising out of the Generation Interconnection Agreement may be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.

### **20.2 Rights Under the Federal Power Act:**

Nothing in this section shall restrict the rights of any Interconnection Party to file a complaint with FERC under relevant provisions of the Federal Power Act.

### **20.3 Equitable Remedies:**

Nothing in this section shall prevent any Interconnection Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations.



## **21 Notices**

### **21.1 General:**

Any notice, demand or request required or permitted to be given by any Interconnection Party to another and any instrument required or permitted to be tendered or delivered by any Interconnection Party, in writing to another shall be provided electronically or may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Interconnection Party, or personally delivered to the Interconnection Party, at the electronic or other address specified in the Generation Interconnection Agreement.

### **21.2 Emergency Notices:**

Moreover, notwithstanding the foregoing, any notice hereunder concerning an Emergency Condition or other occurrence requiring prompt attention, or as necessary during day-to-day operations, may be made by telephone or in person, provided that such notice is confirmed in writing promptly thereafter. Notice in an Emergency Condition, or as necessary during day-to-day operations, shall be provided (i) if by the Transmission Owner, to the shift supervisor at, as applicable, a Generation Project Developer's Generating Facility or a Transmission Project Developer's control center; and (ii) if by the Project Developer, to the shift supervisor at the Transmission Owner's transmission control center.

### **21.3 Operational Contacts:**

Each Interconnection Party shall designate, and provide to each other Interconnection Party contact information concerning, a representative to be responsible for addressing and resolving operational issues as they arise during the term of the Generation Interconnection Agreement.

## **22 Miscellaneous**

### **22.1 Regulatory Filing:**

In the event that this Generation Interconnection Agreement contains any terms that deviate materially from the form included in the Tariff, Transmission Provider shall file the Generation Interconnection Agreement on behalf of itself and the Transmission Owner with FERC as a service schedule under the Tariff within 30 days after execution. Project Developer may request that any information so provided be subject to the confidentiality provisions of section 17 of this Appendix 2. An Project Developer shall have the right, with respect to any Generation Interconnection Agreement tendered to it, to request (a) dispute resolution under section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (b) that Transmission Provider file the agreement unexecuted with FERC. With the filing of any unexecuted Generation Interconnection Agreement, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between or among the Interconnection Parties.

### **22.2 Waiver:**

Any waiver at any time by an Interconnection Party of its rights with respect to a Breach or Default under this Generation Interconnection Agreement or with respect to any other matters arising in connection with this Appendix 2, shall not be deemed a waiver or continuing waiver with respect to any subsequent Breach or Default or other matter.

### **22.3 Amendments and Rights Under the Federal Power Act:**

This Generation Interconnection Agreement may be amended or supplemented only by a written instrument duly executed by all Interconnection Parties. An amendment to the Generation Interconnection Agreement shall become effective and a part of this Generation Interconnection Agreement upon satisfaction of all Applicable Laws and Regulations. Notwithstanding the foregoing, nothing contained in this Generation Interconnection Agreement shall be construed as affecting in any way any of the rights of any Interconnection Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Interconnection Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this Generation Interconnection Agreement and every appendix referred to therein shall be amended, as mutually agreed by the Interconnection Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

### **22.4 Binding Effect:**

This Generation Interconnection Agreement, including this Appendix 2, and the rights and obligations thereunder shall be binding upon, and shall inure to the benefit of, the successors and assigns of the Interconnection Parties.

## **22.5 Regulatory Requirements:**

Each Interconnection Party's performance of any obligation under this Generation Interconnection Agreement for which such party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Interconnection Party, or the Interconnection Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Interconnection Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **23 Representations and Warranties**

### **23.1 General:**

Each Interconnected Entity hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Interconnected Entity during the time the Generation Interconnection Agreement is effective:

#### **23.1.1 Good Standing:**

Such Interconnected Entity is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated and operates as stated in the Generation Interconnection Agreement.

#### **23.1.2 Authority:**

Such Interconnected Entity has the right, power and authority to enter into the Generation Interconnection Agreement, to become a party hereto and to perform its obligations hereunder. The Generation Interconnection Agreement is a legal, valid and binding obligation of such Interconnected Entity, enforceable against such Interconnected Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **23.1.3 No Conflict:**

The execution, delivery and performance of the Generation Interconnection Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of the Interconnected Entity, or with any judgment, license, permit, order, material agreement or instrument applicable to or binding upon the Interconnected Entity or any of its assets.

#### **23.1.4 Consent and Approval:**

Such Interconnected Entity has sought or obtained, or, in accordance with the Generation Interconnection Agreement will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of the Generation Interconnection Agreement and it will provide to any Governmental Authority notice of any actions under this Appendix 2 that are required by Applicable Laws and Regulations.

### **23.2 Transmission Outages:**

#### **23.2.1 Outages; Coordination:**

The Construction Parties acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing all Interconnection Facilities and Transmission Owner Upgrades. The Construction Parties further acknowledge and agree that any such outages shall be coordinated by and through the Transmission Provider.

### **23.3 Land Rights; Transfer of Title:**

In the event activities under Schedule L of this GIA are required, the following provisions will apply, in addition to the provisions set forth above:

#### **23.3.1 Grant of Easements and Other Land Rights:**

Project Developer at its sole cost and expense, shall grant such easements and other land rights to the Transmission Owner over the Site at such times and in such a manner as the Transmission Owner may reasonably require to perform its obligations under the GIA and/or to perform its operation and maintenance obligations under the Generation Interconnection Agreement.

#### **23.3.2 Construction of Facilities on Project Developer Property:**

To the extent that the Transmission Owner is required to construct and install any Transmission Owner Interconnection Facilities and Transmission Owner Upgrades on land owned by the Project Developer, the Project Developer, at its sole cost and expense, shall legally transfer to the Transmission Owner all easements and other land rights required pursuant to section 23.1 above prior to the commencement of such construction and installation.

#### **23.3.3 Third Parties:**

If any of the easements and other land rights described in section 23.1 above must be obtained from a third party, the Transmission Owner's obligation for completing its construction responsibilities in accordance with the Schedule of Work set forth in Schedule L hereto, to the extent of the facilities that it is responsible for constructing for which such easements and land rights are necessary, shall be subject to Project Developer's acquisition of such easements and other land rights at such times and in such manner as the Transmission Owner may reasonably require to perform its obligations under this Appendix 2, and/or to perform its operation and maintenance obligations under the Generation Interconnection Agreement, provided, however, that upon Project Developer's request, the Transmission Owner shall assist the Project Developer in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf. The terms of easements and land rights acquired by Project Developer shall not unreasonably impede the Transmission Owner's timely completion of construction of the affected facilities.

#### **23.3.4 Documentation:**

Project Developer shall prepare, execute and file such documentation as the Transmission Owner may reasonably require to memorialize any easements and other land rights granted pursuant to

this section 23.3. Documentation of such easements and other land rights, and any associated filings, shall be in a form acceptable to the Transmission Owner.

#### **23.3.5 Transfer of Title to Certain Facilities Constructed by Project Developer:**

Within 30 days after the Project Developer's receipt of notice of acceptance following Stage Two energization of the Interconnection Facilities and Transmission Owner Upgrades, the Project Developer shall deliver to the Transmission Owner, for the Transmission Owner's review and approval, all of the documents and filings necessary to transfer to the Transmission Owner title to any Transmission Owner Interconnection Facilities and Transmission Owner Upgrades constructed by the Project Developer, and to convey to the Transmission Owner any easements and other land rights to be granted by Project Developer in accordance with section 23.3.1 above that have not then already been conveyed. The Transmission Owner shall review and approve such documentation, such approval not to be unreasonably withheld, delayed, or conditioned. Within 30 days after its receipt of the Transmission Owner's written notice of approval of the documentation, the Project Developer, in coordination and consultation with the Transmission Owner, shall make any necessary filings at the FERC or other governmental agencies for regulatory approval of the transfer of title. Within 20 days after the issuance of the last order granting a necessary regulatory approval becomes final (i.e., is no longer subject to rehearing), the Project Developer shall execute all necessary documentation and shall make all necessary filings to record and perfect the Transmission Owner's title in such facilities and in the easements and other land rights to be conveyed to the Transmission Owner. Prior to such transfer to the Transmission Owner of title to the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer, the risk of loss or damages to, or in connection with, such facilities shall remain with the Project Developer. Transfer of title to facilities under this section shall not affect the Project Developer's receipt or use of the interconnection rights related to Network Upgrades, Distribution Upgrades, Stand Alone Network Upgrades, or Transmission Owner Interconnection Facilities which it otherwise may be eligible as provided in the GIP.

#### **23.3.6 Liens:**

The Project Developer shall take all reasonable steps to ensure that, at the time of transfer of title in the Transmission Owner Interconnection Facilities built by the Project Developer to the Transmission Owner, those facilities shall be free and clear of any and all liens and encumbrances, including mechanics' liens. To the extent that the Project Developer cannot reasonably clear a lien or encumbrance prior to the time for transferring title to the Transmission Owner, Project Developer shall nevertheless convey title subject to the lien or encumbrance and shall indemnify, defend and hold harmless the Transmission Owner against any and all claims, costs, damages, liabilities and expenses (including without limitation reasonable attorneys' fees) which may be brought or imposed against or incurred by Transmission Owner by reason of any such lien or encumbrance or its discharge.

### **23.4 Warranties:**

#### **23.4.1 Project Developer Warranty:**

The Project Developer shall warrant that its work (or the work of any subcontractor that it retains) in constructing and installing the Transmission Owner Interconnection Facilities or Stand Alone Network Upgrades that it builds is free from defects in workmanship and design and shall conform to the requirements of this GIA for one year (the “Project Developer Warranty Period”) commencing upon the date title is transferred to Transmission Owner in accordance with section 23.3.5 of this Appendix 2. The Project Developer shall, at its sole expense and promptly after notification by the Transmission Owner, correct or replace defective work in accordance with Applicable Technical Requirements and Standards, during the Project Developer Warranty Period. The warranty period for such corrected or replaced work shall be the unused portion of the Project Developer Warranty Period remaining as of the date of notice of the defect. The Project Developer Warranty Period shall resume upon acceptance of such corrected or replaced work. All Costs incurred by Transmission Owner as a result of such defective work shall be reimbursed to the Transmission Owner by the Project Developer on demand; provided that the Transmission Owner submits the demand to the Project Developer within the Project Developer Warranty Period and provides reasonable documentation of the claimed costs. The Transmission Owner’s acceptance, inspection and testing, or a third party’s inspection or testing, of such facilities pursuant to Schedule L, section 11.9 of this GIA shall not be construed to limit in any way the warranty obligations of the Project Developer, and this provision does not modify and shall not limit the Project Developer’s indemnification obligations set forth in Appendix 2, section 14.0 of this GIA.

#### **23.4.2 Manufacturer Warranties:**

Prior to the transfer to the Transmission Owner of title to the Transmission Owner Interconnection Facilities built by the Project Developer, the Project Developer shall produce documentation satisfactory to the Transmission Owner evidencing the transfer to the Transmission Owner of all manufacturer warranties for equipment and/or materials purchased by the Project Developer for use and/or installation as part of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer.

## **24 Tax Liability**

### **24.1 Safe Harbor Provisions:**

This section 24.1 is applicable only to Project Developers. Provided that Project Developer agrees to conform to all requirements of the Internal Revenue Service (“IRS”) (e.g., the “safe harbor” section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016)) that would confer nontaxable status on some or all of the transfer of property, including money, by Project Developer to the Transmission Owner for payment of the Costs of construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, the Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in section 24.4.2 below, shall not include income taxes in the Costs of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that are payable by Project Developer under the Generation Interconnection Agreement. Project Developer shall document its agreement to conform to IRS requirements for such non-taxable status in the Generation Interconnection Agreement, the Interconnection Construction Service Agreement, and/or applicable agreement.

### **24.2 Tax Indemnity:**

Project Developer shall indemnify the Transmission Owner for any costs that Transmission Owner incurs in the event that the IRS and/or a state department of revenue (“State”) determines that the property, including money, transferred by Project Developer to the Transmission Owner with respect to the construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades is taxable income to the Transmission Owner. Project Developer shall pay to the Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Transmission Owner. In the event that the Transmission Owner chooses to contest such assessment, either at the request of Project Developer or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Transmission Owner shall refund to Project Developer the excess of its demand payment made to the Transmission Owner over the amount of the tax, interest and penalty for which the Transmission Owner is finally determined to be liable. Project Developer’s tax indemnification obligation under this section shall survive any termination of the Generation Interconnection Agreement or Interconnection Construction Service Agreement.

### **24.3 Taxes Other Than Income Taxes:**

Upon the timely request by Project Developer, and at Project Developer’s sole expense, the Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Transmission Owner for which Project Developer may be required to reimburse Transmission Provider under the terms of this Appendix 2 or the GIP. Project Developer shall pay to the Transmission Owner on a periodic basis, as invoiced by the Transmission Owner, the Transmission Owner’s documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Project Developer and the



Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Project Developer to the Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Project Developer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Transmission Owner.

#### **24.4 Income Tax Gross-Up:**

##### **24.4.1 Additional Security:**

In the event that Project Developer does not provide the safe harbor documentation required under section 24.1 prior to execution of the Generation Interconnection Agreement, within 15 days after such execution, Transmission Provider shall notify Project Developer in writing of the amount of additional Security that Project Developer must provide. The amount of Security that a Transmission Project Developer must provide initially pursuant to this Generation Interconnection Agreement shall include any amounts described as additional Security under this section 24.4 regarding income tax gross-up.

##### **24.4.2 Amount:**

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of any Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the total Security provided to the amount that would be sufficient to permit the Transmission Owner to receive and retain, after the payment of all applicable income taxes (“Current Taxes”) and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the “Present Value Depreciation Amount”), an amount equal to the estimated Costs of Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer is responsible under the Generation Interconnection Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the “Current Tax Rate”); and the Present Value Depreciation Amount shall be computed by discounting the Transmission Owner’s anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

##### **24.4.3 Time for Payment:**

Project Developer must provide the additional Security, in a form and with terms as required by the GIP within 15 days after its receipt of Transmission Provider’s notice under this section.

#### **24.5 Tax Status:**

Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Generation Interconnection Agreement or the GIP is intended to adversely affect any Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

**SCHEDULE A**

**CUSTOMER FACILITY LOCATION/SITE PLAN**

**SCHEDULE B**  
**SINGLE-LINE DIAGRAM**

**SCHEDULE C**

**LIST OF METERING EQUIPMENT**

## SCHEDULE D

### APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

{Include the following language if not required:}

Not Required.

{Otherwise, include the following language:}

The following technical requirements and standards shall apply. To the extent that these Applicable Technical Requirements and Standards conflict with the terms and conditions of the Tariff or any other provision of this GIA, the Tariff and/or this GIA shall control.

*{Instructions: If the relevant TO Applicable Technical Requirements and Standards **are** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply. The [Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] is available on the PJM website.

*{Instructions. If the relevant TO Applicable Technical Requirements and Standards **are not** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply.

**SCHEDULE E**

**SCHEDULE OF CHARGES**

## **SCHEDULE F**

### **SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**



## **SCHEDULE G**

### **PROJECT DEVELOPER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS**

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}

Not Required.

[OR]

{Include the following language if applicable to Project Developer:}

As provided in section 24.1 of Appendix 2 to this GIA and subject to the requirements thereof, Project Developer represents that it meets all qualifications and requirements as set forth in section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Project Developer agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Project Developer to Transmission Owner with respect to the payment of the Costs of construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades specified in this GIA.

Nothing in Project Developer's agreement pursuant to this Schedule G shall change Project Developer's indemnification obligations under section 24.2 of Appendix 2 to this GIA.

## **SCHEDULE H**

### **INTERCONNECTION REQUIREMENTS FOR ALL WIND, SOLAR AND NON-SYNCHRONOUS GENERATION FACILITIES**

{Include the appropriate language from the alternatives below}

{Include the following language if the Generating Facility is not a wind, solar or non-synchronous generation facility}

Not Required

[OR]

{Include the following language when the Generating Facility is a wind, solar or non-synchronous generation facility}

#### **A. Voltage Ride Through Requirements**

The Generating Facility shall be designed to remain in service (not trip) for voltages and times as specified for the Eastern Interconnection in Attachment 1 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low voltage conditions, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

#### **B. Frequency Ride Through Requirements**

The Generating Facility shall be designed to remain in service (not trip) for frequencies and times as specified in Attachment 2 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low frequency condition, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

#### **C. Supervisory Control and Data Acquisition (“SCADA”) Capability**

The wind, solar or non-synchronous generation facility shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind, solar or non-synchronous generation facility Project Developer shall determine what SCADA information is essential for the proposed wind, solar or non-synchronous generation facility, taking into account the size of the facility and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

#### **D. Meteorological Data Reporting Requirement (Applicable to wind generation facilities only)**

The wind generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Wind speed (meters/second)
- Wind direction (degrees from True North)
- Atmosphere pressure (hectopascals)
- Forced outage data (wind turbine and MW unavailability)

**E. Meteorological Data Reporting Requirement (Applicable to solar generation facilities only)**

The solar generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Irradiance
- Forced outage data

The Transmission Provider and Project Developer may mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such additional mutually agreed upon requirements for meteorological and forced outage data are set forth below: [STATE “NOT APPLICABLE UNDER THIS GIA” OR SPECIFY THE AGREED UPON METEOROLOGICAL AND FORCED OUTAGE DATA REQUIREMENTS]

**SCHEDULE I**  
**INTERCONNECTION SPECIFICATIONS FOR AN**  
**ENERGY STORAGE RESOURCE**

{Include the appropriate language from the alternatives below.}

{Include the following language if the Generating Facility is not an Energy Storage Resource:}

Not Required

{Include the following language if the Generating Facility is an Energy Storage Resource:}

This Schedule I specifies information for Energy Storage Resource will be required to provide primary frequency response consistent with the conditions set forth in Appendix 2, sections 4.7.2, 4.7.2.1, 4.7.2.2, 4.7.2.3, and 4.7.2.4 of this GIA.

**1.0 Minimum State of Charge and Maximum State of Charge**

Primary frequency response operating range for Energy Storage Resources:

Minimum State of Charge: \_\_\_\_\_; and

Maximum State of Charge: \_\_\_\_\_.

**2.0 Static or Dynamic Operating Range**

{Specify whether the operating range is static or dynamic. If the operating range is dynamic, then this Schedule I must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.}

## **SCHEDULE J**

### **SCHEDULE OF TERMS AND CONDITIONS FOR SURPLUS INTERCONNECTION SERVICE**

**SCHEDULE K**

**REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL  
ELECTRICAL GENERATING CAPABILITY**

## **SCHEDULE L**

### **INTERCONNECTION CONSTRUCTION TERMS AND CONDITIONS**

**{Instructions: to be used if construction of facilities is required in connection with this GIA.  
If Interconnection Construction Terms and Conditions are not required, state “Not  
Applicable” and delete reminder of Schedule L}**

# **INTERCONNECTION CONSTRUCTION TERMS AND CONDITIONS**

## **For the Generation Interconnection Agreement**

**By and Between**

**PJM Interconnection, L.L.C.**

**And**

**[Name of Project Developer]**

**And**

**[Name of Transmission Owner]**

(Project Identifier #\_\_\_\_)

- 1.0 These Interconnection Construction Terms and Conditions (“IC Terms & Conditions”), including the Schedules and Appendices attached hereto or incorporated by reference herein, shall apply to the Generation Interconnection Agreement (“GIA”) by and between Transmission Provider, Project Developer, and Transmission Owner. All capitalized terms herein shall have the meanings set forth in Appendix 1 to this Generation GIA.
- 2.0 The standard terms and conditions for construction included in Appendix 2 of the GIA associated with this Interconnection Request are hereby specifically incorporated herein.
- 3.0 Generating Facility or Merchant Transmission Facility. These IC Terms & Conditions specifically relate to the following Generating Facility or Merchant Transmission Facility at the following location:
  - a. Name of Generating Facility or Merchant Transmission Facility:  
\_\_\_\_\_
  - b. Location of Generating Facility or Merchant Transmission Facility:  
\_\_\_\_\_
- 4.0 Commencement of Construction.
  - 4.1 The Transmission Owner shall have no obligation to begin construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades prior to the Effective Date of this GIA. Construction shall commence as provided in the Schedule of Work set forth in section 8.0 of these IC Terms & Conditions.
- 5.0 Construction Responsibility for
  - a. Project Developer Interconnection Facilities. Project Developer is responsible for designing and constructing the Project Developer Interconnection Facilities described in Specifications section 3.0(a)(1) of this GIA.
  - b. Construction of Transmission Owner Interconnection Facilities.



1. The Transmission Owner Interconnection Facilities and Transmission Owner Upgrades for which Transmission Owner shall be responsible for constructing are described in Specifications section 3.0(b) of this GIA.

2. Election of Construction Option. Specify below whether the Project Developer and Transmission Owner have mutually agreed to construction of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that will be built by the Transmission Owner pursuant to the Standard Option or the Negotiated Contract Option.

\_\_\_\_\_ Standard Option.

\_\_\_\_\_ Negotiated Contract Option.

If the parties have mutually agreed to use the Negotiated Contract Option, the permitted, negotiated terms on which they have agreed and which are not already set forth as part of the Scope of Work and/or Schedule of Work set forth in sections 7.0 and 8.0 of these IC Terms & Conditions shall be as set forth in Appendix 1 to this Schedule L.

3. Exercise of Option to Build. Has Project Developer timely exercised the Option to Build?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

If Yes is indicated, Project Developer shall build, in accordance with and subject to the conditions and limitations set forth in section 15.3 of this Schedule L, those portions of the Transmission Owner Interconnection Facilities and Stand Alone described in Specifications section 3.0(a)(2) of this GIA.

6.0 Facilitation by Transmission Provider: Transmission Provider shall keep itself apprised of the status of the Transmission Owner's and Project Developer's construction-related activities and, upon request of either of them, Transmission Provider shall meet with the Transmission Owner and Project Developer separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this Schedule L and Appendix 2 of the this GIA. Each of Transmission Owner and Project Developer shall cooperate in good faith with the other in Transmission Provider's efforts to facilitate resolution of disputes.

7.0 Scope of Work. The Scope of Work for all construction shall be as set forth in Specifications section 3.0 of this GIA, provided, however, that the scope of work is subject to change in accordance with Transmission Provider's scope change process for interconnection projects as set forth in the PJM Manuals. The scope change process is

intended to be used for changes to the Scope of Work as defined herein, and is not intended to be used to change any of the milestone set forth in the GIA. Any change to the Scope of Work must be agreed to by all Parties in writing by executing a scope change document.

- 8.0 Schedule of Work. The Schedule of Work for all construction is set forth below, provided, however, that such schedule is subject to change in accordance with section 15.3 of this Schedule L.

**Transmission Owner:**

**[Provide start and completion date for construction of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades and listed in Schedule C, including any supervisory or other responsibilities associated with use of the Option to Build or state “Not Applicable”]**

**Project Developer:**

**[Provide start and completion date for construction of Project Developer Interconnection Facilities listed in Schedule C, including any facilities being constructed pursuant to the Option to Build, or state “Not Applicable”]**

- 9.0 If Project Developer exercises the Option to Build, Project Developer shall pay Transmission Owner for Transmission Owner to execute the responsibilities enumerated to Transmission Owner under section 15.

10.0 Construction Obligations

10.1 Project Developer Obligations: Project Developer shall, at its sole cost and expense, design, procure, construct, own, and install the Generating Facility or Merchant Transmission Facility and the Project Developer Interconnection Facilities in accordance with this GIA, Applicable Standards, Applicable Laws and Regulations, Good Utility Practice, the Scope of Work, and the System Impact Study(ies) (to the extent that design of the Project Developer Interconnection Facilities is included therein), provided, however, that, in the event and to the extent that the Generating Facility or Merchant Transmission Facility is comprised of or includes Merchant Network Upgrades, subject to the terms of section 15.2.3 of this Schedule L, the Transmission Owner shall design, procure, construct and install such Merchant Network Upgrades.

10.2 Transmission Owner Interconnection Facilities and Transmission Owner Upgrades

10.2.1 Generally: All Transmission Owner Interconnection Facilities and Transmission Owner Upgrades necessary for the interconnection of the Generating Facility or Merchant Transmission Facility shall be designed, procured, installed and constructed in accordance with this GIA, Applicable

Standards, Applicable Laws and Regulations, Good Utility Practice, the System Impact Study(ies), and the Scope of Work.

10.2.2 Cost Responsibility: Responsibility for the Costs of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades shall be assigned in accordance with the GIP, as applicable, and shall be stated in this GIA.

10.2.3 Construction Responsibility: Except as otherwise permitted under, or as otherwise agreed upon by the Project Developer and the Transmission Owner pursuant to this GIA, the Transmission Owner shall be responsible for the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. In the event that there are multiple Transmission Owners, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they have reached agreement among themselves on how to proceed.

10.2.4 Ownership of Transmission Owner Interconnection Facilities and Transmission Owner Upgrades: The Transmission Owner shall own all Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that it builds. In addition, the Project Developer will convey to the Transmission Owner, as provided in section 23.3.5 of Appendix 2 of this GIA, title to all Transmission Owner Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer pursuant to the terms of this Schedule L. Nothing in this section shall affect the interconnection rights otherwise available to a Transmission Project Developer under the GIP.

10.2A Scope of Applicable Technical Requirements and Standards: Applicable Technical Requirements and Standards shall apply to the design, procurement, construction and installation of the Interconnection Facilities, Transmission Owner Upgrades and Merchant A.C. Transmission Facilities only to the extent that the provisions thereof relate to the design, procurement, construction and/or installation of such facilities. Such provisions relating to the design, procurement, construction and/or installation of facilities shall be appended as Schedule D to this GIA. The Interconnection Parties shall mutually agree upon, or in the absence of such agreement, Transmission Provider shall determine, which provisions of the Applicable Technical Requirements and Standards should be identified in this GIA. In the event of any conflict between the provisions of the Applicable Technical Requirements and Standards that are appended as Schedule D to this GIA and any later-modified provisions that are stated in the pertinent PJM Manual, the provisions appended as Schedule D to this GIA shall control.

10.3 Construction by Project Developer

10.3.1 Construction Prior to Execution of GIA: If the Project Developer procures materials for, and/or commences construction of, the Project Developer Interconnection Facilities, any Transmission Owner Interconnection Facilities or Stand Alone Network Upgrades that it has elected to construct by exercising the Option to Build, or for any subsequent modification thereto, prior to the execution of this GIA or, if this GIA has been executed, before the Transmission Owner and Transmission Provider have accepted the Project Developer's initial design, or any subsequent modification to the design, of such Interconnection Facilities or Stand Alone Network Upgrades, such procurement and/or construction shall be at the Project Developer's sole risk, cost and expense.

10.3.2 Monitoring and Inspection: The Transmission Owner may monitor construction and installation of Interconnection Facilities and Transmission Owner Upgrades that the Project Developer is constructing. Upon reasonable notice, authorized personnel of the Transmission Owner may inspect any or all of such Interconnection Facilities and Transmission Owner Upgrades to assess their conformity with Applicable Standards.

10.3.3 Notice of Completion: The Project Developer shall notify the Transmission Provider and the Transmission Owner in writing when it has completed construction of (i) the Generating Facility or Merchant Transmission Facility; (ii) the Project Developer Interconnection Facilities; and (iii) any Transmission Owner Interconnection Facilities and Stand Alone for which it has exercised the Option to Build.

10.4 Construction-Related Access Rights: The Transmission Owner and the Project Developer herein grant each other at no charge such rights of access to areas that it owns or otherwise controls as may be necessary for performance of their respective obligations, and exercise of their respective rights, pursuant to this Schedule L, provided that either of them performing the construction will abide by the safety, security and work rules applicable to the area where construction activity is occurring.

10.5 Coordination Among Parties: The Transmission Provider, the Project Developer, and all Transmission Owners shall communicate and coordinate their activities as necessary to satisfy their obligations under this Schedule L.

## 11.0 Construction Requirements

### 11.1 Construction by Project Developer:

The Project Developer shall use Reasonable Efforts to design, procure, construct and install the Project Developer Interconnection Facilities and any Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that it elects to build by

exercise of the Option to Build (defined in section 11.2.3.1 below) in accordance with the Schedule of Work.

## 11.2 Construction by Transmission Owner

### 11.2.1 Standard Option:

The Transmission Owner shall use Reasonable Efforts to design, procure, construct and install the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that it is responsible for constructing in accordance with the Schedule of Work.

#### 11.2.1.1 Construction Sequencing:

In general, the sequence of the proposed dates of Initial Operation of Project Developers seeking interconnection to the Transmission System will determine the sequence of construction of Network Upgrades.

### 11.2.2 Negotiated Contract Option:

As an alternative to the Standard Option set forth in section 11.2.1 above, the Transmission Owner and the Project Developer may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. Under the Negotiated Contract Option, the Project Developer and the Transmission Owner may agree to terms different from those included in the Standard Option of section 11.2.1 above and the corresponding standard terms set forth in the applicable provisions of the GIP. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Project Developer and the Transmission Owner that are parties to this GIA; no other Project Developer's responsibility for Costs may be affected. No other terms of the Tariff or this Schedule L shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option are set forth in Schedule L, Appendix 1 to this GIA. The Negotiated Option can only be used in connection with a Network Upgrade subject to the Network Upgrade Cost Responsibility Agreement all Project Developers and the relevant Transmission Owner agree.

### 11.2.3 Option to Build

#### 11.2.3.1 Option:

Project Developer has the option (“Option to Build”) to assume responsibility for the design, procurement, and construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in the Schedule of Work in section 8.0 of this Schedule L. Transmission Provider and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Specifications section 3.0(a)(2) of this GIA. If the Transmission Provider and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Project Developer with a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination. Except for Stand Alone Network Upgrades, Project Developer shall have no right to construct Network Upgrades under this option. In order to exercise this Option to Build, Project Developer must provide Transmission Provider and the Transmission Owner with written notice of Project Developer’s election to exercise the option consistent with the deadline applicable to its New Service Request or Upgrade Request. Project Developer may not elect Option to Build after such date.

#### 11.2.3.2 General Conditions Applicable to Option:

In addition to the other terms and conditions applicable to the construction of facilities under this Schedule L, the Option to Build is subject to the following conditions:

(a) If the Project Developer assumes responsibility for the design, procurement and construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades:

(i) Project Developer shall engineer, procure equipment, and construct Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and Specifications provided in advance by Transmission Owner;

(ii) Project Developer’s engineering, procurement and construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Transmission Owner shall be subject in the engineering, procurement or construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades;

(iii) Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades;

(iv) Prior to commencement of construction, Project Developer shall provide to Transmission Owner a schedule for construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades and shall promptly respond to requests for information from Transmission Owner;

(v) At any time during construction, Transmission Owner shall have the right to gain unrestricted access to Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and Specifications provided by Interconnection Transmission Owner, Project Developer shall be obligated to remedy deficiencies in that portion of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades;

(vii) Project Developer shall indemnify Transmission Owner and Transmission Provider for claims arising from Project Developer's construction of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to section 16 of Appendix 2 of this GIA;

(viii) Project Developer shall transfer control of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner;

(ix) Unless Parties otherwise agree, Project Developer shall transfer ownership of Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner;

(x) Transmission Owner shall approve and accept for operation and maintenance Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with section 11.2.3.2 of this Schedule L; and

(xi) Project Developer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are

reasonably required by Transmission Provider to assure that the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades are built to the standards and Specifications required by Transmission Provider.

(b) In addition to the General Conditions applicable to Option to Build set forth in section 11.2.3.2(a) above, the following conditions also apply:

(i) The Project Developer must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that it is building, provided, however, that when the Transmission Owner's assistance is required, the Transmission Owner shall assist the Project Developer in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(ii) The Project Developer must obtain all necessary land rights for the construction and installation of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that it is building, provided, however, that upon Project Developer's reasonable request, the Transmission Owner shall assist the Project Developer in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(iii) Notwithstanding anything stated herein, each Transmission Owner shall have the exclusive right and obligation to perform the line attachments (tie-in work), and to calibrate remote terminal units and relay settings, required for the interconnection to such Transmission Owner's existing facilities of any Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that the Project Developer builds; and

(iv) The Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer shall be successfully inspected, tested and energized pursuant to sections 11.7 and 11.8 of this Schedule L.

#### 11.2.3.3 Additional Conditions Regarding Network Facilities:

To the extent that the Project Developer utilizes the Option to Build for design, procurement, construction and/or installation of (a) any Transmission Owner Interconnection Facilities that are Stand Alone



Network Upgrades to Transmission System facilities that are in existence or under construction by or on behalf of the Transmission Owner on the date that the Project Developer solicits bids under section 11.2.3.7 below, or (b) Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that are to be located on land or in right-of-way owned or controlled by the Transmission Owner, and in addition to the other terms and conditions applicable to the design, procurement, construction and/or installation of facilities under this GIA, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the Project Developer shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Transmission Owner's List of Approved Contractors;

(ii) The Transmission Owner shall have full site control of, and reasonable access to, its property at all times for purposes of tagging or operation, maintenance, repair or construction of modifications to, its existing facilities and/or for performing all tie-ins of Interconnection Facilities and Stand Alone Network Upgrades built by or for the Project Developer; and for acceptance testing of any equipment that will be owned and/or operated by the Transmission Owner;

(iii) The Transmission Owner shall have the right to have a reasonable number of appropriate representatives present for all work done on its property/facilities or regarding the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades and the right to stop, or to order corrective measures with respect to, any such work that reasonably could be expected to have an adverse effect on reliability, safety or security of persons or of property of the Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Transmission Owner shall consult with the Project Developer and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The Project Developer and its contractors, employees and agents shall comply with the Transmission Owner's safety, security and work rules, environmental guidelines and training requirements applicable to the area(s) where construction activity is occurring and shall provide all reasonably required documentation to the Transmission Owner, provided that the Transmission Owner previously has provided its safety, security and work rules and training requirements applicable to work on its facilities to Transmission Provider and the Project Developer within 20 Business Days after a request therefor made by Project Developer;

(v) The Project Developer shall be responsible for controlling the performance of its contractors, employees and agents; and

(vi) All activities performed by or on behalf of the Project Developer pursuant to its exercise of the Option to Build shall be subject to compliance with Applicable Laws and Regulations, including those governing union staffing and bargaining unit obligations, and Applicable Standards.

#### 11.2.3.4 Administration of Conditions:

To the extent that the Transmission Owner exercises any discretion in the application of any of the conditions stated in sections 11.2.3.2 and 11.2.3.3 of this Schedule L, it shall apply each such condition in a manner that is reasonable and not unduly discriminatory and it shall not unreasonably withhold, condition, or delay any approval or authorization that the Project Developer may require for the purpose of complying with any of those conditions.

#### 11.2.3.5 Approved Contractors:

(a) Each Transmission Owner shall develop and shall provide to Transmission Provider a List of Approved Contractors. Each Transmission Owner shall include on its List of Approved Contractors no fewer than three contractors and no fewer than three manufacturers or vendors of major transmission-related equipment, unless a Transmission Owner demonstrates to Transmission Provider's reasonable satisfaction that it is feasible only to include a lesser number of construction contractors, or manufacturers or vendors, on its List of Approved Contractors. Transmission Provider shall publish each Transmission Owner's List of Approved Contractors in a PJM Manual and shall make such manual available on its internet website.

(b) Upon request of a Project Developer, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the Project Developer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate contractor is qualified to design, or to install and/or construct new facilities or upgrades or modifications to existing facilities on the Transmission Owner's system, or (2) any manufacturer or vendor of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) regarding which the Project Developer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate entity's major transmission-related

equipment is acceptable for installation and use on the Transmission Owner's system. No Transmission Owner shall unreasonably withhold, condition, or delay its acceptance of a contractor, manufacturer, or vendor proposed for addition to its List of Approved Contractors.

#### 11.2.3.6 Construction by Multiple Project Developers:

In the event that there are multiple Project Developers that wish to exercise an Option to Build with respect to Interconnection Facilities and Stand Alone Network Upgrades of the types described in section 11.2.3.3 of this Schedule L, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

#### 11.2.3.7 Option Procedures:

(a) Within 10 days after executing this GIA or directing that this GIA be filed with FERC unexecuted, Project Developer shall solicit bids from one or more Approved Contractors named on the Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design, construct and/or install, the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that the Project Developer seeks to build under the Option to Build on terms (i) that will meet the Project Developer's proposed schedule; (ii) that, if the Project Developer seeks to have an Approved Contractor construct or install Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades, will satisfy all of the conditions on construction specified in sections 11.2.3.2 and 11.2.3.3 of this Schedule L; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities).

(b) Any additional costs arising from the bidding process or from the final bid of the successful Approved Contractor shall be the sole responsibility of the Project Developer.

(c) Upon receipt of a qualifying bid acceptable to it, the Project Developer shall contract with the Approved Contractor that submitted the qualifying bid. Such contract shall meet the standards stated in paragraph (a) of this section.

(d) In the absence of a qualifying bid acceptable to the Project Developer in response to its solicitation, the Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades in accordance with the Standard Option described in section 11.2.1 of this Schedule L.

#### 11.2.3.8 Project Developer Drawings:

Project Developer shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to be constructed under the Option to Build. The Transmission Owner shall review and approve the initial drawings and engineering design of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades to be constructed under the Option to Build. The Transmission Owner shall review the drawings to assess the consistency of Project Developer's design of the pertinent Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades with Applicable Standards and the System Impact Study(ies). Transmission Owner, with facilitation and oversight by Transmission Provider, shall provide comments on such drawings to Project Developer within 60 days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

#### 11.2.3.9 Effect of Review:

Transmission Owner's review of Project Developer's initial drawings of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that the Project Developer is building shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, Project Developer shall make such changes to the design of the pertinent Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that Project Developer is building meet Applicable Standards and conform with the System Impact Study(ies).

### 11.3 Revisions to Schedule of Work:

The Schedule of Work shall be revised as required in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Interconnection Parties, which agreement shall not be unreasonably withheld, conditioned or delayed. The scope change process is intended to be used for changes to the Scope of Work as defined herein, and is not intended to be used to change any of the milestone set forth in the GIA.

### 11.4 Right to Complete Transmission Owner Interconnection Facilities and Transmission Owner Upgrades:

In the event that, at any time prior to successful Stage Two energization of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades pursuant to section 11.8 of this Schedule L, the Project Developer terminates its obligations under this GIA pursuant to Appendix 2, section 16.2. of this GIA due to a Default by the Transmission Owner, the Project Developer may elect to complete the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. The Project Developer shall notify the Transmission Owner and Transmission Provider in writing of its election to complete the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades within 10 days after the date of Project Developer's notice of termination pursuant to Appendix 2, section 16.2. of this GIA. In the event that the Project Developer elects to complete the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades, it shall do so in accordance with the terms and conditions of the Option to Build under section 11.2.3 of this Schedule L and shall be responsible for paying all costs of completing the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades incurred after the date of its notice of election to complete the facilities. Project Developer may take possession of, and may use in completing the Transmission Owner Interconnection Facilities, any materials and supplies and equipment (other than equipment and facilities that already have been installed or constructed) acquired by the Transmission Owner for construction, and included in the Costs, of the Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades, provided that Project Developer shall pay Transmission Provider, for the benefit of the Transmission Owner and upon presentation by Transmission Owner of reasonable and appropriate documentation thereof, any amounts expended by the Transmission Owner for such materials, supplies and equipment that Project Developer has not already paid. Title to all Transmission Owner Interconnection Facilities and Transmission Owner Upgrades constructed by Project Developer under this section 11 shall be transferred to the Transmission Owner in accordance with Appendix 2, section 23.3.5 of this GIA.

#### 11.5 Suspension of Work upon Default:

Upon the occurrence of a Default by Project Developer as defined in Appendix 2, section 16 of this GIA, the Transmission Provider or the Transmission Owner may by written notice to Project Developer suspend further work associated with the construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades that the Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this GIA. In the event of a suspension by Transmission Provider or Transmission Owner, the Project Developer shall be responsible for the Costs incurred in connection with any suspension hereunder in accordance with Appendix 2, section 16 of this GIA.

#### 11.6 Construction Reports:

Each of Project Developer and Transmission Owner shall issue reports to each other on a monthly basis, and at such other times as reasonably requested, regarding the status of the

construction and installation of the Interconnection Facilities and Transmission Owner Upgrades. Each of Project Developer and Transmission Owner shall promptly identify, and shall notify each other of, any event that the party reasonably expects may delay completion, or may significantly increase the cost, of the Interconnection Facilities and Transmission Owner Upgrades. Should either Project Developer or Transmission Owner report such an event, Transmission Provider shall, within 15 days of such notification, convene a technical meeting with Project Developer and Transmission Owner to evaluate schedule alternatives.

## 11.7 Inspection and Testing of Completed Facilities

### 11.7.1 Coordination:

Project Developer and the Transmission Owner shall coordinate the timing and schedule of all inspection and testing of the Interconnection Facilities and Transmission Owner Upgrades.

### 11.7.2 Inspection and Testing:

Each of Project Developer and Transmission Owner shall cause inspection and testing of the Interconnection Facilities and Transmission Owner Upgrades that it constructs in accordance with the provisions of this section. Project Developer and Transmission Owner acknowledge and agree that inspection and testing of facilities may be undertaken as facilities are completed and need not await completion of all of the facilities that a party is building.

#### 11.7.2.1 Of Project Developer-Built Facilities:

Upon the completion of the construction and installation, but prior to energization, of any Interconnection Facilities and Transmission Owner Upgrades constructed by the Project Developer and related portions of the Generating Facility or Merchant Transmission Facility, the Project Developer shall have the same inspected and/or tested by an authorized electric inspection agency or qualified third party reasonably acceptable to the Transmission Owner to assess whether the facilities substantially comply with Applicable Standards. Said inspection and testing shall be held on a mutually agreed-upon date, and the Transmission Owner and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

#### 11.7.2.2 Of Transmission Owner-Built Facilities:

Upon the completion of the construction and installation, but prior to energization, of any Interconnection Facilities and Transmission Owner Upgrades constructed by the Transmission Owner, the Transmission Owner shall have the same inspected and/or tested by qualified personnel or a

qualified contractor to assess whether the facilities substantially comply with Applicable Standards. Subject to Applicable Laws and Regulations, said inspection and testing shall be held on a mutually agreed-upon date, and the Project Developer and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

#### 11.7.3 Review of Inspection and Testing by Transmission Owner:

In the event that the written report, or the observation of either of Project Developer and Transmission Owner or Transmission Provider, of the inspection and/or testing pursuant to section 11.7.2 of this Schedule L reasonably leads the Transmission Provider or Transmission Owner to believe that the inspection and/or testing of some or all of the Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer was inadequate or otherwise deficient, the Transmission Owner may, within 20 days after its receipt of the results of inspection or testing and upon reasonable notice to the Project Developer, perform its own inspection and/or testing of such Interconnection Facilities and Stand Alone Network Upgrades to determine whether the facilities are acceptable for energization, which determination shall not be unreasonably delayed, withheld or conditioned.

#### 11.7.4 Notification and Correction of Defects

11.7.4.1 If the Transmission Owner, based on inspection or testing pursuant to section 11.7.2 or 11.7.3 of this Schedule L, identifies any defects or failures to comply with Applicable Standards in the Interconnection Facilities and Stand Alone Network Upgrades constructed by the Project Developer, the Transmission Owner shall notify the Project Developer and Transmission Provider of any identified defects or failures within 20 days after the Transmission Owner's receipt of the results of such inspection or testing. The Project Developer shall take appropriate actions to correct any such defects or failure at its sole cost and expense, and shall obtain the Transmission Owner's acceptance of the corrections, which acceptance shall not be unreasonably delayed, withheld or conditioned. Such acceptance does not modify and shall not limit the Project Developer's indemnification obligations set forth in section 11.2.3.2(e) of this Schedule L.

11.7.4.2 In the event that inspection and/or testing of any Transmission Owner Interconnection Facilities and Transmission Owner Upgrades built by the Transmission Owner identifies any defects or failures to comply with Applicable Standards in such facilities, Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. In the event that such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission

Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.

#### 11.7.5 Notification of Results:

Within 10 days after satisfactory inspection and/or testing of Interconnection Facilities and Stand Alone Network Upgrades built by the Project Developer (including, if applicable, inspection and/or testing after correction of defects or failures), the Transmission Owner shall confirm in writing to the Project Developer and Transmission Provider that the successfully inspected and tested facilities are acceptable for energization.

### 11.8 Energization of Completed Facilities

(A) Unless otherwise provided in the Schedule of Work, energization of the Interconnection Facilities and Transmission Owner Upgrades related to interconnection of a Generation Project Developer and, when applicable as determined by Transmission Provider, of the Interconnection Facilities and Transmission Owner Upgrades related to interconnection of a Transmission Project Developer, shall occur in two stages. Stage One energization shall consist of energization of the Project Developer Interconnection Facilities and of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades and will occur prior to initial energization of the Generating Facility. Stage Two energization shall consist of (1) initial synchronization to the Transmission System of any completed generator(s) at the Generating Facility of a Generation Project Developer, or of applicable facilities, as determined by the Transmission Provider, associated with Merchant Transmission Facilities of a Transmission Project Developer, and (2) energization of the remainder of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades. Stage Two energization shall be completed prior to Initial Operation of the Generating Facility or Merchant Transmission Facility.

(B) In the case of Interconnection Facilities and Transmission Owner Upgrades related to interconnection of a Transmission Project Developer for which the Transmission Provider determines that two-stage energization is inapplicable, energization shall occur in a single stage, consisting of energization of the Interconnection Facilities and Transmission Owner Upgrades and the Generating Facility or Merchant Transmission Facility. Such a single-stage energization shall be regarded as Stage Two energization for the purposes of the remaining provisions of this section 11.8.

11.8.1 Stage One energization of the Interconnection Facilities and Transmission Owner Upgrades may not occur prior to the satisfaction of the following additional conditions:

(a) The Project Developer shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Transmission Owner Interconnection Facilities that Project Developer has constructed; and



(b) The Project Developer shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Transmission Owner Interconnection Facilities and Stand Alone that Project Developer has constructed.

11.8.2 As soon as practicable after the satisfaction of the conditions for Stage One energization specified in sections 11.7 and 11.8.1 of this Schedule L, the Transmission Owner and the Project Developer shall coordinate and undertake the Stage One energization of facilities.

11.8.3 Stage Two energization of the Interconnection Facilities and Transmission Owner Upgrades may not occur prior to the satisfaction of the following additional conditions:

(a) The Project Developer shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that Project Developer has constructed and operational control of which it has not previously transferred pursuant to section 11.8.1 of this Schedule L;

(b) The Project Developer shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades that Project Developer has constructed and which were not included in the Stage One energization, but are included in the Stage Two energization; and

(c) Telemetry systems shall be operational and shall be providing Transmission Provider and the Transmission Owner with telemetered data as specified pursuant to section 8.5.2 of Appendix 2 to this GIA.

11.8.4 As soon as practicable after the satisfaction of the conditions for Stage Two energization specified in sections 11.7 and 11.9.3 of this Schedule L, the Transmission Owner and the Project Developer shall coordinate and undertake the Stage Two energization of facilities.

11.8.5 To the extent defects in any Interconnection Facilities and Transmission Owner Upgrades are identified during the energization process, the energization will not be deemed successful. In that event, the Constructing Entity shall take action to correct such defects in any Interconnection Facilities and Transmission Owner Upgrades that it built as promptly as practical after the defects are identified. The affected Constructing Entity shall so notify the other Construction Parties when it has corrected any such defects, and the Constructing Entities shall recommence efforts, within 10 days thereafter, to energize the appropriate Interconnection Facilities and Transmission Owner Upgrades in accordance with section 11.9;

provided that the Transmission Owner may, in the reasonable exercise of its discretion and with the approval of Transmission Provider, require that further inspection and testing be performed in accordance with section 11.7 of this Schedule L.

11.9 Transmission Owner's Acceptance of Facilities Constructed by Project Developer:

Within five days after determining that Interconnection Facilities and Transmission Owner Upgrades have been successfully energized, the Transmission Owner shall issue a written notice to the Project Developer accepting the Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer that were successfully energized. Such acceptance shall not be construed as confirming, endorsing or providing a warranty by the Transmission Owner as to the design, installation, construction, fitness, safety, durability or reliability of any Interconnection Facilities and Transmission Owner Upgrades built by the Project Developer, or their compliance with Applicable Standards.

11.10 Addendum of Non-Standard Terms and Conditions for Construction Service. In the event of any conflict between a provision of Schedule F of this GIA that FERC has accepted and any provision of the standard terms and conditions set forth in this Schedule L and Appendix 2 of this GIA that relates to the same subject matter, the pertinent provision of Schedule F of this GIA shall control.

**SCHEDULE L, APPENDIX 1**  
**NEGOTIATED CONTRACT OPTION TERMS**

**Tariff, Part IX, Subpart C**

**FORM OF  
WHOLESALE MARKET PARTICIPATION AGREEMENT**

(Project Identifier #\_\_\_\_)

**WHOLESALE MARKET PARTICIPATION AGREEMENT**

**Among**

**PJM INTERCONNECTION, L.L.C.**

**And**

---

**And**

---

# WHOLESALE MARKET PARTICIPATION AGREEMENT

By and Among  
PJM Interconnection, L.L.C.

And

[Name of Wholesale Market Participant]

And

[Name of Transmission Owner]  
(Project Identifier #\_\_)

This Wholesale Market Participation Agreement (“WMPA”), including the Specifications, Appendices, and Schedules attached hereto and incorporated herein, is entered into by and among PJM Interconnection, L.L.C., the Regional Transmission Organization for the PJM Region (“Transmission Provider” or “PJM”), \_\_\_\_\_ (“Project Developer” or “Wholesale Market Participant” [OPTIONAL: or “[short name]”]), and \_\_\_\_\_ (“Transmission Owner” {OPTIONAL: or “[short name]”}) (referred to individually as a “Party” and collectively as the “Parties”) in order to effectuate Wholesale Transactions by Wholesale Market Participant in PJM’s markets. [Use as/when applicable: This WMPA supersedes the \_\_\_\_\_ {insert details to identify the agreement being superseded, the effective date of the agreement, the service agreement number designation, the prior position number or project identifier, and the FERC docket number, if applicable.}]

## WITNESSETH

WHEREAS, Wholesale Market Participant is developing and will own and control a generation or storage resource that it intends to use to engage in Wholesale Transactions in PJM’s markets (the “Generating Facility”), and desires to maintain its proposed Generating Facility in the Cycle of projects that PJM studies for potential reliability impacts to the Transmission System;

WHEREAS, Wholesale Market Participant is seeking to physically interconnect its Generating Facility at a local distribution or sub-transmission facility that at this time is not subject to the PJM Open Access Transmission Tariff (“Tariff”) under Federal Energy Regulatory Commission (“FERC” or “Commission”) jurisdiction;

WHEREAS, Wholesale Market Participant and ([Transmission Owner] [or if the physical interconnection is at Municipality/Cooperative facilities, insert the name of the Municipality/Cooperative \_\_\_\_\_]) or its affiliate have entered into a separate non-FERC jurisdictional two-party interconnection agreement in order to address issues of physical interconnection, local upgrades, and local charges that may be presented by the interconnection of the Generating Facility to the local distribution or sub-transmission facility (the “Interconnection Agreement”); and

WHEREAS, the Interconnection Agreement is a Condition Precedent to this WMPA, and this WMPA is hereby made expressly contingent upon the satisfaction of the Condition Precedent

as described in section 3.0 below, and, in the event the Condition Precedent is not satisfied, then this WMPA automatically will be null and void *ab initio* and will have no further force or effect, and, moreover, the Interconnection Agreement must remain in full force and effect in order for Wholesale Market Participant to use the Generating Facility to engage in Wholesale Transactions in PJM's markets under this WMPA.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, along with other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged by Transmission Provider, Transmission Owner, and Wholesale Market Participant; the Parties agree to assume all of the rights and obligations consistent with the rights and obligations relating to Network Upgrades and metering requirements as set forth in the Tariff as of the effective date of this WMPA, required for Wholesale Market Participant to engage in Wholesale Transactions in PJM's markets using the Generating Facility; and the Parties mutually covenant and agree as follows:

### **Article 1 – DEFINITIONS and EFFECTIVE DATE**

- 1.0 Defined Terms.** All capitalized terms used and not otherwise defined herein shall have the meanings set forth in Appendix 1 hereto.
- 1.1 Effective Date.** This WMPA shall become effective on the date it is executed by all Parties, or, if this WMPA is filed with FERC unexecuted, on the date specified by FERC. This WMPA shall terminate on such date as mutually agreed upon by the Parties, unless earlier terminated consistent with the provisions of section 3.0 or Appendix 2, section 8 of this WMPA.
- 1.2 Assumption of Tariff Obligations.** Wholesale Market Participant agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement, and the PJM Manuals.
- 1.3 Incorporation of Other Documents.** All portions of the Tariff and the Operating Agreement pertinent to the subject matter of this WMPA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.

### **Article 2 - NOTICES and MISCELLANEOUS**

- 2.0 Notices.** Any notice, demand, or request required or permitted to be given by any Party to another Party and any instrument required or permitted to be tendered or delivered by any Party in writing to another Party shall be provided electronically or may be so given, tendered, or delivered by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the electronic or other address specified below.

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403-2497  
interconnectionagreementnotices@pjm.com

Wholesale Market Participant:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Transmission Owner:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Any Party may change its address or designated representative for notice by giving notice to the other Parties in the manner provided for above.

- 2.1 Construction with Other Parts of the Tariff.** This WMPA shall not be construed as an application for service under Tariff, Part II or Tariff, Part III.
- 2.2 Warranty for System Impact Studies and/or Facilities Study(ies).** In analyzing and preparing the System Impact Studies and/or Facilities Study(ies), and in designing and specifying the Network Upgrades that are required for reliability reasons as described in Schedule D of this WMPA, Transmission Provider, Transmission Owner, and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely upon information provided by Wholesale Market Participant and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER, NOR SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR TRANSMISSION OWNER MAKE ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDIES AND/OR FACILITIES STUDY(IES), OR OF THE NETWORK UPGRADES. Wholesale Market Participant acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.



**2.3 Waiver.** No waiver by any Party of one or more defaults by another Party in performance of any of the provisions of this WMPA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.

**2.4 Amendment.** This WMPA or any part thereof may not be amended, modified, or waived other than by a written document signed by all Parties. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the Parties, without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.

## **2.5 Assignment**

### **2.5.1 Assignment by Wholesale Market Participant with Prior Consent**

Except as provided in section 2.5.2 of this WMPA, Wholesale Market Participant shall not assign its rights or delegate its duties under this WMPA without the prior written consent of the other Parties, which consent shall not be unreasonably withheld, conditioned, or delayed, and any such assignment or delegation made without such prior written consent shall be null and void.

### **2.5.2 Assignment by Wholesale Market Participant without Prior Consent**

#### **2.5.2.1 Assignment to Owners:**

If the Interconnection Agreement provides that it may be assigned, and the Interconnection Agreement was assigned, then Wholesale Market Participant may assign its rights or delegate its duties under this WMPA, without Transmission Provider's or Transmission Owner's prior consent, to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all of the Generating Facility, provided that prior to the effective date of any such assignment (1) the assignee shall demonstrate to Transmission Provider that, as of the effective date of the assignment, the assignee has the technical and operational competence to comply with the requirements of this WMPA, (2) the assignee assumes all rights, duties, and obligations of Wholesale Market Participant under this WMPA in a writing to Transmission Provider and Transmission Owner, and (3) the assignee shall demonstrate that assignee is the same legal entity that has been assigned the Interconnection Agreement. Any assignment described herein shall not relieve or discharge Wholesale Market Participant from any of its obligations hereunder absent the written consent of Transmission Provider and Transmission Owner, such consent not to be unreasonably withheld, conditioned, or delayed

#### **2.5.2.2 Assignment to Lenders:**

If the Interconnection Agreement provides that it may be assigned to any Project Finance Entity(ies), and the Interconnection Agreement was so assigned, then Wholesale Market Participant may assign this WMPA to such Project Finance Entity(ies) without Transmission Provider's or Transmission Owner's consent, provided that such assignment does not alter or diminish Wholesale Market Participant's duties and obligations under this WMPA. If Wholesale Market Participant provides Transmission Provider and Transmission Owner with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contact(s) for notice of Breach consistent with Appendix 2, section 7.3 hereto, then Transmission Provider and Transmission Owner shall provide notice and reasonable opportunity for such Project Finance Entity(ies) to cure any Breach under this WMPA in accordance with this WMPA. Transmission Provider or Transmission Owner shall, if requested by such Project Finance Entity(ies), provide such customary and reasonable documents, including consents to assignment, as may reasonably be requested with respect to the assignment and status of this WMPA, provided that such documents do not alter or diminish the rights of Transmission Provider or Transmission Owner under this WMPA, except with respect to providing notice of Breach to such Project Finance Entity(ies) consistent with Appendix 2, section 6.3 hereto. Upon presentation of Transmission Provider's or Transmission Owner's invoice therefor, Wholesale Market Participant shall pay Transmission Provider's or Transmission Owner's reasonable documented cost of providing such documents and certificates as requested by such Project Finance Entity(ies). Any assignment described herein shall not relieve or discharge Wholesale Market Participant from any of its obligations hereunder absent the written consent of Transmission Provider and Transmission Owner.

### **2.5.3 Assignment by Transmission Owner**

Transmission Owner shall be entitled, subject to applicable laws and regulations, to assign this WMPA to an Affiliate or successor that owns and operates all or a substantial portion of Transmission Owner's transmission facilities.

### **2.5.4 Successors and Assigns:**

This WMPA and all of its provisions are binding upon, and inure to the benefit of, the Parties and their respective successors and permitted assigns.

### **2.5.5 Rights to Facilities:**

Nothing in this WMPA provides any rights with regard to the use of the non-FERC jurisdictional distribution or sub-transmission facilities owned, operated, and maintained by Transmission Owner.

## **Article 3 – CONTINGENCIES and PROJECT-SPECIFIC MILESTONES**

**3.0 Contingencies.** This WMPA is hereby made expressly contingent on Wholesale Market Participant having entered into the Interconnection Agreement (the “Condition Precedent”). Notwithstanding anything to the contrary in this WMPA, in the event that the Condition Precedent is not satisfied, then this WMPA automatically will be null and void *ab initio* and will have no further force or effect. Further, the Interconnection Agreement must remain in full force and effect in order for Wholesale Market Participant to use the Generating Facility to engage in Wholesale Transactions in PJM’s markets under this WMPA. The effectiveness of this WMPA is expressly contingent on the effectiveness of the Interconnection Agreement, and this WMPA shall automatically terminate upon termination of the Interconnection Agreement.

**3.1 Project-Specific Milestones.** During the term of this WMPA, Wholesale Market Participant shall ensure that it meets each of the following milestones:

[Specify Project-Specific Milestones]

[As appropriate include the following standard Milestones]

**3.1.1 Substantial Site work completed.** On or before \_\_\_\_\_ Wholesale Market Participant must demonstrate completion of at least 20 percent of project site construction.

**3.1.2 Commercial Operation.** On or before \_\_\_\_\_, Wholesale Market Participant must demonstrate commercial operation of all generating units in order to achieve the full Maximum Facility Output set forth in section 1.0(c) of the Specifications to this WMPA. Failure to achieve this Maximum Facility Output may result in a permanent reduction in Maximum Facility Output of the Generating Facility, and, if necessary, a permanent reduction of the Capacity Interconnection Rights to the level achieved. Demonstrating commercial operation includes achieving Initial Operation and making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

**3.1.3 Documentation.** Within one month following full commercial operation of the Generating Facility, Wholesale Market Participant must provide certified documentation demonstrating that the “as-built” Generating Facility is consistent with the applicable PJM studies and agreements. Wholesale Market Participant must also provide PJM with “as-built” electrical modeling data or confirm that previously submitted data remain valid.

[Add Additional Project Specific Milestones as appropriate]

Wholesale Market Participant shall demonstrate the occurrence of each of the foregoing milestones to Transmission Provider’s reasonable satisfaction. Transmission Provider may reasonably extend any such milestone dates in the event of delays that Wholesale Market

Participant (i) did not cause and (ii) could not have remedied through the exercise of due diligence.

[Include the below optional Article 4 when Municipality/Cooperative facilities reside between the Generating Facility and Transmission Owner facilities.]

#### **Article 4 – POINT of COMMON COUPLING**

- 4.0 Rights to Facilities.** Nothing in this WMPA provides any rights with regard to the use of the non-FERC jurisdictional distribution or sub-transmission facilities owned, operated, and maintained by [insert name of Municipality/Cooperative].
- 4.1 Point of Common Coupling.** The electrical Point of Interconnection for the Generating Facility under this WMPA, for the purpose of engaging in Wholesale Transactions in PJM's markets, is located at a point where Transmission Owner's facilities are physically interconnected to facilities owned by [insert name of Municipality/Cooperative], to which Wholesale Market Participant's facilities are or will be physically interconnected, at a point of common coupling, pursuant to the Interconnection Agreement referenced in this WMPA. Therefore, the Parties acknowledge and agree that Wholesale Transactions using the Generating Facility under this WMPA depend upon the physical availability of, and Wholesale Market Participant's right to utilize, the [insert name of Municipality/Cooperative] facilities and the physical interconnection of the [insert name of Municipality/Cooperative] facilities with those of Wholesale Market Participant and Transmission Owner. Accordingly, the following shall apply:
- 4.1.1 Wholesale Market Participant shall obtain [insert name of Municipality/Cooperative]'s agreement to grant to Wholesale Market Participant the rights to utilize the [insert name of Municipality/Cooperative] facilities to transport energy produced by the Generating Facility to the Point of Interconnection as shown in Schedule B of this WMPA.
  - 4.1.2 Concurrently with execution of this WMPA, Wholesale Market Participant shall provide Transmission Provider and Transmission Owner with copies of any and all agreements pursuant to which [insert name of Municipality/Cooperative] agrees to grant to Wholesale Market Participant the rights as described in section 4.1.1.
  - 4.1.3 In the event that any of the [insert name of Municipality/Cooperative] facilities used to provide physical interconnection of the Generating Facility become unavailable for any reason to engage in Wholesale Transactions under the Point of Interconnection as shown in Schedule B of this WMPA, Wholesale Market Participant's rights as set forth in Specifications, section 2 of this WMPA will be suspended for the duration of such unavailability, and Transmission Provider and Transmission Owner shall incur no liability to Wholesale Market Participant in connection with such suspension.
  - 4.1.4 In the event that [insert name of Municipality/Cooperative] ceases operations at its facility where the Generating Facility is located, or removes from service any of the electrical facilities on which the Generating Facility's physical interconnection

depends, it shall be Wholesale Market Participant's responsibility to acquire and install, or to obtain rights to utilize, any facilities necessary to enable Wholesale Market Participant to deliver energy produced by the Generating Facility to and across the Point of Interconnection as shown in Schedule B of this WMPA.

IN WITNESS WHEREOF, Transmission Provider, Wholesale Market Participant, and Transmission Owner have caused this WMPA to be executed by their respective authorized officials. By each individual signing below, each represents to the others that they are duly authorized to sign on behalf of their company and have the actual and/or apparent authority to bind the respective company to this WMPA.

(Project Identifier # \_\_\_\_\_)

Transmission Provider: **PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Wholesale Market Participant: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**SPECIFICATIONS FOR  
WHOLESALE MARKET PARTICIPATION AGREEMENT**

**By and Among  
PJM INTERCONNECTION, L.L.C.  
And  
[Name of Wholesale Market Participant]  
And  
[Name of Transmission Owner]  
(Project Identifier # \_\_\_\_)**

**1.0 Description of Generating Facility** owned and controlled by Wholesale Market Participant to engage in Wholesale Transactions in PJM's markets under this WMPA:

a. Name of Generating Facility:

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b. Location of Generating Facility:

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c. Size in megawatts of Generating Facility:

Maximum Facility Output of \_\_\_\_\_ MW

d. Description of the equipment configuration, including the interconnection facilities owned by Wholesale Market Participant that physically interconnect the Generating Facility to the local distribution or sub-transmission facility:

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**2.0 Rights**

**2.1 Capacity Interconnection Rights:** {Instructions: This section will not apply if the Generating Facility is exclusively an Energy Resource and thus is granted no CIRs; see alternate section 2.1 below.}

Consistent with the applicable terms of the Tariff, and subject to construction of any Network Upgrades required for reliability reasons as described in Schedule D of this WMPA, Wholesale Market Participant shall have Capacity Interconnection Rights at the Point of Interconnection specified in Schedule B of this WMPA in the amount of \_\_\_\_ MW; provided, however, that nothing in this WMPA provides any rights with regard to the use of local distribution or sub-transmission facilities. {Instructions: This number is the total of the CIRs granted under this WMPA, plus any prior CIRs if this is a superseding WMPA.}

[Instructions: Include the following language when the projected Initial Operation is in advance of the study year used for the System Impact Studies, and CIRs are only interim until the study year.

Consistent with the applicable terms of the Tariff, and subject to construction of any Network Upgrades required for reliability reasons as described in Schedule D of this WMPA, Wholesale Market Participant shall have Capacity Interconnection Rights at the Point of Interconnection specified in Schedule B of this WMPA in the amount of \_\_\_\_ MW commencing \_\_\_\_ {e.g., June 1, 2023}. From the effective date of this WMPA until \_\_\_\_ {e.g., May 31, 2023} (the “interim time period”), Wholesale Market Participant may be awarded interim Capacity Interconnection Rights in an amount not to exceed \_\_\_\_ MW. The availability and amount of such interim Capacity Interconnection Rights shall depend upon the completion and results of an interim deliverability study. To the extent applicable, during the interim time period, PJM reserves the right to limit total injections of the Generating Facility consistent with the results of the interim deliverability study (which may be less than the Maximum Facility Output). Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on \_\_\_\_ {e.g., May 31, 2023}.]

- 2.1a** To the extent that any portion of the Generating Facility is not a Capacity Resource with Capacity Interconnection Rights, such portion of the Generating Facility shall be an Energy Resource. Pursuant to this WMPA, Wholesale Market Participant may sell energy into PJM’s markets in an amount equal to the Generating Facility’s Maximum Facility Output indicated in section 1.0c of these Specifications. PJM reserves the right to limit injections in the event reliability would be affected by output greater than such quantity.

{Instructions: This version of section 2.1 will be used in lieu of section 2.1 above when a Generating Facility will be an Energy Resource and therefore will not be granted CIRs.}

- [2.1] Energy Resource:** The Generating Facility described in section 1.0 of these Specifications shall be an Energy Resource. Pursuant to this WMPA, Wholesale Market Participant may sell energy into PJM’s markets in an amount equal to the Generating Facility’s Maximum Facility Output indicated in section 1.0c of these Specifications. PJM reserves the right to limit injections in the event reliability would be affected by output greater than such quantity.



**3.0 Ownership and Location of Metering Equipment.** The metering equipment to be constructed, the capability of the metering equipment to be constructed, and the ownership thereof as required for Wholesale Market Participant to use the Generating Facility to engage in Wholesale Transactions in PJM's markets shall be identified in Schedule B to this WMPA, and provided consistent with the PJM Manuals.

## **APPENDICES:**

- **APPENDIX 1 - DEFINITIONS**
- **APPENDIX 2 - STANDARD TERMS AND CONDITIONS**

## **SCHEDULES:**

- **SCHEDULE A - SITE PLAN**
- **SCHEDULE B - SINGLE-LINE DIAGRAM**
- **SCHEDULE C - LIST OF METERING EQUIPMENT**
- **SCHEDULE D - LIST OF NETWORK UPGRADES**
- **SCHEDULE E - APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS**
- **SCHEDULE F - SCHEDULE OF NON-STANDARD TERMS AND CONDITIONS**

## **APPENDIX 1**

### **DEFINITIONS**

**From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement**

## **APPENDIX 2**

### **STANDARD TERMS AND CONDITIONS**

#### **1 Survival**

The Wholesale Market Participation Agreement shall continue in effect after termination to the extent necessary to provide for final billings and payments, and to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while the Wholesale Market Participation Agreement was in effect.

#### **2 No Transmission Services**

The execution of a Wholesale Market Participation Agreement does not constitute a request for transmission service, or entitle Project Developer to receive transmission service, under Tariff, Part II or Tariff, Part III. Nor does the execution of a Wholesale Market Participation Agreement obligate Transmission Owner or Transmission Provider to procure, supply, or deliver to Project Developer or the Generating Facility any energy, capacity, Ancillary Services, or Station Power (and any associated distribution services).

#### **3 Metering**

##### **3.1 General:**

Metering shall be provided in accordance with the PJM Manuals. All Metering Equipment shall be tested prior to any operation of the Generating Facility. Power flows to and from the Generating Facility shall be compensated to the Point of Interconnection, or, upon the mutual agreement of Transmission Owner and Project Developer, to another location.

##### **3.2 Standards:**

All Metering Equipment installed pursuant to this Appendix 2 to be used for billing and payments shall be revenue quality Metering Equipment and shall satisfy applicable ANSI standards and Transmission Provider's metering standards and requirements. Nothing in this Appendix 2 precludes the use of Metering Equipment for any retail services of Transmission Owner provided, however, that in such circumstances Applicable Laws and Regulations shall control.

##### **3.3 Testing of Metering Equipment:**

The Interconnected Entity that owns the Metering Equipment shall operate, maintain, inspect, and test all Metering Equipment upon installation and at least once every two (2) years thereafter. Upon reasonable request by the other Interconnected Entity, the owner of the Metering Equipment shall inspect or test the Metering Equipment more frequently than every two years, but in no event more frequently than three times in any 24-month period. The owner of the Metering Equipment shall give reasonable notice to the other Parties of the time when any inspection or test of the

owner's Metering Equipment shall take place, and the other Parties may have representatives present at the test or inspection. If Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired, or replaced in order to provide accurate metering. Where Transmission Owner owns the Metering Equipment, the expense of such adjustment, repair, or replacement shall be borne by Project Developer, except that Project Developer shall not be responsible for such expenses where the inaccuracy or defect is caused by Transmission Owner. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than 1 percent from the measurement made by the standard meter used in the test, the owner of the Metering Equipment shall inform Transmission Provider, and Transmission Provider shall inform the other Interconnected Entity, of the need to correct all measurements made by the inaccurate meter for the period during which the inaccurate measurements were made, if the period can be determined. If the period of inaccurate measurement cannot be determined, the correction shall be for the period immediately preceding the test of the Metering Equipment that is equal to one-half of the time from the date of the last previous test of the Metering Equipment, provided that the period subject to correction shall not exceed nine months.

### **3.4 Metering Data:**

At Project Developer's expense, the metered data shall be telemetered (a) to a location designated by Transmission Provider; (b) to a location designated by Transmission Owner, unless Transmission Owner agrees otherwise; and (c) to a location designated by Project Developer. Data from the Metering Equipment at the Point of Interconnection shall be used, under normal operating conditions, as the official measurement of the amount of energy delivered from the Generating Facility to the Point of Interconnection, provided that Transmission Provider's rules applicable to Station Power as set forth at Tariff, Attachment K-Appendix, section 1.7.10(d) shall control with respect to a Project Developer's consumption of Station Power.

### **3.5 Communications:**

#### **3.5.1 Project Developer Obligations:**

Project Developer shall install and maintain satisfactory operating communications with Transmission Provider's system dispatcher or its other designated representative, and with Transmission Owner. Project Developer shall provide standard voice line, dedicated voice line, and electronic communications at its Generating Facility control room. Project Developer also shall provide and maintain backup communication links with both Transmission Provider and Transmission Owner for use during abnormal conditions as specified by Transmission Provider and Transmission Owner, respectively. Project Developer further shall provide the dedicated data circuit(s) necessary to provide Project Developer data to Transmission Provider and Transmission Owner as necessary to conform with Applicable Technical Requirements and Standards.

#### **3.5.2 Remote Terminal Unit:**

Unless otherwise deemed unnecessary by Transmission Provider and Transmission Owner, prior to any operation of the Generating Facility, a remote terminal unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Project Developer, or by

Transmission Owner at Project Developer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Provider and Transmission Owner through use of a dedicated point-to-point data circuit(s). Instantaneous bi-directional real power and, with respect to the Generating Facility, reactive power flow information must be telemetered directly to the location(s) specified by Transmission Provider and Transmission Owner.

### **3.5.3. Phasor Measurement Units (PMUs):**

A Project Developer that submitted a New Service Request on or after October 1, 2012 with a proposed new Generating Facility that has a Maximum Facility Output equal to or greater than 100 MW shall install and maintain, at its expense, phasor measurement units (PMUs). PMUs shall be installed on the Generating Facility low side of the generator step-up transformer, unless it is a non-synchronous generation facility, in which case the PMUs shall be installed on the Generating Facility side of the Point of Interconnection. The PMUs must be capable of performing phasor measurements at a minimum of 30 samples per second which are synchronized via a high-accuracy satellite clock. To the extent Project Developer installs similar quality equipment, such as relays or digital fault recorders, that can collect data at least at the same rate as PMUs and which data is synchronized via a high-accuracy satellite clock, such equipment would satisfy this requirement. As provided for in the PJM Manuals, a Project Developer shall be required to install and maintain, at its expense, PMU equipment which includes the communication circuit capable of carrying the PMU data to a local data concentrator, and then transporting the information continuously to the Transmission Provider; as well as store the PMU data locally for 30 days. Project Developer shall provide to Transmission Provider all necessary and requested information through the Transmission Provider synchrophasor system, including the following: (a) gross MW and MVAR measured at the Generating Facility side of the generator step-up transformer (or, for a non-synchronous generation facility, to be measured at the Generating Facility side of the Point of Interconnection); (b) generator terminal voltage; (c) generator terminal frequency; and (d) generator field voltage and current, where available. The Transmission Provider will install and provide for the ongoing support and maintenance of the network communications linking the data concentrator to the Transmission Provider. Additional details regarding the requirements and guidelines of PMU data and telecommunication of such data are contained in the PJM Manuals.

## **4 Force Majeure**

### **4.1 Notice:**

A Party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify the other Parties in writing or by telephone within a reasonable time after the occurrence of the cause relied upon.

### **4.2 Duration of Force Majeure:**

A Party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force

Majeure to the other Parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The Party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance. The Party affected has a continuing notice obligation to the other Parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The Party affected shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such Party shall resume performance and give prompt written notice thereof to the other Parties.

#### **4.3 Obligation to Make Payments:**

A Party's obligation to make payments for services shall not be suspended by Force Majeure.

#### **4.4 Definition of Force Majeure:**

For the purposes of this section, Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a Party's control that, in any of the foregoing cases, by exercise of due diligence, such Party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected Party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected Party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected Party.

### **5 Indemnity**

#### **5.1 Indemnity:**

Each Party shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents, and employees, and Affiliates, from and against any and all loss, liability, damage, cost, or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying Party's breach of any of the representations or warranties made in, or failure of the indemnifying Party or any of its subcontractors to perform

any of its obligations under, this Wholesale Market Participation Agreement (including Appendix 2), or (ii) the negligence or willful misconduct of the indemnifying Party or its contractors; provided, however, that no Party shall have any indemnification obligations under this section 5.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Party seeking indemnity.

## **5.2 Indemnity Procedures:**

Promptly after receipt by a Person entitled to indemnity (“Indemnified Person”) of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in section 5.1 may apply, the Indemnified Person shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party’s indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party. The Indemnified Person shall cooperate with the indemnifying Party with respect to the matter for which indemnification is claimed. The indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Party, and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit, or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit, or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit, or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the Indemnified Person; and (ii) shall not settle or consent to the entry of any judgment in any action, suit, or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned, or delayed.

## **5.3 Indemnified Person:**

If an Indemnified Person is entitled to indemnification under this section 6 as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under section 5.2 of this Appendix 2, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Party contest, settle, or consent to the entry of any judgment with respect to, or pay in full, such claim.

## **5.4 Amount Owning:**



If an indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this section 5, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

### **5.5 Limitation on Damages:**

Except as otherwise provided in this section 5, the liability of a Party under this Appendix 2 shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees, and agents, or any of them, be liable to another Party, whether in tort, contract, or other basis in law or equity for any special, indirect, punitive, exemplary, or consequential damages, including lost profits. The limitations on damages specified in this section 5.5 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint, or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this Appendix 2. The provisions of this section 5.5 shall survive the termination or expiration of the Wholesale Market Participation Agreement.

### **5.6 Limitation of Liability in Event of Breach:**

A breaching Party ("Breaching Party") shall have no liability hereunder to the other Parties, and the other Parties hereby release the Breaching Party, for all claims or damages that either of them incurs that are associated with any interruption in the availability of the Generating Facility, Interconnection Facilities and Transmission Owner Upgrades, Transmission System, or Interconnection Service, or damages to a Party's facilities, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this Wholesale Market Participation Agreement (including Appendix 2).

### **5.7 Limited Liability in Emergency Conditions:**

Except as otherwise provided in the Tariff or Operating Agreement, no Party shall be liable to any other Party for any action that it takes in responding to an Emergency Condition, so long as such action is made in good faith, is consistent with Good Utility Practice, and is not contrary to the directives of Transmission Provider or Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Project Developer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or Transmission Owner related to an Emergency Condition.

## **6 Breach, Cure, and Default**

### **6.1 Breach:**

A Breach of this Wholesale Market Participation Agreement shall include:

- (a) The failure to pay any amount when due;

(b) The failure to comply with any material term or condition of this Appendix 2 or of the other portions of the Wholesale Market Participation Agreement or any attachments or Schedule hereto, including but not limited to any material breach of a representation, warranty, or covenant (other than in subsections (a), (c), and (d) of this section) made in this Appendix 2;

(c) Assignment of the Wholesale Market Participation Agreement in a manner inconsistent with its terms;

(d) Failure of a Party to provide information or data required to be determined under this Appendix 2 to another Party for such other Party to satisfy its obligations under this Appendix 2.

## **6.2 Continued Operation:**

In the event of a Breach or Default by either Interconnected Entity, and subject to termination of the Wholesale Market Participation Agreement under section 8 of this Appendix 2, the Interconnected Entities shall continue to operate and maintain, as applicable, such DC power systems, protection and Metering Equipment, telemetering equipment, SCADA equipment, transformers, Secondary Systems, communications equipment, building facilities, software, documentation, structural components, and other facilities and appurtenances that are reasonably necessary for Transmission Provider and Transmission Owner to operate and maintain the Transmission System, and for Project Developer to operate and maintain the Generating Facility, in a safe and reliable manner.

## **6.3 Notice of Breach:**

A Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider, and to other persons that the Breaching Party identifies in writing to the other Parties in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider or Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that Project Developer has provided the notifying Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 12 of this Appendix 2.

## **6.4 Cure and Default:**

A Breaching Party that does not take steps to cure the Breach pursuant to this section 6.4 is automatically in Default of this Appendix 2 and of the Wholesale Market Participation Agreement, and this Wholesale Market Participation Agreement shall be deemed terminated. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

### **6.4.1 Cure of Breach:**

- 6.4.1.1** Except for the event of Breach set forth in section 6.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Parties to this WMPA. Such agreement shall not be unreasonably withheld.
- 6.4.1.2** In an event of Breach set forth in section 6.1(a), the Breaching Interconnection shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

## **6.5 Right to Compel Performance:**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 11.1 of this Appendix 2, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy, and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **7 Termination**

### **7.1 Termination of the Wholesale Market Participation Agreement:**

This Wholesale Market Participation Agreement may be terminated by the following means:

#### **7.1.1 By Mutual Consent:**

The Wholesale Market Participation Agreement may be terminated as of the date on which the Parties mutually agree.

#### **7.1.2 By Project Developer:**

Subject to its payment of Cancellation Costs, Project Developer may unilaterally terminate the Wholesale Market Participation Agreement pursuant to Applicable Laws and Regulations upon providing Transmission Provider and the Transmission Owner sixty days prior written notice thereof.

#### **7.1.3 Upon Default of Project Developer:**

Transmission Provider may terminate the Wholesale Market Participation Agreement upon the Default of Project Developer of its obligations under the Wholesale Market Participation Agreement by providing Project Developer and Transmission Owner prior written notice of termination.

#### **7.1.4 Cancellation Cost Responsibility upon Termination:**

In the event of cancellation pursuant to section 7.1 of this Appendix 2, Project Developer shall be liable to pay to Transmission Owner or Transmission Provider all Cancellation Costs in connection with the Wholesale Market Participation Agreement. Cancellation costs may include costs for Network Upgrades assigned to Project Developer, in accordance with the Tariff and as reflected in this Wholesale Market Participation Agreement, that remain the responsibility of Project Developer under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Project Developers in the Cycle. In the event Transmission Owner incurs Cancellation Costs, it shall provide Transmission Provider, with a copy to Project Developer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. Project Developer shall pay Transmission Provider each invoice for Cancellation Costs within 30 days after, as applicable, Transmission Owner's or Transmission Provider's presentation to Project Developer of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing Party seeks to collect. Upon receipt of each of Project Developer's payments of such invoices of Transmission Owner, Transmission Provider shall reimburse Transmission Owner for Cancellation Costs incurred by the latter.

#### **7.2 FERC Approval:**

Notwithstanding any other provision of this Appendix 2, no termination hereunder shall become effective until the Interconnected Entities and/or Transmission Provider have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with the FERC of a notice of termination of the Wholesale Market Participation Agreement, and acceptance of such notice for filing by the FERC.

#### **7.3 Survival of Rights:**

Termination of this Wholesale Market Participation Agreement shall not relieve any Party of any of its liabilities and obligations arising under this Wholesale Market Participation Agreement (including Appendix 2) prior to the date on which termination becomes effective, and each Party may take whatever judicial or administrative actions it deems desirable or necessary to enforce its rights hereunder. Applicable provisions of this Appendix 2 will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the Wholesale Market Participation Agreement was in effect.

### **8 Confidentiality**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. If requested by any Party, the disclosing Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Party may disclose such writing to an appropriate Governmental Authority. Any Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **8.1 Term:**

During the term of the Wholesale Market Participation Agreement, and for a period of three years after the expiration or termination of the Wholesale Market Participation Agreement, except as otherwise provided in this section 8, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other Party.

### **8.2 Scope:**

Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of this Appendix 2; or (vi) is required, in accordance with section 8.7 of this Appendix 2, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Wholesale Market Participation Agreement. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

### **8.3 Release of Confidential Information:**

No Party shall disclose Confidential Information to any other person, except to its Affiliates (limited by FERC's Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or considering providing financing to or equity participation in Project Developer or to potential purchasers or assignees of Project Developer, on a need-to-know basis in connection with the Wholesale Market Participation Agreement, unless such person has first been advised of the confidentiality provisions of this section 8 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this section 8.

### **8.4 Rights:**

Each Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Party. A Party's disclosure to another Party of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **8.5 No Warranties:**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to any other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **8.6 Standard of Care:**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication, or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under the Wholesale Market Participation Agreement or to comply with Applicable Laws and Regulations.

#### **8.7 Order of Disclosure:**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order or waive compliance with the terms of this Appendix 2 or the Wholesale Market Participation Agreement. Notwithstanding the absence of a protective order or agreement, or waiver, the Party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **8.8 Termination of Wholesale Market Participation Agreement:**

Upon termination of the Wholesale Market Participation Agreement for any reason, each Party shall, within 10 calendar days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or to return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party.

#### **8.9 Remedies:**

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this section 8. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this section 8, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section 8, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental or consequential, or punitive damages of any nature or kind resulting from or arising in connection with this section 8.

#### **8.10 Disclosure to FERC or its Staff:**

Notwithstanding anything in this section 8 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Wholesale Market Participation Agreement, the Party shall provide the requested information to FERC or its staff within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.122, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. A Party shall notify the other Parties to the Wholesale Market Participation Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### **8.11 Non-Disclosure:**

Subject to the exception in section 8.10 of this Appendix 2, no Party shall disclose Confidential Information of another Party to any person not employed or retained by the Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Wholesale Market Participation Agreement or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Party's Confidential Information under this subparagraph, the disclosing Party shall promptly notify the other Parties in writing and shall assert confidentiality and cooperate with the other Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order, or other reasonable measures.

#### **8.12 Information in the Public Domain:**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### **8.13 Return or Destruction of Confidential Information:**

If a Party provides any Confidential Information to another Party in the course of an audit or inspection, the providing Party may request the other Party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other Party that it has complied with such request.

## **9 Information Access and Audit Rights**

### **9.1 Information Access:**

Consistent with Applicable Laws and Regulations, each Party shall make available such information and/or documents reasonably requested by another Party that are necessary to (i) verify the costs incurred by the other Party for which the requesting Party is responsible under this Appendix 2; and (ii) carry out obligations and responsibilities under this Appendix 2, provided that the Parties shall not use such information for purposes other than those set forth in this section 9.1 and to enforce their rights under this Appendix 2.

### **9.2 Reporting of Non-Force Majeure Events:**

Each Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Appendix 2 for a reason other than an event of Force Majeure as defined in section 5.4 of this Appendix 2. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation, or information provided under this section shall not entitle the receiving Party to allege a cause of action for anticipatory breach of the Wholesale Market Participation Agreement.

### **9.3 Audit Rights:**

Subject to the requirements of confidentiality under section 8 of this Appendix 2, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent other Party, to audit at its own expense the other Party's accounts and records pertaining to such Party's performance and/or satisfaction of obligations arising under this Appendix 2. Any audit authorized by this section shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Appendix 2. Any request for audit shall be presented to the Party to be audited not later than 24 months after the event as to which the audit is sought. Each Party shall preserve all records held by it for the duration of the audit period. Audit rights under this Appendix



2 do not extend to accounts and records pertaining to the non-FERC jurisdictional Interconnection Agreement.

## **10 Disputes**

### **10.1 Submission:**

Any claim or dispute that any Party may have against another arising out of the Wholesale Market Participation Agreement may be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.

### **10.2 Rights Under the Federal Power Act:**

Nothing in this section shall restrict the rights of any Party to file a complaint with FERC under relevant provisions of the Federal Power Act.

### **10.3 Equitable Remedies:**

Nothing in this section shall prevent any Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations.

## **11 Notices**

### **11.1 General:**

Any notice, demand, or request required or permitted to be given by any Party to another, and any instrument required or permitted to be tendered or delivered by any Party in writing to another, shall be provided electronically or may be so given, tendered, or delivered by recognized national courier or by depositing the same with the United States Postal Service with postage prepaid for delivery by certified or registered mail addressed to the Party, or personally delivered to the Party, at the electronic or other address specified in the Wholesale Market Participation Agreement.

### **11.2 Emergency Notices:**

Moreover, notwithstanding the foregoing, any notice hereunder concerning an Emergency Condition or other occurrence requiring prompt attention, or as necessary during day-to-day operations, may be made by telephone or in person, provided that such notice is confirmed in writing promptly thereafter. Notice in an Emergency Condition, or as necessary during day-to-day operations, shall be provided (i) if by Transmission Owner, to the shift supervisor at, as applicable, a Project Developer's Generating Facility; and (ii) if by Project Developer, to the shift supervisor at Transmission Owner's transmission control center.

### **11.3 Operational Contacts:**

Each Party shall designate, and provide to each other Party, contact information concerning, a representative to be responsible for addressing and resolving operational issues as they arise during the term of the Wholesale Market Participation Agreement.

## **12 Miscellaneous**

### **12.1 Regulatory Filing:**

In the event that this Wholesale Market Participation Agreement contains any terms that deviate materially from the form included in the Tariff, Transmission Provider shall file the Wholesale Market Participation Agreement on behalf of itself and Transmission Owner with FERC as a service schedule under the Tariff within 30 days after execution. Project Developer may request that any information so provided be subject to the confidentiality provisions of section 8 of this Appendix 2. Project Developer shall have the right, with respect to a Wholesale Market Participation Agreement tendered to it, to request in writing (a) dispute resolution under Tariff, Part I, section 12, or consistent with Operating Agreement, Schedule 5; or (b) that Transmission Provider file the agreement unexecuted with FERC. With the filing of any unexecuted Wholesale Market Participation Agreement, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between or among the Parties.

### **12.2 Waiver:**

Any waiver at any time by a Party of its rights with respect to a Breach or Default under this Wholesale Market Participation Agreement, or with respect to any other matters arising in connection with this Appendix 2, shall not be deemed a waiver or continuing waiver with respect to any subsequent Breach or Default or other matter.

### **12.3 Amendments and Rights Under the Federal Power Act:**

This Wholesale Market Participation Agreement may be amended or supplemented only by a written instrument duly executed by all Parties. An amendment to the Wholesale Market Participation Agreement shall become effective and a part of this Wholesale Market Participation Agreement upon satisfaction of all Applicable Laws and Regulations. Notwithstanding the foregoing, nothing contained in this Wholesale Market Participation Agreement shall be construed as affecting in any way any of the rights of any Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this Wholesale Market Participation Agreement and every appendix referred to therein shall be amended, as mutually agreed by the Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

### **12.4 Binding Effect:**

This Wholesale Market Participation Agreement, including this Appendix 2, and the rights and obligations thereunder shall be binding upon, and shall inure to the benefit of, the successors and assigns of the Parties.

## **12.5 Regulatory Requirements:**

Each Party's performance of any obligation under this Wholesale Market Participation Agreement for which such Party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **13 Representations and Warranties**

### **13.1 General:**

Each Interconnected Entity hereby represents, warrants, and covenants as follows with these representations, warranties, and covenants effective as to the Interconnected Entity during the time the Wholesale Market Participation Agreement is effective:

#### **13.1.1 Good Standing:**

Such Interconnected Entity is duly organized or formed, as applicable, validly existing, and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated and operates as stated in the Wholesale Market Participation Agreement.

#### **13.1.2 Authority:**

Such Interconnected Entity has the right, power, and authority to enter into the Wholesale Market Participation Agreement, to become a party hereto, and to perform its obligations hereunder. The Wholesale Market Participation Agreement is a legal, valid, and binding obligation of such Interconnected Entity, enforceable against such Interconnected Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization, or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **13.1.3 No Conflict:**

The execution, delivery, and performance of the Wholesale Market Participation Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of the Interconnected Entity, or with any judgment, license, permit, order, material agreement, or instrument applicable to or binding upon the Interconnected Entity or any of its assets.

#### **13.1.4 Consent and Approval:**

Such Interconnected Entity has sought or obtained, or, in accordance with the Wholesale Market Participation Agreement will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery, and performance of the Wholesale Market Participation Agreement and it will provide to any Governmental Authority notice of any actions under this Appendix 2 that are required by Applicable Laws and Regulations.

**SCHEDULE A**

**SITE PLAN**

## **SCHEDULE B**

### **SINGLE-LINE DIAGRAM**

{If Municipality/Cooperative: Make sure the point of common coupling is designated in the Single-Line Diagram *in addition to* the Point of Interconnection.}

## **SCHEDULE C**

### **LIST OF METERING EQUIPMENT**

{Include the following language if not required:}

Not Required.

{If Municipality/Cooperative: Make sure to account for the fact that metering may be installed at the point of common coupling. *For example:*

Wholesale Market Participant shall be responsible for the installation of metering and telemetry at the point of common coupling (as shown in Schedule B) between the Generating Facility and the [insert name of Municipality/Cooperative] system as required by PJM Manuals M-01 and M14D. [Insert name of Municipality/Cooperative] and Wholesale Market Participant will together determine meter ownership.

Wholesale Market Participant shall make its metering data at the point of common coupling available to [insert name of Municipality/Cooperative], or its affiliate, via telemetry for use by [insert name of Municipality/Cooperative] and Transmission Owner for balancing, settlement, and audit purposes. Wholesale Market Participant may purchase and install its own backup metering. }

## **SCHEDULE D**

### **LIST OF NETWORK UPGRADES**

{Include the following language if not required:}

Not Required.

{Otherwise, list the Network Upgrades identified through the System Impact Studies, with Stand Alone Network Upgrades, if any, listed separately, and include the sentence below.}

[List]

Construction of these Network Upgrades listed in Schedule D of this WMPA is subject to the terms and conditions of a separate facilities construction agreement between Wholesale Market Participant and Transmission Owner.



## SCHEDULE E

### APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

{Include the following language if not required:}

Not Required.

{Otherwise, include the following language:}

Except as otherwise provided in the Interconnection Agreement, as applicable, the following technical requirements and standards shall apply. To the extent that these Applicable Technical Requirements and Standards conflict with the terms and conditions of the Tariff or any other provision of this WMPA, the Tariff and/or this WMPA shall control.

*{Instructions: If the relevant TO Applicable Technical Requirements and Standards **are** posted on the PJM website, use the following language:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply. The [Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] is available on the PJM website.

*{Instructions. If the relevant TO Applicable Technical Requirements and Standards **are not** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply.

## **SCHEDULE F**

### **SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**

{Include the following language if not required:}

Not Required.

**Tariff, Part IX, Subpart D**

**FORM OF  
ENGINEERING AND PROCUREMENT AGREEMENT**

Service Agreement No. [   ]

(Project Identifier #\_\_\_\_)

**ENGINEERING AND PROCUREMENT  
AGREEMENT**

**By and Among  
PJM INTERCONNECTION, L.L.C.  
And**

---

**And**

---

**ENGINEERING AND PROCUREMENT  
AGREEMENT**

**By and Among  
PJM Interconnection, L.L.C.  
And**

**And**

**(Project Identifier #\_\_\_\_)**

- 1.0 This Engineering and Procurement Agreement (“E&P Agreement”), including the Specifications attached hereto and incorporated herein, is entered into by and among PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”), [\_\_\_\_\_] (“Project Developer” [OPTIONAL: or [“short name”]]), and [\_\_\_\_\_] (“Transmission Owner” [OPTIONAL: or [“short name”]]). Transmission Provider, Project Developer and Transmission Owner are individually, a “Party” and together, the “Parties” and collectively are “Parties”. [Use as/when applicable: This E&P Agreement supersedes the \_\_\_\_\_ {insert details to identify the agreement being superseded, such as whether it is an E&P Agreement or Generator Interconnection Agreement, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}] For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}.
- 2.0 The location and a description of the Generating Facility or Merchant Transmission Facility that Project Developer proposes to interconnect to the Transmission Provider’s Transmission System is attached hereto. In the event that Project Developer will not own the facilities, Project Developer represents and warrants that it is authorized by the owners of such facilities to enter into this E&P Agreement and to represent such control.
- 3.0 In order to advance the completion of its interconnection under the PJM Open Access Transmission Tariff (“Tariff”), Project Developer has requested an E&P Agreement and Transmission Provider has determined that Project Developer is eligible under the Tariff to obtain this E&P Agreement. This E&P Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades.
- 4.0 (a) In accord with the GIP, Project Developer, on or before the effective date of this E&P Agreement, shall provide Transmission Provider (for the benefit of the Transmission Owner) with a letter of credit from an agreed provider or other form of security reasonably acceptable to Transmission Provider in the amount of \$ \_\_\_\_\_, which amount equals the estimated costs, determined in accordance with the GIP, of the engineering and procurement activities described in section 2.0 of the Attached

Specifications. Should Project Developer fail to provide such security in the amount or form required, this E&P Agreement shall be terminated. Project Developer acknowledges (1) that it will be responsible for the actual costs of the facilities described in the Specifications, whether greater or lesser than the amount of the payment security provided under this section, and (2) that the payment security under this section does not include any additional amounts that it will owe in the event that it executes a final Generator Interconnection Agreement, as described in section 7.0(a) below.

(b) Project Developer acknowledges (1) that the purpose of this E&P Agreement is to expedite, at Project Developer's request, the engineering and procurement of certain long-lead items, as described in the Specifications, necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request; and (2) that Transmission Provider's Interconnection Studies related to such facilities have not been completed, but that the [identify completed System Impact or other study(ies)], dated [\_\_\_\_], that included Project Developer's project sufficiently demonstrated, in Project Developer's sole opinion, the necessity of facilities additions to the Transmission System to accommodate Project Developer's project to warrant, in Project Developer's sole judgment, its request that the Transmission Owner provide engineering and procurement for the equipment indicated in the Specifications for use in interconnecting Project Developer's project with the Transmission System.

5.0 This E&P Agreement shall be effective on the date it is executed by all Interconnection Parties and shall terminate upon the execution and delivery by Project Developer and Transmission Provider of the final Generator Interconnection Agreement described in section 7.0(a) below, or on such other date as mutually agreed upon by the parties, unless earlier terminated in accordance with the Tariff.

6.0 In addition to the milestones stated in the GIP, during the term of this E&P Agreement, Project Developer shall ensure that its generation project meets each of the following development milestones:

[SPECIFY MILESTONES]

OR

[NOT APPLICABLE FOR THIS E&P AGREEMENT]

OR

[MILESTONE REQUIREMENTS WILL BE SPECIFIED IN THE FURTHER GENERATOR INTERCONNECTION AGREEMENT DESCRIBED IN SECTION 7.0(a)]

7.0 (a) Transmission Provider and the Transmission Owner agree to provide for the engineering and procurement of the facilities identified, and to the extent described, in section 2.0 of the Specifications in accordance with the GIP, as amended from time to time, and this E&P Agreement. The parties agree that (1) this E&P Agreement shall not

provide for or authorize Interconnection Service or rights associated therewith for the Project Developer, and (2) Interconnection Service will commence only after Project Developer has entered into a final Generator Interconnection Agreement with Transmission Provider and the Transmission Owner (or, alternatively, the Project Developer, Transmission Owner or Transmission Provider has exercised its right to initiate dispute resolution or to have the final Generator Interconnection Agreement filed with the FERC unexecuted) after completion of the System Impact Studies related to Project Developer's Interconnection Request and otherwise in accordance with the Tariff. The final Generator Interconnection Agreement may further provide for construction of, and payment for, transmission facilities additional to those identified in the attached Specifications. Should Project Developer fail to enter into such final Generator Interconnection Agreement (or, alternatively, to initiate dispute resolution or request in writing that the agreement be filed with the FERC unexecuted) within the time prescribed by the Tariff, Transmission Provider shall have the right, upon providing written notice to Project Developer, to terminate this E&P Agreement.

(b) In the event that Project Developer decides not to interconnect its proposed facilities, as described in section 1.0 of the Specifications to the Transmission System, it shall immediately give Transmission Provider written notice of its determination. Project Developer shall be responsible for the Costs incurred pursuant to this E&P Agreement by Transmission Provider and/or by the Transmission Owner (1) on or before the date of such notice, and (2) after the date of such notice, if the costs could not reasonably be avoided despite, or were incurred by reason of, Project Developer's determination not to interconnect. Project Developer's liability under the preceding sentence shall include all Cancellation Costs in connection with the engineering and procurement of the facilities described in section 2.0 of the Specifications. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Project Developer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. Within 60 days after the date of Project Developer's notice, Transmission Provider shall provide an accounting of, and the appropriate party shall make any payment to the other that is necessary to resolve, any difference between (i) Project Developer's cost responsibility under this E&P Agreement and the Tariff for Costs, including Cancellation Costs, of the facilities described in section 2.0 of the Specifications and (ii) Project Developer's previous payments under this E&P Agreement. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Transmission Owner has returned to it the portion of Project Developer's previous payments that Transmission Provider must pay under that sentence. This E&P Agreement shall be deemed to be terminated upon completion of all payments required under this paragraph (b).

(c) Disposition of the facilities related to this E&P Agreement after receipt of Project Developer's notice of its determination not to interconnect shall be decided in accordance with the GIP.

8.0 Project Developer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures

concerning the dispatch of generation set forth in the Operating Agreement and the PJM Manuals.

- 9.0 In analyzing and preparing the System Impact Study, and in designing and constructing the Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades described in the Specifications attached to this E&P Agreement, Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely on information provided by Project Developer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR TRANSMISSION OWNER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE FACILITIES STUDY OR THE SYSTEM IMPACT STUDY IF NO FACILITIES STUDY IS REQUIRED OR OF THE TRANSMISSION OWNER INTERCONNECTION FACILITIES, DISTRIBUTION UPGRADES AND/OR NETWORK UPGRADES. Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 10.0 Within 120 days after the Transmission Owner completes the engineering and procurement of the facilities described in section 2.0 of the Specifications, Transmission Provider shall provide Project Developer with an accounting of, and the appropriate party shall make any payment to the other that is necessary to resolve, any difference between (a) Project Developer's responsibility under this E&P Agreement and the Tariff for the actual cost of such equipment, and (b) Project Developer's previous aggregate payments to Transmission Provider and the Transmission Owner hereunder. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Transmission Owner has returned to it the portion of Project Developer's previous payments that Transmission Provider must pay under that sentence.
- 11.0 No third party beneficiary rights are created under this E&P Agreement, provided, however, that payment obligations imposed on Project Developer hereunder are agreed and acknowledged to be for the benefit of the Transmission Owner actually performing the services associated with the interconnection of the Generating Facilities and any associated upgrades of other facilities.
- 12.0 No waiver by either party of one or more defaults by the other in performance of any of the provisions of this E&P Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.



- 13.0 This E&P Agreement or any part thereof, may not be amended, modified, assigned, or waived other than by a writing signed by all parties hereto. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.
- 14.0 This E&P Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 15.0 This E&P Agreement shall not be construed as an application for service under Part II or Part III of the Tariff.
- 16.0 Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

**Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

**Project Developer**

[CONTACT NAME/ADDRESS]

**Transmission Owner**

[CONTACT NAME/ADDRESS]

- 17.0 All portions of the Tariff and the Operating Agreement pertinent to the subject of this E&P Agreement are incorporated herein and made a part hereof.
- 18.0 This E&P Agreement is entered into pursuant to the GIP.
- 19.0 Neither party shall be liable for consequential, incidental, special, punitive, exemplary or indirect damages, lost profits or other business interruption damages, by statute, in tort or contract, under any indemnity provision or otherwise with respect to any claim, controversy or dispute arising under this E&P Agreement.
- 20.0 Addendum of Project Developer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status. To the extent required, in accordance with section

20.1, Schedule A to this E&P Agreement shall set forth the Project Developer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

## 20.1 Tax Liability

### 20.1.1 Safe Harbor Provisions:

This section 20.1.1 is applicable only to Generation Project Developers. Provided that Project Developer agrees to conform to all requirements of the Internal Revenue Service ("IRS") (e.g., the "safe harbor" provisions of IRS Notices 2001-82 and 88-129) that would confer nontaxable status on some or all of the transfer of property, including money, by Project Developer to the Transmission Owner for payment of the Costs of construction of the Transmission Owner Interconnection Facilities, the Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in section 20.1.2 below, shall not include income taxes in the Costs of Transmission Owner Interconnection Facilities that are payable by Project Developer under the E&P Agreement, the Generator Interconnection Agreement or the Interconnection Construction Service Agreement. Project Developer shall document its agreement to conform to IRS requirements for such non-taxable status in the E&P Agreement, Generator Interconnection Agreement, and/or the Interconnection Construction Service Agreement.

### 20.1.2 Tax Indemnity:

Project Developer shall indemnify the Transmission Owner for any costs that Transmission Owner incurs in the event that the IRS and/or a state department of revenue (State) determines that the property, including money, transferred by Project Developer to the Transmission Owner with respect to the construction of the Transmission Owner Interconnection Facilities is taxable income to the Transmission Owner. Project Developer shall pay to the Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Transmission Owner. In the event that the Transmission Owner chooses to contest such assessment, either at the request of Project Developer or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Transmission Owner shall refund to Project Developer the excess of its demand payment made to the Transmission Owner over the amount of the tax, interest and penalty for which the Transmission Owner is finally determined to be liable. Project Developer's tax indemnification obligation under this section shall survive any termination of the E&P Agreement, the GIA or the Interconnection Construction Service Agreement.

### 20.1.3 Taxes Other Than Income Taxes:

Upon the timely request by Project Developer, and at Project Developer's sole expense, the Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Transmission Owner for which Project Developer may be required to reimburse Transmission Provider under the terms of this

E&P Agreement or the GIP. Project Developer shall pay to the Transmission Owner on a periodic basis, as invoiced by the Transmission Owner, the Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Project Developer and the Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Project Developer to the Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Project Developer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Transmission Owner.

#### 20.1.4 Income Tax Gross-Up

##### 20.1.4.1 Additional Security:

In the event that Project Developer does not provide the safe harbor documentation required under section 20.1.1 prior to execution of this E&P, within 15 days after such execution, Transmission Provider shall notify Project Developer in writing of the amount of additional Security that Project Developer must provide. The amount of Security that a Transmission Project Developer must provide initially pursuant to this E&P Agreement shall include any amounts described as additional Security under this section 20.1.4 regarding income tax gross-up.

##### 20.1.4.2 Amount:

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the total Security provided to the amount that would be sufficient to permit the Transmission Owner to receive and retain, after the payment of all applicable income taxes ("Current Taxes") and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the "Present Value Depreciation Amount"), an amount equal to the estimated Costs of Transmission Owner Interconnection Facilities, Distribution Upgrades and/or Network Upgrades for which Project Developer is responsible under the Generator Interconnection Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Transmission Owner's anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

##### 20.1.4.3 Time for Payment:

Project Developer must provide the additional Security, in a form and with terms as required by the GIP, within 15 days after its receipt of Transmission Provider's notice under this

section. The requirement for additional Security under this section shall be treated as a milestone included in the Generator Interconnection Agreement pursuant to the GIP.

#### 20.1.5 Tax Status:

Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this E&P Agreement or the Tariff is intended to adversely affect any Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

### 21 Breach, Cure and Default

#### 21.1 Breach:

A Breach of this E&P Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this E&P Agreement, including but not limited to any material breach of a representation, warranty or covenant;
- (c) Assignment of the E&P Agreement in a manner inconsistent with its terms; or
- (d) Failure of a Party to provide information or data required to be determined under to another Party for such other Party to satisfy its obligations under this E&P Agreement.

#### 21.2 Notice of Breach:

A Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider or the Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the notifying Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies).

#### 21.3 Cure and Default:

A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 21.3 is automatically in Default of this E&P Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

#### 21.4.1 Cure of Breach:

21.4.1.1 Except for the event of Breach set forth in section 21.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Parties. Such agreement shall not be unreasonably withheld.

21.4.1.2 In an event of Breach set forth in section 21.1(a), the Breaching Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

#### 21.5 Right to Compel Performance:

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. No remedy conferred by any provision of this E&P Agreement is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies

22.0 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All Transmission Providers, Transmission Owners, market participants, and Project Developers interconnected with electric systems are to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

23.0 This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction.

IN WITNESS WHEREOF, Transmission Provider, Project Developer and Transmission Owner have caused this E&P Agreement to be executed by their respective authorized officials.

(Project Identifier #\_\_\_\_)

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Transmission Owner: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**SPECIFICATIONS FOR  
ENGINEERING AND PROCUREMENT  
AGREEMENT  
BY AND AMONG  
PJM INTERCONNECTION, L.L.C.  
AND**

\_\_\_\_\_  
**AND**

\_\_\_\_\_  
**(Project Identifier #\_\_\_)**

1.0 Description of Generating Facility or Merchant Transmission Facility to be interconnected with the Transmission System in the PJM Region:

a. Name of Generating Facility or Merchant Transmission Facility:

\_\_\_\_\_  
\_\_\_\_\_

b. Location of Generating Facility or Merchant Transmission Facility:

\_\_\_\_\_  
\_\_\_\_\_

2.0.A Facilities to be designed or procured by the Transmission Owner under this E&P Agreement: **[List or state None]**

2.0.B Facilities to be designed or procured by the Project Developer under this E&P Agreement: **[List or state None]**

3.0 Project Developer shall be subject to the charges detailed below:

3.1 Transmission Owner Interconnection Facilities Charge:

3.2 Distribution Upgrades Charge:

3.3 Network Upgrades Charge:

3.4 Cost Breakdown:

\$	Direct Labor
\$	Direct Material
\$	Indirect Labor
\$	Indirect Material

\$

Total



SCHEDULES: {Note: Schedules A through B are required, others are optional; add if applicable and desirable for clarity.}

SCHEDULE A – INTERCONNECTION CUSTOMER’S AGREEMENT TO CONFORM  
WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS

SCHEDULE B – ADDITIONAL PROVISIONS FOR BILLINGS AND PAYMENTS

SCHEDULE \_\_ – CUSTOMER FACILITY LOCATION/SITE PLAN

SCHEDULE \_\_ – SINGLE-LINE DIAGRAM

## **SCHEDULE A**

### **INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS**

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}  
Not Required.

[OR]

{Include the following language if applicable to Project Developer:}

As provided in section 20.1 of this E&P Agreement and subject to the requirements thereof, Project Developer represents that it meets all qualifications and requirements as set forth in section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Project Developer agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Project Developer to Transmission Owner with respect to the payment of the Costs of engineering and procurement the Transmission Owner Interconnection Facilities specified in this E&P Agreement.

Nothing in Project Developer's agreement pursuant to this Schedule A shall change Project Developer's indemnification obligations under section 20.1 of this E&P Agreement.

## **SCHEDULE B**

### **ADDITIONAL PROVISIONS FOR BILLINGS AND PAYMENTS**

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Project Developer is responsible.

Transmission Provider shall invoice Project Developer on behalf of the Transmission Owner, for the Transmission Owner's expected Costs during the next three months. Upon receipt of each of Project Developer's payments of such invoices, Transmission Provider shall reimburse the Transmission Owner. Project Developer shall pay each invoice received from Transmission Provider within 20 days after receipt thereof. Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. section 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment. If Project Developer fails to pay any invoice when and as due, Transmission Provider or Transmission Owner can provide notice of such failure to Project Developer and the other party, and Project Developer shall pay the amounts due within five days from the receipt of such notice. Subject to obtaining any necessary authorizations from FERC, if Project Developer fails to make payment within five days from the receipt of such notice, Transmission Provider and Transmission Owner shall each have the right to suspend performance hereunder. If Project Developer fails to make payment within 15 days from the receipt of such notice, Transmission Provider and Transmission Owner shall each have the right to terminate this Agreement, or exercise such other rights and remedies, as each may have in equity or at law.

**Tariff, Part IX, Subpart E**

**FORM OF  
UPGRADE CONSTRUCTION SERVICE AGREEMENT**

Service Agreement No. [   ]

(Project Identifier #\_\_\_\_)

**UPGRADE CONSTRUCTION SERVICE AGREEMENT**

**By and Among**

**PJM Interconnection, L.L.C.**

**And**

**[Upgrade Customer]**

**And**

**[Name of Transmission Owner]**

**UPGRADE CONSTRUCTION SERVICE AGREEMENT**

**By and Among**  
**PJM Interconnection, L.L.C.**  
**And**  
**[Upgrade Customer]**  
**And**  
**[Name of Transmission Owner]**

(Project Identifier #\_\_\_)

This Upgrade Construction Service Agreement, including the Appendices attached hereto and incorporated herein (collectively, “Upgrade CSA”) is made and entered into as of the Effective Date (as defined in the attached Appendix III) by and among PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”), \_\_\_\_\_ (“Upgrade Customer” [OPTIONAL: or “[short name]”]) and \_\_\_\_\_ (“Transmission Owner” [OPTIONAL: or “[short name]”]). Transmission Provider, Upgrade Customer and Transmission Owner are referred to herein individually as “Party” and collectively as “the Parties.”

**WITNESSETH**

WHEREAS, Upgrade Customer has requested (1) Incremental Auction Revenue Rights pursuant to section 7.8 of Schedule 1 of the Operating Agreement of PJM Interconnection L.L.C. (“Operating Agreement”) and Generation Interconnection Procedures (“GIP”) set forth in PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part {[instruction: {use Part VII if this is a transition period Agreement subject to Tariff, Part VII} {use Part VIII if this a new rules Agreement subject to Part VIII}}]; or (2) installation of one or more Merchant Network Upgrades pursuant to the GIP;

WHEREAS, pursuant to Upgrade Customer’s Upgrade Request proposing Merchant Network Upgrades only and in accordance with the PJM Tariff, Transmission Provider has conducted the required studies to determine whether such requests can be accommodated, and if so, under what terms and conditions, including the identification of any Customer-Funded Upgrades that must be constructed in order to provide the service or rights requested by Upgrade Customer;

WHEREAS, Transmission Provider’s studies have identified the Customer-Funded Upgrades described in Appendix I of this Upgrade CSA as necessary to provide Upgrade Customer the service or rights it has requested; and

WHEREAS, Upgrade Customer: (i) desires that Transmission Owner construct the required Customer-Funded Upgrades; and (ii) agrees to assume cost responsibility for the design, engineering, procurement and construction of such Customer-Funded Upgrades in accordance with the PJM Tariff.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, together with other good and valuable consideration, the receipt and sufficiency is hereby mutually acknowledged by each Party, the Parties mutually covenant and agree as follows:

## **Article 1 – Definitions and Other Documents**

### **1.0 Defined Terms.**

All capitalized terms used in this Upgrade CSA shall have the meanings ascribed to them in the GIP or in definitions either in the body of this Upgrade CSA or its attached appendices. In the event of any conflict between defined terms set forth in the PJM Tariff or defined terms in this Upgrade CSA, such conflict will be resolved in favor of the terms as defined in this Upgrade CSA. Any provision of the PJM Tariff relating to this Upgrade CSA that uses any such defined term shall be construed using the definition given to such defined term in this Upgrade CSA.

### **1.1 Incorporation of Other Documents.**

Subject to the provisions of section 1.0 above, all portions of the PJM Tariff and the Operating Agreement as of the date of this Upgrade CSA, and as pertinent to the subject of this Upgrade CSA, are hereby incorporated herein and made a part hereof.

## **Article 2 – Responsibility for Customer-Funded Upgrades**

### **2.0 Upgrade Customer Financial Responsibilities.**

Upgrade Customer shall pay all Costs for the design, engineering, procurement and construction of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. An estimate of such Costs is provided in Appendix I to this Upgrade CSA.

### **2.1 Obligation to Provide Security.**

Upgrade Customer shall provide Security to collateralize Upgrade Customer's obligation to pay the Costs incurred by Transmission Owner to construct the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, less any Costs already paid by Upgrade Customer, in accordance with the GIP. Upgrade Customer shall deliver such Security to Transmission Provider prior to the Effective Date of this Upgrade CSA, as described in Appendix III. Unless otherwise specified by the Transmission Provider, such Security shall take the form of a letter of credit, in the amount of \$\_\_\_\_\_ naming the Transmission Provider and Transmission Owner as beneficiaries.

### **2.2 Failure to Provide Security.**

If the Upgrade Customer fails to provide Security in the amount, in the time or in the form required by section 2.1, then this Upgrade CSA shall terminate immediately and the Upgrade Customer's Upgrade Request shall be deemed terminated and withdrawn.

### **2.3 Costs.**

In accordance with the GIP, the Upgrade Customer shall pay for the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA based upon the Costs of the Customer-Funded Upgrades described in Appendix I.

## **2.4 Charges.**

In accordance with sections 9, 24, and 25 of Appendix III to this Upgrade CSA, the Upgrade Customer shall pay to the Transmission Provider the charges applicable after Initial Operation of the Merchant Network Upgrades, as set forth in SCHEDULE B to this Upgrade CSA. Promptly after receipt of such payments, the Transmission Provider shall forward such payments to the appropriate Transmission Owner.

## **2.5 Transmission Owner Responsibilities.**

If the Upgrade Customer satisfies all requirements of this Article 2 and applicable requirements set forth in the PJM Tariff, Transmission Owner shall use Reasonable Efforts to construct or cause to be constructed the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, on its transmission system. Transmission Owner shall own the Customer-Funded Upgrades it has, or has arranged to have, constructed and shall have ongoing responsibility to maintain such Customer-Funded Upgrades consistent with the Operating Agreement and the Transmission Owner's Agreement.

# **Article 3 – Rights to Transmission Service**

## **3.0 No Transmission Service.**

This Upgrade CSA does not entitle the Upgrade Customer to take Transmission Service under the PJM Tariff.

# **Article 4 – Early Termination**

## **4.0 Termination by Upgrade Customer.**

Subject to the terms of section 14 of Appendix III, Upgrade Customer may terminate this Upgrade CSA at any time by providing written notice of termination to Transmission Provider and Transmission Owner. Upgrade Customer's notice of termination shall become effective sixty calendar days after either the Transmission Provider or Transmission Owner receives such notice.



## **Article 5 – Rights**

### **5.0 Rights.**

Transmission Provider shall make available to Upgrade Customer the rights attributable to the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. The rights, allocation and assignment procedures, duration and all other terms and procedures set forth in the GIP and applicable PJM Manuals referenced therein regarding an Upgrade Customer assuming responsibility for Customer-Funded Upgrades to accommodate an Upgrade Request shall apply under this Agreement for the benefit of Upgrade Customer.

### **5.1 Amount of Rights Granted.**

Upgrade Customer shall receive the following rights, subject to section 5.2 below and the applicable terms of the PJM Tariff:

Incremental Auction Revenue Rights. Pursuant to the GIP, Upgrade Customer shall have Incremental Auction Revenue Rights in the following quantities between the indicated source(s) and sink(s):

Incremental Capacity Transfer Rights. Pursuant to the GIP, Upgrade Customer shall have Incremental Capacity Transfer Rights in the following quantities into the indicated Locational Deliverability Area:

### **5.2 Availability of Rights Granted.**

Upgrade Customer's rights as described in section 5.1 shall become effective upon the completion of (i) the Customer-Funded Upgrades identified in this Upgrade CSA, and, if applicable, (ii) the transmission upgrade projects noted as contingencies in Appendix I of this Upgrade CSA.

## **Article 6 – Miscellaneous**

### **6.0 Notices.**

Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

#### **Transmission Provider:**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

**Upgrade Customer:**

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**Transmission Owner:**

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**6.1 Waiver.**

No waiver by any Party of one or more Defaults by another in performance of any of the provisions of this Upgrade CSA shall operate or be construed as a waiver of any other or further Default or Defaults, whether of a like or different character.

**6.2 Amendment.**

This Upgrade CSA or any part thereof, may not be amended, modified or waived other than by a writing signed by all Parties

Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.

**6.3 No Partnership.**

Notwithstanding any provision of this Upgrade CSA, the Parties do not intend to create hereby any joint venture, partnership, association taxable as a corporation, or other entity for the conduct of any business for profit.

**6.4 Counterparts.**

This Upgrade CSA may be executed in multiple counterparts to be construed as one effective as of the Effective Date.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Upgrade CSA to be executed by their respective authorized officials.

(Project Identifier # \_\_\_\_\_)

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Upgrade Customer: [Name of Upgrade Customer]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Transmission Owner: [Name of Transmission Owner]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

## **APPENDIX I**

### **SCOPE AND SCHEDULE OF WORK FOR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY TRANSMISSION OWNER**

#### **A. Scope of Work**

Transmission Owner hereby agrees to provide the following or Customer-Funded Upgrades pursuant to the terms of this Upgrade CSA:

[Identify Customer-Funded Upgrades to be constructed]

#### **B. Schedule of Work**

[Add schedule for construction work to be completed]

#### **C. Costs**

Upgrade Customer shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with section 9.0 of Appendix III to this Upgrade CSA.

Merchant Network Upgrades Charge: \$ \_\_\_\_\_

[Add additional sections to list: any Contingencies, Applicable Technical Requirements, and Estimate of Tax Gross-ups, as required pursuant to Appendix III]

#### **D. Construction of Customer Funded Upgrades**

1. The Merchant Network Upgrades regarding which Transmission Owner shall be the Constructing Entity are described on the attached Appendix I, section A to this Upgrade CSA.

2. Election of Construction Option. Specify below whether the Constructing Entities have mutually agreed to construction of the Merchant Network Upgrades that will be built by the Transmission Owner pursuant to the Standard Option or the Negotiated Contract Option. (See sections 6.1 and 6.1.1 of Appendix III to this Upgrade CSA.)

\_\_\_\_\_ Standard Option.

\_\_\_\_\_ Negotiated Contract Option.

If the parties have mutually agreed to use the Negotiated Contract Option, the permitted, negotiated terms on which they have agreed and which are not already set forth as part of the Scope of Work and/or Schedule of Work attached to this Upgrade CSA, respectively, shall be as set forth in Schedule A attached to this Upgrade CSA.

## **APPENDIX II**

### **DEFINITIONS**

**From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement.**

**APPENDIX III**  
**GENERAL TERMS AND CONDITIONS**

## **1.0 Effective Date and Term**

### **1.1 Effective Date.**

Subject to regulatory acceptance, this Upgrade CSA shall become effective on the date the agreement has been executed by all Parties, or if the agreement is filed with FERC unexecuted, upon the date specified by FERC. The Transmission Owner shall have no obligation to begin construction or preparation for construction of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with FERC; (ii) such agreement, if unexecuted and nonconforming, has been filed with and accepted by FERC; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

### **1.2 Term.**

This Upgrade CSA shall continue in full force and effect from the Effective Date until the termination hereof.

### **1.3 Survival.**

This Upgrade CSA shall continue in effect after termination to the extent necessary to provide for final billings and payments, including billings and payments pursuant to this Upgrade CSA, and to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Upgrade CSA was in effect.

## **2.0 Facilitation by Transmission Provider**

Transmission Provider shall keep itself apprised of the status of the Transmission Owner's construction-related activities and, upon request of Upgrade Customer or Transmission Owner, Transmission Provider shall meet with the Upgrade Customer and Transmission Owner separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this Upgrade CSA. Transmission Owner shall cooperate in good faith with the other Parties in Transmission Provider's efforts to facilitate resolution of disputes.



### **3.0 Construction Obligations**

#### **3.1 Customer-Funded Upgrades.**

All Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA shall be designed, engineered, procured, installed and constructed in accordance with this section 3.0, Applicable Standards, Applicable Laws and Regulations, Good Utility Practice, the Facilities Study and the Scope of Work under this Upgrade CSA.

#### **3.2 Scope of Applicable Technical Requirements and Standards.**

Applicable technical requirements and standards shall apply to the design, engineering, procurement, construction and installation of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA only to the extent that the provisions thereof relate to the design, engineering, procurement, construction and/or installation of such or Customer-Funded Upgrades. Such provisions relating to the design, engineering, procurement, construction and/or installation of such Customer-Funded Upgrades shall be contained in Appendix I appended to this Upgrade CSA. The Parties shall mutually agree upon, or in the absence of such agreement, Transmission Provider shall determine, which provisions of the applicable technical requirements and standards should be appended to this Upgrade CSA. In the event of any conflict between the provisions of the applicable technical requirements and standards that are appended to this Upgrade CSA and any later-modified provisions that are stated in the pertinent PJM Manuals, the provisions appended to this Upgrade CSA shall control.

## **4.0 Tax Liability**

### **4.1 Upgrade Customer Payments Taxable.**

The Parties shall treat all payments or property transfers made by Upgrade Customer to Transmission Owner for the installation of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, as taxable contributions in aid of construction under section 118(b) of the Internal Revenue Code and any applicable State income tax laws, except in the event, and to the extent, there exists a Favorable Tax Determination, as defined in section 4.4, indicating otherwise.

### **4.2 Income Tax Gross-Up.**

All payments and property transfers by Upgrade Customer and Transmission Owner in connection with the installation of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, shall be made on a fully grossed-up basis. This means that Upgrade Customer will pay Transmission Owner an amount equal to (1) the current taxes imposed on Transmission Owner ("Current Taxes") on the excess of (a) the amount of any payments and the fair market value of any property transferred to Transmission Owner by Upgrade Customer under this Upgrade CSA in connection with the installation of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, (without regard to any payments under this Article) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit Transmission Owner to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1). For this purpose, (i) Current Taxes shall be computed based on Transmission Owner's composite federal, State, and local tax rates at the time the payments or property transfers are received and Transmission Owner will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Transmission Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Transmission Owner's current weighted average cost of capital. Thus, the formula for calculating Upgrade Customer's liability to Transmission Owner pursuant to this Article can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . The estimated tax gross-up payments with respect to the facilities, identified in Appendix I to this Upgrade CSA, are stated in Appendix I.

### **4.3 Private Letter Ruling.**

At Upgrade Customer's request, made no later than one year after the termination of this Upgrade CSA pursuant to section 14 hereof, and expense, Transmission Owner may file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Upgrade Customer to Transmission Owner under this Upgrade CSA are subject to federal income taxation. Upgrade Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Upgrade Customer's knowledge. The Parties shall cooperate in good faith with respect to the submission of such request. Transmission Owner shall keep Upgrade

Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Upgrade Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Transmission Owner shall allow Upgrade Customer to attend all meetings with IRS officials about the request and shall permit Upgrade Customer to prepare the initial drafts of any follow-up letters in connection with the request.

#### **4.4 Refund.**

In the event that (a) a private letter ruling is issued to Transmission Owner which holds that any amount paid or the value of any property transferred by Upgrade Customer to Transmission Owner under the terms of this Upgrade CSA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Transmission Owner in good faith that any amount paid or the value of any property transferred by Upgrade Customer to Transmission Owner under the terms of this Upgrade CSA is not taxable to Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Upgrade Customer to Transmission Owner are not subject to federal income tax, or (d) if Transmission Owner receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Upgrade Customer to Transmission Owner pursuant to this Upgrade CSA (each of (a), (b), (c), or (d), a “Favorable Tax Determination”), Transmission Owner shall promptly refund to Upgrade Customer the following: (i) any payment made by Upgrade Customer under this section 4 for taxes that are attributable to the amount determined to be non-taxable, together with interest thereon; (ii) interest on any amounts paid by Upgrade Customer to Transmission Owner for such taxes which Transmission Owner did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC’s regulations at 18 C.F.R. § 35.19a(a)(2)(ii) from the date payment was made by Upgrade Customer to the date Transmission Owner refunds such payment to Upgrade Customer; and (iii) with respect to any such taxes paid by Transmission Owner, any refund or credit Transmission Owner receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to Transmission Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Transmission Owner will remit such amount promptly to Upgrade Customer only after and to the extent that Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA.

#### **4.5 Contests.**

If, following a Favorable Tax Determination, Upgrade Customer receives a refund pursuant to section 4.4, and, notwithstanding the Favorable Tax Determination, any Governmental Authority determines that Transmission Owner’s receipt of payments or property constitutes income that is subject to taxation, Transmission Owner shall notify Upgrade Customer, in writing, within 30 Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Upgrade Customer and at Upgrade Customer’s sole expense, Transmission Owner may appeal, protest, seek abatement of, or otherwise oppose such

determination. Upon Upgrade Customer's written request and sole expense, Transmission Owner may file a claim for refund with respect to any taxes paid under this Article, whether or not it has received such a determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Transmission Owner shall keep Upgrade Customer informed, shall consider in good faith suggestions from Upgrade Customer about the conduct of the contest, and shall reasonably permit Upgrade Customer or a Upgrade Customer representative to attend contest proceedings. Upgrade Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Transmission Owner may agree to a settlement either with Upgrade Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Owner, but reasonably acceptable to Upgrade Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Upgrade Customer's obligation shall be based on the amount of the settlement agreed to by Upgrade Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding sentence.

#### **4.6 Taxes Other Than Income Taxes.**

Upon the timely request by Upgrade Customer, and at Upgrade Customer's sole expense, Transmission Owner may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or State income tax) asserted or assessed against Transmission Owner for which Upgrade Customer may be required to reimburse Transmission Owner under the terms of this Upgrade CSA. Upgrade Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Upgrade Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Upgrade Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction.

#### **4.7 Tax Status.**

Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this Upgrade CSA is intended to adversely affect the Transmission Owner's tax-exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **5.0 Safety**

### **5.1 General.**

Transmission Owner shall perform all work hereunder in accordance with Good Utility Practice, Applicable Standards and Applicable Laws and Regulations pertaining to the safety of persons or property.

### **5.2 Environmental Releases.**

Transmission Owner shall notify Transmission Provider and Upgrade Customer, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the facility or the facilities, any of which may reasonably be expected to affect Transmission Provider or Upgrade Customer. Transmission Owner shall: (i) provide the notice as soon as possible; (ii) make a good faith effort to provide the notice within 24 hours after it becomes aware of the occurrence; and (iii) promptly furnish to Transmission Provider and Upgrade Customer copies of any publicly available reports filed with any governmental agencies addressing such events.

## **6.0 Schedule of Work**

### **6.1 Standard Option.**

The Transmission Owner shall use Reasonable Efforts to design, engineer, procure, construct and install Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, in accordance with the Schedule and Scope of Work.

### **6.2 Negotiated Contract Option.**

As an alternative to the Standard Option set forth in section 6.1 of this Appendix III, the Transmission Owner and the Upgrade Customer may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Customer-Funded Upgrades. Under the Negotiated Contract Option, the Upgrade Customer and the Transmission Owner may agree to terms different from those included in the Standard Option of section 6.1 above and the corresponding standard terms set forth in the applicable provisions of the GIP and this Appendix III. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Upgrade Customer and the Transmission Owner that are parties to this Upgrade CSA; no other Upgrade Customer's responsibility for Costs may be affected. No other terms of the Tariff or this Appendix III shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option shall be stated in full in an appendix to this Upgrade CSA.

### **6.3 Revisions to Schedule and Scope of Work.**

The Schedule and Scope of Work shall be revised as required in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Transmission Provider and Transmission Owner, which agreement shall not be unreasonably withheld, conditioned or delayed. The scope change process is intended to be used for changes to the Scope of Work as defined herein, and is not intended to be used to change any of the milestone set forth in the GIA. Any change to the Scope of Work must be agreed to by all Parties in writing by executing a scope change document.

## **7.0 Suspension of Work upon Default**

Upon the occurrence of a Default by Upgrade Customer, the Transmission Provider or the Transmission Owner may, by written notice to Upgrade Customer, suspend further work associated with the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this section 7.0. In the event of a suspension by Transmission Provider or Transmission Owner, the Upgrade Customer shall be responsible for the Costs incurred in connection with any suspension hereunder.

## **7.1 Notification and Correction of Defects.**

7.1.1 In the event that inspection and/or testing of any Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, built by Transmission Owner identifies any defects or failures to comply with Applicable Standards in such Customer-Funded Upgrades, then Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. If such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.

## **8.0 Transmission Outages**

### **8.1 Outages; Coordination.**

The Transmission Provider and Transmission Owner acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. The Transmission Provider and Transmission Owner further acknowledge and agree that any such outages shall be coordinated by and through Transmission Provider.



## **9.0 Security, Billing and Payments**

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Upgrade Customer is responsible.

### **9.1 Adjustments to Security.**

The Security provided by Upgrade Customer at or before the Effective Date of this Upgrade CSA shall be: (a) reduced as portions of the work on Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, are completed; and/or (b) increased or decreased as required to reflect adjustments to Upgrade Customer's cost responsibility, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals.

### **9.2 Invoice.**

Transmission Owner shall provide Transmission Provider a quarterly statement of its scheduled expenditures during the next three months for, as applicable the design, engineering and construction of, and/or for other charges related to, construction of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA. Transmission Provider shall bill Upgrade Customer, on behalf of Transmission Owner, for Transmission Owner's expected costs during the subsequent three months. Upgrade Customer shall pay each bill within 20 days after receipt thereof. Upon receipt of each of Upgrade Customer's payments of such bills, Transmission Provider shall reimburse the Transmission Owner. Upgrade Customer may request that the Transmission Provider provide quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that section 9.3 of this Appendix III shall govern the timing of the final cost reconciliation upon completion of the work.

### **9.3 Final Invoice.**

Within 120 days after Transmission Owner completes construction and installation of the Customer-Funded Upgrades under this Upgrade CSA, Transmission Provider shall provide Upgrade Customer with an accounting of, and the appropriate Party shall make any payment to the other that is necessary to resolve, any difference between: (a) Upgrade Customer's responsibility under the PJM Tariff for the Costs of the or Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA; and (b) Upgrade Customer's previous aggregate payments to Transmission Provider for the Costs of the facilities identified in Appendix I to this Upgrade CSA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to the Upgrade Customer or the Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Party owing the payment.

### **9.4 Disputes.**

In the event of a billing dispute among the Transmission Provider, Transmission Owner, and Upgrade Customer, Transmission Provider and the Transmission Owner shall continue to perform their respective obligations pursuant to this Upgrade CSA so long as: (a) the Upgrade Customer continues to make all payments not in dispute, and the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute; or (b) the Upgrade Customer pays to Transmission Provider, or into an independent escrow account established by the Upgrade Customer, the portion of the invoice in dispute, pending resolution of such dispute. If the Upgrade Customer fails to meet any of these requirements, then Transmission Provider shall so inform the other Parties and Transmission Provider or the Transmission Owner may provide notice to Upgrade Customer of a Breach pursuant to section 13 of this Appendix III. Within 30 days after the resolution of the dispute, the party that owes money to the other party shall pay the amount due with interest calculated in accord with section 9.6 (interest).

#### **9.5 Interest.**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

#### **9.6 No Waiver.**

Payment of an invoice shall not relieve Upgrade Customer from any other responsibilities or obligations it has under this Upgrade CSA, nor shall such payment constitute a waiver of any claims arising hereunder.

## **10.0 Assignment**

### **10.1 Assignment with Prior Consent.**

Subject to section 10.2 of this Appendix III, no Party shall assign its rights or delegate its duties, or any part of such rights or duties, under this Upgrade CSA without the written consent of the other Parties, which consent shall not be unreasonably withheld, conditioned or delayed. Any such assignment or delegation made without such written consent shall be null and void. In addition, the Transmission Owner shall be entitled, subject to Applicable Laws and Regulations, to assign this Upgrade CSA to any Affiliate or successor of the Transmission Owner that owns and operates all or a substantial portion of such Transmission Owner's transmission facilities.

### **10.2 Assignment Without Prior Consent.**

#### **10.2.1 Assignment by Upgrade Customer.**

Upgrade Customer may assign this Upgrade CSA without the Transmission Owner's or Transmission Provider's prior consent to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Upgrade Customer's assets provided that, prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical competence and financial ability to comply with the requirements of this Upgrade CSA and assumes in a writing provided to the Transmission Owner and Transmission Provider all rights, duties, and obligations of Upgrade Customer arising under this Upgrade CSA. However, any assignment described herein shall not relieve or discharge the Upgrade Customer from any of its obligations hereunder absent the written consent of the Transmission Owner, such consent not to be unreasonably withheld, conditioned, or delayed.

#### **10.2.2 Assignment by Transmission Owner.**

Transmission Owner shall be entitled, subject to applicable laws and regulations, to assign this Upgrade CSA to an Affiliate or successor that owns and operates all or a substantial portion of Transmission Owner's transmission facilities.

#### **10.2.3 Assignment to Lenders.**

Upgrade Customer may, without the consent of the Transmission Provider or the Transmission Owner, assign this Upgrade CSA to any Project Finance Entity(ies), provided that such assignment shall not alter or diminish Upgrade Customer's duties and obligations under this Upgrade CSA. If Upgrade Customer provides the Transmission Owner with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to Article 6 of this Upgrade CSA, the Transmission Provider or Transmission Owner shall provide notice and reasonable opportunity for such entity(ies) to cure any Breach under this Upgrade CSA in accordance with this Upgrade CSA. Transmission Provider or Transmission Owner shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment

and status of this Upgrade CSA, provided that such documents do not alter or diminish the rights of the Transmission Provider or Transmission Owner under this Upgrade CSA, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider's and/or the Transmission Owner's invoice therefore, Upgrade Customer shall pay the Transmission Provider and/or the Transmission Owner's reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Upgrade Customer from any of its obligations hereunder absent the written consent of the Transmission Owner and Transmission Provider.

### **10.3 Successors and Assigns.**

This Upgrade CSA and all of its provisions are binding upon, and inure to the benefit of, the Transmission Provider and Transmission Owner and their respective successors and permitted assigns.

## **11.0 Insurance**

### **11.1 Required Coverages.**

Constructing Entity shall maintain, at its own expense, insurance as described in paragraphs A through E below. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, will be located. Failure to maintain required insurance shall be a Breach of this Upgrade CSA.

A. Workers Compensation Insurance with statutory limits, as required by the State and/or jurisdiction in which the work is to be performed, and employer’s liability insurance with limits of not less than one million dollars (\$1,000,000).

B. Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) each accident products and completed operations aggregate.

C. Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of no less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

D. Excess and/or Umbrella Liability Insurance with a limit of liability of twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer’s liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

E. Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Constructing Entity’s duties, responsibilities and performance outlined in this Upgrade CSA, with limits of liability as follows:

\$10,000,000 each occurrence

\$10,000,000 aggregate

An entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design and engineering work associated with the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, necessary for the transmission service to procure professional liability insurance in the

amounts and upon the terms prescribed by this section, and providing evidence of such insurance to the other entity. Such insurance shall be procured from companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, are located. Nothing in this section relieves the entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the entity’s insurance obligations under this section become invalid for any reason, including but not limited to: (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the PJM Tariff; entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an entity will not design, engineer or construct or cause to design, engineer or construct any new Customer-Funded Upgrades, Transmission Provider, in its discretion, may waive the requirement that an entity maintain the Professional Liability Insurance pursuant to this section.

### **11.2 Additional Insureds.**

The Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability policies procured by each Constructing Entity (“Insuring Constructing Entity”) shall include each other party (the “Insured Party”), its officers, agents and employees as additional insureds, providing all standard coverages and covering liability of the Insured Party arising out of bodily injury and/or property damage (including loss of use) in any way connected with the operations, performance, or lack of performance under this Upgrade CSA.

### **11.3 Other Required Terms.**

The above-mentioned insurance policies (except workers’ compensation) shall provide the following:

(a) Each policy shall contain provisions that specify that it is primary and non-contributory for any liability arising out of that party’s negligence, and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer’s liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Insuring Constructing Entity shall be responsible for its respective deductibles or retentions.

(b) If any coverage is written on a Claims First Made Basis, continuous coverage shall be maintained or an extended discovery period will be exercised for a period of not less than two years after termination of this Upgrade CSA.

(c) Provide for a waiver of all rights of subrogation which the Insuring Constructing Entity’s insurance carrier might exercise against the Insured Party.

### **11.4 No Limitation of Liability.**

The requirements contained herein as to the types and limits of all insurance to be maintained by the Constructing Entities are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this Upgrade CSA.

### **11.5 Self-Insurance.**

Notwithstanding the foregoing, each Constructing Entity may self-insure to meet the minimum insurance requirements of this section to the extent it maintains a self-insurance program; provided that such Constructing Entity's senior secured debt is rated at investment grade or better by Standard & Poor's and its self-insurance program meets the minimum insurance requirements of this section 11. For any period of time that a Constructing Entity's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, it shall comply with the insurance requirements applicable to it under this section 11. In the event that a Constructing Entity is permitted to self-insure pursuant to this section, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in section 11.6 of this Appendix III.

### **11.6 Notices; Certificates of Insurance.**

Prior to the commencement of work pursuant to this Upgrade CSA, the Constructing Entities agree to furnish certificate(s) of insurance evidencing the insurance coverage obtained in accordance with section 11 of this Appendix III. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation in favor of the other Interconnected Entities. All policies of insurance shall provide for 30 days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide 30 days prior written notice of cancellation or material adverse change, each Constructing Entity shall provide the other Constructing Entities with 30 days prior written notice of cancellation or material adverse change to any of the insurance required in this Upgrade CSA.

### **11.7 Subcontractor Insurance.**

In accord with Good Utility Practice, each Constructing Entity shall require each of its subcontractors to maintain and provide evidence of insurance coverage of types, and in amounts, commensurate with the risks associated with the services provided by the subcontractor. Bonding of contractors or subcontractors shall be at the hiring Constructing Entity's discretion, but regardless of bonding, the Transmission Owner shall be responsible for the performance or non-performance of any contractor or subcontractor it hires.

### **11.8 Reporting Incidents.**

The Parties shall report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Upgrade CSA.

## **12.0 Indemnity**

### **12.1 Indemnity.**

Each Constructing Entity shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property of persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with or resulting from: (i) the indemnifying Constructing Entity's breach of any of the representations or warranties made in, or failure of the indemnifying Constructing Entity or any of its subcontractors to perform any of its obligations under, this Upgrade CSA; or (ii) the negligence or willful misconduct of the indemnifying Constructing Entity or its contractors; provided, however, that the neither Constructing Entity shall not have any indemnification obligations under this section in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Party seeking indemnity.

### **12.2 Indemnity Procedures.**

Promptly after receipt by a person entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this section 12 may apply, the Indemnified Person shall notify the indemnifying Constructing Entity of such fact. Any failure of or delay in such notification shall not affect a Constructing Entity's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Constructing Entity. The Indemnified Person shall cooperate with the indemnifying Constructing Entity with respect to the matter for which indemnification is claimed. The indemnifying Constructing Entity shall have the right to assume the defense thereof with counsel designated by such indemnifying Constructing Entity and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Constructing Entity and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Constructing Entity, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Constructing Entity shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying Constructing Entity. Notwithstanding the foregoing, the indemnifying Constructing Entity shall not: (i) be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified



Person and the indemnifying Constructing Entity, in such event the indemnifying Constructing Entity shall pay the reasonable expenses of the Indemnified Person; and (ii) settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

### **12.3 Indemnified Person.**

If an Indemnified Person is entitled to indemnification under this section 12 as a result of a claim by a third party, and the indemnifying Constructing Entity fails, after notice and reasonable opportunity to proceed under this section 12, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Constructing Entity contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

### **12.4 Amount Owed.**

If the indemnifying Constructing Entity is obligated to indemnify and hold any Indemnified Person harmless under this section 12, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

### **12.5 Limitation on Damages.**

Except as otherwise provided in this section 12, the liability of a Party shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 12.5 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this Upgrade CSA. The provisions of this section 12 shall survive the termination or expiration of this Upgrade CSA.

### **12.6 Limitation of Liability in Event of Breach.**

A Breaching Party shall have no liability hereunder to any other Party, and each other Party hereby releases the Breaching Party, for all claims or damages it incurs that are associated with any interruption in the availability of the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, the Transmission System, or Transmission Service, or associated with damage to the Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this Upgrade CSA.

### **12.7 Limited Liability in Emergency Conditions.**

Except as otherwise provided in the PJM Tariff or the Operating Agreement, no Party shall be liable to any other Party for any action that it takes in responding to an Emergency Condition, so

long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Upgrade Customer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.

### **13.0 Breach, Cure and Default**

#### **13.1 Breach.**

A Breach of this Upgrade CSA shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Upgrade CSA including but not limited to any material breach of a representation, warranty or covenant made in this Upgrade CSA;
- (c) Assignment of this Upgrade CSA in a manner inconsistent with the terms of this Upgrade CSA; or
- (d) Failure of any Party to provide information or data required to be provided to another Party under this Upgrade CSA for such other Party to satisfy its obligations under this Upgrade CSA.

#### **13.2 Notice of Breach.**

In the event of a Breach, a Party not in Breach of this Upgrade CSA shall give written notice of such Breach to the Breaching Party, the other Party and to any other persons that the Breaching Party identifies in writing prior to the Breach. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Upgrade Customer, Transmission Provider or the Transmission Owner agree to provide notice of such Breach, in the same manner as its or their notice to Upgrade Customer, to any Project Finance Entity, provided that the Upgrade Customer has provided Transmission Provider and the Transmission Owner with notice of an assignment to such Project Finance Entity(ies) and has identified such Project Finance Entities as contacts for notice.

#### **13.3 Cure and Default.**

A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section is automatically in Default of this Upgrade CSA, and its Upgrade Request and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

##### **13.3.1 Cure of Breach.**

###### **13.3.1.1**

Except for the event of Breach set forth in section 13.1(a) above, the Breaching Interconnection Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed

and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.

#### **13.3.1.2**

In an event of Breach set forth in section 13.1(a), the Breaching Interconnection Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Upgrade Customer, and the Upgrade Customer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Upgrade Customer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

#### **13.4 Right to Compel Performance.**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Interconnection Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 9.5, no remedy conferred by any provision of this Upgrade CSA is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

#### **13.5 Remedies Cumulative.**

No remedy conferred by any provision of this Upgrade CSA is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **14.0 Termination**

### **14.1 Termination.**

#### **14.1.1 Upon Completion of Construction.**

##### **14.1.1.1 Conforming Upgrade CSAs.**

If this Upgrade CSA is conforming and, therefore, is only reported to FERC on PJM's Electric Quarterly Report, it shall terminate upon the date Transmission Provider receives written notice, in a form acceptable to the Transmission Provider from the Transmission Owner that the following conditions have occurred: (i) completion of construction of all Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA; (ii) final payment of all Costs due and owing under this Upgrade CSA; and (iii) termination of all rights provided under this Upgrade CSA.

##### **14.1.1.2 Non-Conforming Upgrade CSAs.**

If this Upgrade CSA is non-conforming and, therefore, has been filed with and accepted by FERC, it shall terminate upon (a) Transmission Provider receiving written notice, in a form acceptable to Transmission Provider, from Transmission Owner that the following conditions have occurred: (i) completion of construction of Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA;; (ii) final payment of all Costs due and owing under this Upgrade CSA; (iii) termination of all rights provided under this Upgrade CSA; and (b) the effective date of Transmission Provider's cancellation of the Upgrade CSA in accordance with Commission rules and regulations. Transmission Provider shall serve the Transmission Owner and Upgrade Customer with a copy of the notice of cancellation of any Upgrade CSA in accordance with Commission rules and regulations.

### **14.2 Cancellation by Upgrade Customer.**

#### **14.2.1 Applicability.**

The following provisions shall apply in the event that Upgrade Customer terminates this Upgrade CSA:

##### **14.2.2 Cancellation Cost Responsibility.**

Upon the cancellation of this Upgrade CSA by the Upgrade Customer, the Upgrade Customer shall be liable to pay to the Transmission Owner or Transmission Provider all Cancellation Costs in connection with the Upgrade CSA. Cancellation costs may include costs for Network Upgrades assigned to Upgrade Customer, in accordance with the Tariff and as reflected in this Upgrade CSA, that remain the responsibility of Upgrade Customer under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Upgrade Customers in the Cycle. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Upgrade Customer, with a written

demand for payment and with reasonable documentation of such Cancellation Costs. The Upgrade Customer shall pay the Transmission Provider each bill for Cancellation Costs within 30 days after, as applicable, the Transmission Owner's or Transmission Provider's presentation to the Upgrade Customer of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing party seeks to collect. Upon receipt of each of Upgrade Customer's payments of such bills of the Transmission Owner, Transmission Provider shall reimburse the Transmission Owner for Cancellation Costs incurred by the latter.

#### **14.2.3 Disposition of Customer-Funded Upgrades upon Cancellation.**

Upon cancellation of this Upgrade CSA by the Upgrade Customer, Transmission Provider, after consulting with the Transmission Owner, may, at the sole cost and expense of the Upgrade Customer, authorize the Transmission Owner to: (a) cancel supplier and contractor orders and agreements entered into by the Transmission Owner to design, engineer, construct, install, operate, maintain and own Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, provided, however, that Upgrade Customer shall have the right to choose to take delivery of any equipment ordered by the Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; (b) remove any Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, built by the Transmission Owner; (c) partially or entirely complete the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, as necessary to preserve the integrity or reliability of the Transmission System, provided that Upgrade Customer shall be entitled to receive any rights associated with such Customer-Funded Upgrades as determined in accordance with the PJM Tariff; or (d) undo any of the changes to the Transmission System that were made pursuant to this Upgrade CSA. To the extent that the Upgrade Customer has fully paid for equipment that is unused upon cancellation or which is removed pursuant to this section, the Upgrade Customer shall have the right to take back title to such equipment; alternatively, in the event that the Upgrade Customer does not wish to take back title, the Transmission Owner may elect to pay the Upgrade Customer a mutually agreed amount to acquire and own such equipment.

#### **14.2.4 Termination upon Default.**

In the event that Upgrade Customer exercises its right to terminate under this section notwithstanding any other provision of this Upgrade CSA, the Upgrade Customer shall be liable for payment of the Transmission Owner's Costs incurred up to the date of Upgrade Customer's notice of termination pursuant to this section and the costs of completion of some or all of the Customer-Funded Upgrades, or specific unfinished portions thereof, and/or removal of any or all of such Customer-Funded Upgrades that have been installed, to the extent that Transmission Provider determines such completion or removal to be required for the Transmission Provider and/or the Transmission Owner to perform their respective obligations under the PJM Tariff, provided, however, that Upgrade Customer's payment of such costs shall be without prejudice to any remedies that otherwise may be available to it under this Upgrade CSA for the Default of the Transmission Owner.

### **14.3 Survival of Rights.**

The obligations of the Parties hereunder with respect to payments, Cancellation Costs, warranties, liability and indemnification shall survive termination to the extent necessary to provide for the determination and enforcement of said obligations arising from acts or events that occurred while this Upgrade CSA was in effect. In addition, applicable provisions of this Upgrade CSA will continue in effect after expiration, cancellation or termination to the extent necessary to provide for final billings, payments, and billing adjustments.

#### **14.4 Filing at FERC.**

The Transmission Provider shall make a filing with FERC pursuant to section 205 of the Federal Power Act effectuating the termination of this Upgrade CSA as required.

## **15.0 Force Majeure**

### **15.1 Notice.**

A Party that is unable to carry out an obligation imposed on it by this Upgrade CSA due to Force Majeure shall notify the other Parties in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **15.2 Duration of Force Majeure.**

A Party shall not be responsible for any non-performance or considered in Breach or Default under this Upgrade CSA, for any non-performance, any interruption or failure of service, deficiency in the quality or quantity of service, or any other failure to perform any obligation hereunder to the extent that such failure or deficiency is due to Force Majeure. A Party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such Party shall resume performance and give prompt notice thereof to the other Party.

### **15.3 Obligation to Make Payments.**

Any Party's obligation to make payments for services shall not be suspended by Force Majeure.



## **16.0 Confidentiality**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the other Party receiving the information that the information is confidential. If requested by any Party, the disclosing Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Party may disclose such writing to an appropriate Governmental Authority. Any Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **16.1 Term.**

During the term of this Upgrade CSA, and for a period of three years after the termination of this Upgrade CSA, except as otherwise provided in section 16 of this Upgrade CSA, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any Party.

### **16.2 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of this Upgrade CSA; or (vi) is required, in accordance with section 16.7 of this Appendix III, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Upgrade CSA. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

### **16.3 Release of Confidential Information.**

No Party shall disclose Confidential Information of another Party to any other person, except to its Affiliates (in accordance with FERC's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be or considering providing financing to or equity participation in Upgrade Customer on a need-to-know basis in connection with this Upgrade CSA, unless such person has first been advised of the confidentiality provisions of this section and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party that provides Confidential Information of another Party to any person shall remain responsible for any release of Confidential Information in contravention of this section.

#### **16.4 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Party. A Party's disclosure to another Party of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **16.5 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to any other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **16.6 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this Upgrade CSA or to comply with Applicable Laws and Regulations.

#### **16.7 Order of Disclosure.**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order, or waive compliance with the terms of this Upgrade CSA. Notwithstanding the absence of a protective order, or agreement, or waiver, the Party subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **16.8 Termination of Upgrade Construction Service Agreement.**

Upon termination of this Upgrade CSA for any reason, each Party shall, within 10 calendar days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting Party) or to return to the requesting Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party.

#### **16.9 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this section 16. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this section, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, consequential, or punitive damages of any nature or kind resulting from or arising in connection with a Breach of any obligation under this section 16.

#### **16.10 Disclosure to FERC or its Staff.**

Notwithstanding anything in this section to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Upgrade CSA, the Party, shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Upgrade CSA prior to the release of the Confidential Information to FERC or its staff. A Party shall notify the other Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### **16.11 Non-Disclosure.**

Subject to the exception noted above in section 16.10 of this Appendix III, no Party shall disclose Confidential Information of Party to any person not employed or retained by the disclosing Party, except to the extent disclosure is: (i) required by law; (ii) reasonably deemed by the disclosing Party to be required in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Upgrade CSA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Party's Confidential Information under this subparagraph, the disclosing Party shall promptly notify the other Parties in writing and shall assert confidentiality and cooperate with the other Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

#### **16.12 Information in the Public Domain.**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

#### **16.13 Return or Destruction of Confidential Information.**

If any Party provides any Confidential Information to another Party in the course of an audit or inspection, the providing Party may request the other Party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days after receiving the request and shall certify in writing to the requesting Party that it has complied with such request.

## **17.0 Information Access and Audit Rights**

### **17.1 Information Access.**

Subject to Applicable Laws and Regulations, each Party shall make available to the other Parties information necessary: (i) to verify the Costs incurred by the other Party for which the requesting Party is responsible under this Upgrade CSA and the PJM Tariff; and (ii) to carry out obligations and responsibilities under this Upgrade CSA and the PJM Tariff. The Parties shall not use such information for purposes other than those set forth in this section 17 and to enforce their rights under this Upgrade CSA and the PJM Tariff.

### **17.2 Reporting of Non-Force Majeure Events.**

Each Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Upgrade CSA for a reason other than an event of force majeure as defined in section 1.21 of Appendix 2 of this Attachment GG. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section 17 shall not entitle the receiving Party to allege a cause of action for anticipatory breach of this Upgrade CSA and the PJM Tariff.

### **17.3 Audit Rights.**

Subject to the requirements of confidentiality of this Upgrade CSA and the PJM Tariff, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent Party, to audit at its own expense the other Party's accounts and records pertaining to such Party's performance and/or satisfaction of obligations arising under this Upgrade CSA and the PJM Tariff. Any audit authorized by this section 17 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Upgrade CSA. Any request for audit shall be presented to the other Party not later than 24 months after the event as to which the audit is sought. Each Party shall preserve all records held by it for the duration of the audit period.

### **17.4 Waiver.**

Any waiver at any time by any Party of its rights with respect to a Breach or Default under this Upgrade CSA, or with respect to any other matters arising in connection with this Upgrade CSA, shall not be deemed a waiver or continuing waiver with respect to any other Breach or Default or other matter.

### **17.5 Amendments and Rights Under the Federal Power Act.**

Except as set forth in this section 17, this Upgrade CSA may be amended, modified, or supplemented only by written agreement of the Parties. Notwithstanding the foregoing, nothing contained in this Upgrade CSA shall be construed as affecting in any way any of the rights of any

Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this Upgrade CSA shall be amended, as mutually agreed by the Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

#### **17.6 Regulatory Requirements.**

Each Party's performance of any obligation under this Upgrade CSA for which such Party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **18.0 Representations and Warranties**

### **18.1 General.**

Each Constructing Entity hereby represents, warrants and covenants as follows, with these representations, warranties, and covenants effective as to the Constructing Entity during the full time this Upgrade CSA is effective:

#### **18.1.1 Good Standing.**

Such Constructing Entity is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated.

#### **18.1.2 Authority.**

Such Constructing Entity has the right, power and authority to enter into this Upgrade CSA, to become a Party thereto and to perform its obligations thereunder. This Upgrade CSA is a legal, valid and binding obligation of such Constructing Entity, enforceable against such Constructing Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **18.1.3 No Conflict.**

The execution, delivery and performance of this Upgrade CSA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Constructing Entity, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Constructing Entity or any of its assets.

## **19.0 Inspection and Testing of Completed Facilities**

### **19.1 Coordination.**

Upgrade Customer and the Transmission Owner shall coordinate the timing and schedule of all inspection and testing of the Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA.

### **19.2 Inspection and Testing.**

Each Constructing Entity shall cause inspection and testing of any Customer-Funded Upgrades that it constructs in accordance with the provisions of this section. The Parties acknowledge and agree that inspection and testing of facilities may be undertaken as facilities are completed and need not await completion of all of the facilities that a Constructing Entity is building.

Upon the completion of the construction and installation, but prior to energization, of any Customer-Funded Upgrades constructed by the Transmission Owner, the Transmission Owner shall have the same inspected and/or tested by qualified personnel or a qualified contractor to assess whether the facilities substantially comply with Applicable Standards. Subject to Applicable Laws and Regulations, said inspection and testing shall be held on a mutually agreed-upon date, and the Upgrade Customer and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

### **19.3 Notification and Correction of Defects.**

In the event that inspection and/or testing of any Customer-Funded Upgrades built by the Transmission Owner identifies any defects or failures to comply with Applicable Standards in such facilities, Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. In the event that such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.



## **20.0 Operation and Maintenance of Merchant Network Upgrades**

Unless otherwise provided in this Upgrade CSA, the Transmission Owner that owns Merchant Network Upgrades constructed on behalf of and at the expense of the Upgrade Customer shall operate and maintain such Merchant Network Upgrades at the expense of the Upgrade Customer. The charge for operation and maintenance of such Merchant Network Upgrade charges is set forth in SCHEDULE B of this Upgrade CSA.

## **21.0 Charges**

### **21.1 Specified Charges.**

If and to the extent required by the Transmission Owner, after the Initial Operation of the Merchant Network Upgrade, Upgrade Customer shall pay one or more of the types of recurring charges described in this section to compensate the Transmission Owner for costs incurred in performing certain of its obligations under this Appendix III. All such charges shall be stated in SCHEDULE B of the Upgrade CSA. Permissible charges under this section may include:

(a) Administration Charge - Any such charge may recover only the costs and expenses incurred by the Transmission Owner in connection with administrative obligations such as the preparation of bills. An Administration Charge shall not be permitted to the extent that the Transmission Owner's other charges to the Upgrade Customer under the same Upgrade CSA include an allocation of the Transmission Owner's administrative and general expenses and/or other corporate overhead costs.

(b) Merchant Network Upgrade Operations and Maintenance Charge - Any such charge may recover only the Transmission Owner's costs and expenses associated with operation and maintenance charges related to the Upgrade Customer's Merchant Network Upgrade owned by the Transmission Owner.

(c) Other Charges - Any other charges applicable to the Upgrade Customer, as mutually agreed upon by the Upgrade Customer and the Transmission Owner and as accepted by the FERC as part of an Upgrade CSA.

### **21.2 FERC Filings.**

To the extent required by law or regulation, each Party shall seek FERC acceptance or approval of its respective charges or the methodology for the calculation of such charges.

**SCHEDULE A**

**NEGOTIATED CONTRACT OPTIONS**

List or state "None."

**SCHEDULE B**

**OPERATION AND MAINTENANCE CHARGES FOR  
MERCHANT NETWORK UPGRADES**

List or state "None."

**SCHEDULE C**

**NETWORK UPGRADES TO BE BUILT BY TRANSMISSION OWNER**

**[Specify Facilities to Be Constructed or state “None”]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Developer Party has sole cost responsibility
- ii. Facilities for which a Network Upgrade Cost Responsibility Service Agreement is required.

**Tariff, Part IX, Subpart F**

**FORM OF  
COST RESPONSIBILITY AGREEMENT**

Service Agreement No. [   ]

(Project Identifier #\_\_\_\_)

**COST RESPONSIBILITY AGREEMENT**

**By and Between**

**PJM INTERCONNECTION, L.L.C.**

**And**

---

**COST RESPONSIBILITY AGREEMENT**

**By and Between  
PJM INTERCONNECTION, L.L.C.  
And**

---

(Project Identifier #\_\_\_)

**RECITALS**

This Cost Responsibility Agreement (“Agreement”), dated as of [Insert Date], is made and entered into by and between [Insert Project Developer Name] (“Project Developer”) and PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”). Project Developer and Transmission Provider each may be referred to herein as a “Party” or, collectively, “Parties.” Capitalized terms used in this Agreement, unless otherwise indicated, shall have the meanings ascribed to them in the PJM Open Access Transmission Tariff (“Tariff”). For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}. [Possible Language: This Agreement supersedes the (name of agreement) between PJM Interconnection, L.L.C. and (former agreement Project Developer name), dated (insert date of former agreement). This paragraph and the following WHEREAS clauses can be edited as appropriate if there is no former agreement, and this CRA is being into in connection with a merger/re-organization or other agreement or transaction].

WHEREAS, Project Developer owns or operates an existing generating facility within the PJM Region and is currently a party to [an existing Power Purchase Agreement[s] (the [“PPA[s]”])].

WHEREAS, Project Developer has notified the Transmission Provider its [PPA[s]] expire on [Insert Expiration Date[s]].

WHEREAS, the Project Developer proposes to enter into a form of Generation Interconnection Agreement (“GIA”) with PJM and the Transmission Owner coincident with the expiration of the [PPA[s]] in order to establish an interconnection with the PJM Transmission System for the purposes of making wholesale sales in the PJM Region (the “Project Developer Request”).

WHEREAS, consistent with Order No. 2003<sup>1</sup>, Project Developer need not submit an

<sup>1</sup> *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103, at PP 814, 815 (2003), *order on reh’g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh’g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh’g*, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff’d sub nom, Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert denied*, 552 U.S. 1230 (2008).



Interconnection Request pursuant to the GIP, provided it represents that it is a Qualifying Facility and the output and operating characteristics of its existing generation facility (“Generating Facility”) will continue to be substantially the same as the output and operating characteristics of the Generating Facility as set forth in the existing Project Developer [PPA[s]].

WHEREAS, the Transmission Provider must perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

### **COST RESPONSIBILITY**

1. Project Developer elects, and PJM agrees to perform certain modeling, studies or analysis to verify and ensure that the interconnection of Generating Facility meets the necessary system interconnection requirements as specified in the Tariff and associated PJM Manuals, as appropriate.
2. The scope of the modeling, studies or analysis shall be subject to the assumptions as set forth in Attachment A to this Agreement.
3. If required, studies shall identify Interconnection Facilities, Network Upgrades and Distribution Upgrades including the estimated cost thereof that may be required to provide interconnection service under the Tariff based upon the information specified by the Project Developer in Attachment A.
4. Project Developer shall submit an upfront deposit in the amount of \$10,000 for the performance of the modeling, studies or analysis at the time Project Developer submits this executed Agreement to the Transmission Provider. If in-depth studies are required (e.g., System Impact Study), the Transmission Provider’s good faith estimate for the time to complete such studies is {instructions: provide estimated time to complete studies} months.
5. Project Developer agrees that it shall reimburse the Transmission Provider for the actual costs incurred or expended by the Transmission Provider and Transmission Owner in connection with the modeling, studies or analysis (above and beyond the deposits submitted pursuant to paragraph 4 above) within 20 days of receiving an invoice for such costs. Actual costs may exceed the study deposit.
6. Within 120 days after the Transmission Provider completes the modeling, studies or analysis, Transmission Provider shall provide a final invoice (“Final Invoice”) which will include an accounting of the actual costs incurred in performing the modeling, studies or analysis. Within 20 days of receiving the Final Invoice, the Project Developer shall make any payment due to the Transmission Provider and/or the Transmission Owner that is necessary to resolve any differences between (a) the Project Developer’s cost responsibility under this Agreement and the Tariff for the actual cost of the modeling, studies or analysis;

and (b) Project Developer's aggregate payments (including deposits submitted pursuant to paragraph 4 above) remitted pursuant to this Agreement prior to the issuance of the Final Invoice.

7. In the event that the Transmission Provider anticipates that the actual costs of the modeling, studies or analysis will exceed the deposits submitted in accordance with paragraph 4 above, the Transmission Provider shall provide the Project Developer with an estimate of the modeling, studies or analysis costs. Upon receipt of the estimate of such modeling, studies or analysis costs, the Project Developer may withdraw its Project Developer Request and terminate this Agreement by providing written notice of such withdrawal and termination to the Transmission Provider within 20 Business Days of receiving such estimate. If Project Developer fails to pay such amounts, then Transmission Provider shall deem this Agreement to be terminated and withdrawn. If the Project Developer withdraws its Project Developer Request and terminates this Agreement prior to the completion of the modeling, studies or analysis work, Project Developer agrees to pay actual costs of the modeling, studies or analysis performed up until the time of such request to withdraw and terminate.

### **CONFIDENTIALITY**

8. Project Developer agrees to provide all information requested by the Transmission Provider necessary to complete the required modeling, studies or analysis. Subject to paragraph 9 of this Agreement and to the extent required by the GIP, information provided pursuant to this paragraph 8 shall be and remain confidential.
9. Upon completion of all requisite modeling, studies or analysis, the Transmission Provider shall keep confidential all information provided to it by the Project Developer. Upon completion of the modeling, studies or analysis, the results shall be listed on the Transmission Provider's OASIS to the extent required and, to the extent required by Commission regulations, will be made publicly available upon request, except that the identity of the Project Developer shall be remain confidential and will not be posted on OASIS.
10. Project Developer acknowledges that, consistent with the Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the modeling, studies or analysis process and that the Transmission Provider may disseminate information to the Transmission Owner.

### **DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

11. In modeling, studying or analyzing Project Developer's Request, the Transmission Provider, the Interconnected Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the Project Developer and possibly by third-parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTOR EMPLOYED

BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS, OF THE MODELING, STUDIES OR ANALYSIS. The Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement, nor any modeling, studies or analysis prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any interconnection service to or on behalf of the Project Developer at this point in time or in the future.

12. Project Developer agrees that in no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission Provider's obligations under this Agreement or otherwise.

Without limitation of the foregoing, Project Developer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any modeling, studies or analysis arising out of the Project Developer Request shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

#### **ASSIGNMENT**

13. No Party herein shall assign its rights or delegate its duties, or any part of such rights or duties, under this Agreement without the written consent of the other Party, which consent shall not be unreasonably withheld, conditioned, or delayed. Any such assignment or delegation made without such written consent shall be null and void. A Party may make an assignment in connection with the sale, merger, or transfer of a substantial portion or all of its properties which it owns, so long as the assignee in such a sale, merger, or transfer assumes in writing all rights, duties and obligations arising under this Agreement.

#### **MISCELLANEOUS**

14. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage

prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

**Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

**Project Developer**

[Insert Project Developer Notice Info]

Either Party may change the notice information in this Agreement by giving five Business Days written notice prior to the effective date of the change.

15. Subject to any necessary regulatory acceptance, this Agreement shall become effective on the date that it is executed by all Parties, or, if this Agreement is filed with Federal Energy Regulatory Commission (“FERC”) unexecuted, upon the date specified by the FERC.
16. Breach:
  - a. A breach of this Agreement shall include:
    - i. The failure to pay any amount when due;
    - ii. The failure to comply with any material term or condition of this Agreement or the Tariff, including but not limited to any material breach of a representation, warranty or covenant made in this Agreement;
    - iii. Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
    - iv. Failure of Project Developer to provide information or data required to be provided pursuant to this Agreement in order for Transmission Provider to perform the modeling, studies or analysis associated with this Agreement.
  - b. Notice of Breach:

A Party not in breach shall give written notice of an event of breach to the breaching Party. Such notice shall set forth, in reasonable detail, the nature of the breach, and where known and applicable, the steps necessary to cure such breach. A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 16 automatically in Default of this Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.
  - c. Cure of Breach or Termination Pursuant to Breach:

- i. Except for the event of Breach set forth in section 16.a.i above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends from the receipt of such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.
  - ii. In an event of Breach set forth in section 16.a.i, the Breaching Interconnection Party shall may cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn
- 17. In addition to section 16 above, this Agreement may be terminated by the following means:
  - a. By Mutual Consent: This Agreement may be terminated as of the date on which the Parties mutually agree to terminate this Agreement.
  - b. By Project Developer: The Project Developer may unilaterally terminate this Agreement in accordance with the terms set forth in section 7 of this Agreement or pursuant to Applicable Laws and Regulations upon providing Transmission Provider 30 days prior written notice thereof, provided that Project Developer is not in breach under this Agreement.
  - c. By Transmission Provider: Transmission Provider may unilaterally terminate this Agreement in accordance with the Applicable Laws and Regulations upon providing Project Developer 30 days prior written notice thereof.
- 18. No waiver by either Party of one or more breaches by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further breach, whether of a like or different character.
- 19. This Agreement or any part thereof may not be amended, modified or waived other than by a writing signed by all Parties hereto.

Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page,

as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.

20. This Agreement shall be binding upon the Parties hereto, their heirs, executors, administrators, successors and assigns.
21. This Agreement shall not be construed as an application for service under Part II or Part III of the Tariff.
22. The provisions of the GIP of the Tariff are incorporated herein and made a part hereof.
23. Governing Law, Regulatory Authority and Rules: This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders or regulations of a Governmental Authority.
24. No Third-party Beneficiaries: This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.
25. Multiple Counterparts: This Agreement may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument.
26. No Partnership: The Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership, obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
27. Severability: If any provision of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
28. Reservation of Rights: The Transmission Provider shall have the right to make a unilateral filing with FERC to implement or modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or

any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Project Developer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials. By each individual signing below, each represents to the other that they are duly authorized to sign on behalf of that company and have the actual and/or apparent authority to bind the respective company to this Agreement.

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Project Developer: [Insert Project Developer Name]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_



**ATTACHMENT A**  
**INFORMATION TO BE SUPPLIED BY PROJECT DEVELOPER**

**Name of Interconnection Project Developer** (as it will appear in the GIA):

**Name of the Generating Facility:**

**Location of the Generating Facility:**

**Company name:**

**Address:**

**City, State, Zip Code:**

**Legal Notices:**

**Company name:**

**Address:**

**City, State, Zip Code:**

**Attn:**

**Phone:**

**Email:**

**Tax ID for the Generating Facility:**

**Maximum Facility Output:**

**Capacity Interconnection Rights**

**Description of the equipment configuration (as it is to appear in the GIA):**

**Requested effective date of the GIA (if other than upon execution by all parties, e.g., to coincide with the termination of a PPA):**

**Provide Generating Facility Location/Site Plan (generally, an aerial photo with cross streets labeled and the Generating Facility pinpointed in red):**

**Provide one-line diagram of the Generating Facility and clearly indicate Point of Interconnection and the Point of Change of Ownership:**

**Provide a list of metering equipment and indicate ownership of same:**

**Addendum 1**  
**[Insert Project Developer Name] Site Overview**

**Addendum 2**  
**[Insert Project Developer Name] One Line Diagram**

**Tariff, Part IX, Subpart G**

**FORM OF  
NECESSARY STUDIES AGREEMENT**

Service Agreement No. [   ]

(Project Identifier #\_\_\_\_)

**NECESSARY STUDIES AGREEMENT**

**By And Among**

**PJM INTERCONNECTION, L.L.C.**

**And**

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**Necessary Studies Agreement  
By and Among  
PJM Interconnection, L.L.C.  
and**

---

(Project Identifier #\_\_\_)

**RECITALS**

1. This Necessary Studies Agreement (“Agreement”) entered into by and between \_\_\_\_\_ (“Project Developer”) and PJM Interconnection, L.L.C. (“PJM” or “Transmission Provider”) (individually, a “Party” and together, the “Parties”) is effective as of the date this Agreement is fully executed by the Parties (“Effective Date”). Capitalized terms used in this Agreement, unless otherwise indicated, shall have the meanings ascribed to them in the PJM Open Access Transmission Tariff (“Tariff”), or Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”). For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, use Part VIII if this is a new rules period agreement}.
  
2. Consistent with section A.2 of the GIP, and pursuant to that certain [Generation Interconnection Agreement] related to PJM {Project Identifier #} \_\_\_\_\_, designated as [Original, First Revised, etc.] Service Agreement No. \_\_\_\_\_, with an effective date of [Date] [and filed with the Federal Energy Regulatory Commission (“FERC”) in Docket No. \_\_\_\_\_] [which was a conforming agreement reported to the Federal Energy Regulatory Commission (“FERC”) in PJM’s Electric Quarterly Reports] (the “Service Agreement”), Project Developer has notified Transmission Provider that it plans to undertake modifications to its Generating Facility or Merchant Transmission Facility located at \_\_\_\_\_ that, upon completion, reasonably may have a material impact on the Transmission System (“Planned Modifications”).

{or}

Subject to sections 4 through 14 of this Agreement, Project Developer shall provide sufficient information regarding the Planned Modifications, including but not limited to relevant data, drawings, models, plans, and specifications, to enable Transmission Provider to evaluate the impact, if any, on the Transmission System of the Planned Modifications. The Planned Modifications consist of \_\_\_\_\_. Attachment 1 to this Agreement contains a detailed description of the Planned Modifications.

3. Project Developer represents and warrants that the information provided in section 2 of this Agreement is accurate and complete as of the Effective Date.
4. The obligation(s) of Transmission Provider are conditioned on receipt from Project Developer of all required information regarding the Planned Modifications within 30 days of the Effective Date. Project Developer is obligated to update the data following any requests from PJM. If Project Developer does not provide all required information regarding the Planned Modifications within 30 days of the Effective Date, this Agreement shall be null and void and any and all obligations on the part of Transmission Provider shall cease.

### **PURPOSE OF THE NECESSARY STUDIES UNDER THIS AGREEMENT**

5. Consistent with Tariff, Part IX, Subpart B, Appendix 2, section 3, and the Service Agreement, Transmission Provider agrees to conduct the necessary studies to determine whether the Planned Modifications will have a permanent material impact on the Transmission System and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the Planned Modifications ("Necessary Studies"). The Necessary Studies are expected to include, but are not limited to, a \_\_\_\_\_ . Upon completion of the Necessary Studies, Transmission Provider shall provide Project Developer with preliminary determinations of: (i) the type and scope of the permanent material impact, if any, the Planned Modifications will have on the Transmission System; (ii) the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications; and (iii) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the Planned Modifications. In the event that Transmission Provider is unable to complete the Necessary Studies within 270 days of the date the Transmission Provider approves the dynamic model and data submitted by the Project Developer and Transmission Provider's receipt of the information required under section 3 of this Agreement, Transmission Provider shall notify Project Developer and explain the reasons for the delay.

### **CONFIDENTIALITY**

6. Subject to section 7 below, information provided pursuant to this Agreement that is Confidential Information as defined by the Tariff, and to the extent consistent with PJM's confidentiality obligations in Operating Agreement, section 18.17, shall be and remain confidential. To the extent Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of the Necessary Studies, the consultants and/or Transmission Owner(s) shall keep all information provided by Project Developer confidential and shall use such information solely for the purpose of the study for which it was provided and for no other purpose.



7. Project Developer acknowledges that, consistent with the GIP, Transmission Provider may contract with consultants, including Transmission Owner(s), to provide services or expertise in the study process and that Transmission Provider may disseminate information to Transmission Owner(s).
8. During the longer of the terms of this Agreement or the Service Agreement, and for a period of three years after the expiration or termination thereof, and except as otherwise provided herein, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by the other Party.
9. Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the requirements of this Agreement, the Tariff, or the Operating Agreement; or (vi) is required, in accordance with this Agreement, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.
10. Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the other Party. A Party's disclosure to the other Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
11. By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.
12. Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication, or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under this Agreement or the Tariff.
13. If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for

production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order or waive compliance with the terms of the [GIP] or any applicable agreement entered into pursuant to the [GIP]. Notwithstanding the absence of a protective order or agreement, or waiver, the Party that is subjected to the request or order may disclose such Confidential Information that, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

14. Notwithstanding anything in this Agreement to the contrary, and pursuant to 18 C.F.R. § 1b.20, if the FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement or the Service Agreement, the Party receiving such request shall provide the requested information to FERC or its staff, within the time provided for in the request for information.

In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. The providing Party is prohibited from notifying the other Party prior to the release of the Confidential Information to FERC or its staff. The providing Party shall notify the other Party when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

### **COST RESPONSIBILITY**

15. Project Developer shall provide to Transmission Provider, as of the Effective Date, an initial deposit of \$25,000 for the performance of the Necessary Studies. Transmission Provider's good faith estimate for the time of completion of the Necessary Studies is within 270 days of the date the Transmission Provider approves the dynamic model and data submitted by the Project Developer, and Transmission Provider's receipt of the information under section 3 of this agreement.
  - a. If Project Developer fails to submit an initial deposit of \$25,000 for the performance of the Necessary Studies, this Agreement shall be deemed to be terminated and withdrawn effective as of the end of the next Business Day after the date by which the initial deposit was due to be paid to Transmission Provider.
  - b. If any additional study costs beyond the initial deposit of \$25,000 are anticipated, then, prior to conducting any of the Necessary Studies, Transmission Provider shall provide an estimate of the additional study costs. The estimated additional study costs are non-binding, and additional actual study costs may exceed the estimated additional study cost increases provided by Transmission Provider.

Regardless of whether Transmission Provider provides Project Developer with estimated additional studies, Project Developer is responsible for and must pay all actual study costs.

- i. If Transmission Provider sends notification to Project Developer of estimated additional study costs, then Project Developer must either:
  - (a) Withdraw the request for the Necessary Studies; or
  - (b) Pay all estimated additional study costs within 10 days of such estimate being sent to Project Developer by Transmission Provider.
- ii. If Project Developer fails to complete either 16(b)(i)(a) or 16(b)(i)(b), above, this Agreement shall be deemed to be terminated and withdrawn effective as of the end of the next Business Day after the date by which the additional study costs were due to be paid to Transmission Provider.
- c. Within 120 days after Transmission Provider completes and delivers the Necessary Studies, Transmission Provider shall provide a final invoice that will include an accounting of the actual costs incurred in performing the Necessary Studies ("Final Invoice"). Within 20 days of receiving the Final Invoice, Project Developer shall make any payment due to Transmission Provider. If Project Developer withdraws its Necessary Studies request and terminates this Agreement prior to the completion of the Necessary Studies or analysis work, Project Developer agrees to pay Transmission Provider actual costs of the modeling, studies, or analysis performed up until the time of such request to withdraw and terminate.

#### **DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

16. In analyzing and preparing the Necessary Studies, Transmission Provider, Transmission Owner(s), and any other subcontractors employed by Transmission Provider shall have to rely on information provided by Project Developer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE NECESSARY STUDIES. Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the Necessary Studies performed hereunder are intended, nor shall either be interpreted, to constitute agreement by

Transmission Provider or Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of Project Developer either at this point in time or in the future.

17. In no event will Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Agreement or otherwise, even if Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for any delay in delivery of, or of the non-performance or delay in performance of, Transmission Provider's obligations under this Agreement. Without limitation of the foregoing, Project Developer further agrees that Transmission Owner(s) and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Necessary Studies shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

#### **MISCELLANEOUS**

18. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

##### **Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403-2497  
interconnectionagreementnotices@pjm.com

##### **Project Developer**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_  
Phone \_\_\_\_\_  
Email \_\_\_\_\_

19. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.

20. This Agreement, or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties.

Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.

## 21 Breach, Cure and Default

### 21.1 Breach:

A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material breach of a representation, warranty or covenant;
- (c) Assignment of the Agreement in a manner inconsistent with its terms; or
- (d) Failure of a Party to provide information or data required to be determined under to another Party for such other Party to satisfy its obligations under this Agreement.

### 21.2 Notice of Breach:

A Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider agrees to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the notifying Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies).

### 21.3 Cure and Default:

A Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 21.3 is automatically in Default of this Agreement, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

#### 21.4.1 Cure of Breach:

21.4.1.1 Except for the event of Breach set forth in section 21.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Parties. Such agreement shall not be unreasonably withheld.

21.4.1.2 In an event of Breach set forth in section 21.1(a), the Breaching Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is the Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Project Developer shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

#### 21.5 Right to Compel Performance:

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. No remedy conferred by any provision of this Agreement is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies

22. This Agreement shall be binding upon the Parties, their heirs, executors, administrators, successors, and assigns.

23. Neither this Agreement nor the Necessary Studies performed hereunder shall be construed as an application for any service under the Tariff.

24. All portions of the Tariff and Operating Agreement pertinent to the subject matter of this Agreement and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.

25. Unless otherwise defined in this Agreement, all capitalized terms herein shall have the meanings as set forth in the definitions of such terms as stated in the PJM Tariff.

26. In addition to section 21 above, this Agreement may be terminated by the following means:

- a. By Mutual Consent: This Agreement may be terminated as of the date on which the Parties mutually agree to terminate this Agreement.

- b. By Project Developer: Project Developer may unilaterally terminate this Agreement in accordance with the terms set forth in section 16(b)(i)(a) of this Agreement or pursuant to Applicable Laws and Regulations upon providing Transmission Provider 30 days prior written notice thereof, provided that Project Developer is not in breach under this Agreement.
  - c. By Transmission Provider: Transmission Provider may unilaterally terminate this Agreement in accordance with Applicable Laws and Regulations upon providing Project Developer 30 days prior written notice thereof.
27. This Agreement or any part thereof may not be amended, modified, or waived other than by a writing signed by all Parties hereto.
28. The provisions of the GIP are incorporated herein and made a part hereof.
29. Governing Law, Regulatory Authority, and Rules: This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials. By each individual signing below each represents to the other that they are duly authorized to sign on behalf of that company and have actual and/or apparent authority to bind the respective company to this Agreement.

**Transmission Provider:**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Project Developer:**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_



## ATTACHMENT 1

Describe work to be done.

**Tariff, Part IX, Subpart H**

**FORM OF  
NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT**

Service Agreement No. [   ]

(Network Upgrade #\_\_\_\_)

**NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT**

**By and Among**

**PJM INTERCONNECTION, L.L.C.**

**And**

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**And**

---

**And**

---

**NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT**

**By and Among**  
**PJM Interconnection, L.L.C.**  
**And**  
**[Name of Project Developer]**  
**And**  
**[Name of Project Developer]**

(Network Upgrade #\_\_\_)

- 1.0 Parties. This Network Upgrade Cost Responsibility Agreement (“NUCRA”) including the Schedules and Appendices attached hereto and incorporated herein, is entered into by and between PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”) and the following Project Developers:

Project Developer (includes Eligible Customer and Affected System Customer):

[full name], Project Identifier #\_\_\_ [OPTIONAL: (also referred to as “[short name”))]\_\_\_\_\_

Name and location of Generating Facility or Merchant Transmission Facility

Project Developer:

[full name] and Project Identifier #\_\_\_ [OPTIONAL: (also referred to as “[short name”))]\_\_\_\_\_

Name and location of Generating Facility or Merchant Transmission Facility

{instructions – for the above, also provide Service Agreement No. or other identifying information if known}

All capitalized terms herein shall have the meanings set forth in the appended definitions of such terms as stated in the GIP. [Use as/when applicable: This NUCRA supersedes the \_\_\_\_\_ {insert details to identify the agreement being superseded, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}] For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}.

- 2.0 Authority. This NUCRA is entered into pursuant to [{use Part VII if this is a transition period CSA subject to Tariff, Part VII} {use Part VIII if this is a new rules NUCRA subject to Part VIII}] of the Tariff. The standard terms and conditions set forth in Appendix 2 to this NUCRA are hereby specifically incorporated as provisions of this NUCRA.
- 3.0 Effective Date and Term.
- 3.1 Effective Date. This NUCRA shall become effective on the later of (i) the date the agreement has been executed by all parties to this NUCRA, or (ii) the date that all Project Developers have delivered Security to the Transmission Provider, provided, however, that if the NUCRA is filed with the FERC unexecuted, the Effective Date shall be the date specified by the FERC.
- 3.2 Term. This NUCRA shall continue in full force and effect from the Effective Date until the termination thereof pursuant to section 7 of Appendix 2 to this NUCRA.
- 4.0 Common Use Upgrades Construction and Scope. Common Use Upgrades subject to this NUCRA shall be described in the attached Schedule A. Construction of the Common Use Upgrades and changes to the scope of work shall be as set forth in the applicable agreements or projects as identified in section 1.0 above.
- 5.0 Schedule of Work. The Schedule of Work for construction of the Common Use Upgrades shall be as set forth in the applicable agreements or projects as identified in section 1.0 above.
- 6.0 Common Use Upgrade Cost Responsibility. The cost responsibility of each Project Developer for each Common Use Upgrade described in the attached Schedule A shall be described in the attached Schedule B. Cost responsibility shall be described as a percentage of the total estimated cost of each Common Use Upgrade.
- 7.0 Security. Security associated with this NUCRA shall be the Security provided by each Project Developer as set forth in the Project Developer's GIA, section 5, or the Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party.
- 8.0 Notices. Any notice or request made to or by any party regarding this NUCRA shall be made in accordance with the standard terms and conditions for construction set forth in Appendix 2 to this NUCRA to the representatives of the other parties, as indicated below:

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

Project Developer:

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Project Developer:

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- 9.0 Waiver. No waiver by any party of one or more defaults by another in performance of any of the provisions of this NUCRA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 10.0 Amendment. Except as set forth in Appendix 2, sections 4 and 13.3 of this NUCRA, this NUCRA or any part thereof, may not be amended, modified, assigned, or waived other than by a writing signed by all parties. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and initialed by the parties, without modifying or altering the original date of execution, dates of any milestones, or obligations contained therein.
- 11.0 Incorporation of Other Documents. All portions of the agreements identified in section 1.0 above, and the Tariff and the Operating Agreement pertinent to the subject of this NUCRA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof. To the extent there is a conflict between the NUCRA and other documents, the terms of this NUCRA shall control.
- 12.0 Addendum of Non-Standard Terms and Conditions. Subject to FERC acceptance, the parties agree that the terms and conditions set forth in the attached Schedule C are hereby incorporated by reference into, and made a part of, this NUCRA. In the event of any conflict between a provision of the attached Schedule C that FERC has accepted and any provision of the standard terms and conditions set forth in Appendix 2 to this NUCRA that relates to the same subject matter, the pertinent provision of the attached Schedule C shall control.
- 13.0 This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal laws and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction.

IN WITNESS WHEREOF, the parties have caused this Network Upgrade Cost Responsibility Agreement to be executed by their respective authorized officials.

(Network Identifier #\_\_\_\_)

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

Project Developer: [Name of Party]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

The signature below of the authorized officer of the Transmission Owner is for the limited purpose of acknowledging that an authorized officer of said Transmission Owner has read this Agreement as of this \_\_ day of 20\_\_.

Transmission Owner: [Name of Transmission Owner]

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**APPENDICES:**

- **APPENDIX 1 – DEFINITIONS**
- **APPENDIX 2 – STANDARD TERMS AND CONDITIONS**

**SCHEDULES:**

- **SCHEDULE A – COMMON USE UPGRADES**
- **SCHEDULE B – COST RESPONSIBILITY**
- **SCHEDULE C – SCHEDULE OF NON-STANDARD TERMS AND CONDITIONS**



## **APPENDIX 1**

### **DEFINITIONS**

**From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement.**

## **APPENDIX 2**

### **STANDARD TERMS AND CONDITIONS**

## **Preamble**

The cost responsibility of any Common Use Upgrades required to interconnect a Generating Facility or Merchant Transmission Facility with the Transmission System shall be in accordance with the following Standard Construction Terms and Conditions.

### **1 Facilitation by Transmission Provider**

Transmission Provider shall keep itself apprised of the status of the construction-related activities of the parties to this NUCRA and, upon request of any of them, Transmission Provider shall meet with the parties separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this NUCRA. Each party shall cooperate in good faith with the other parties in Transmission Provider's efforts to facilitate resolution of disputes.

### **2 Common Use Upgrade Cost Responsibility**

Responsibility for the Costs of Common Use Upgrades shall be assigned in accordance with the GIP. The cost responsibility of each Project Developer shall be shown in Schedule B.

### **3 Security, Billing and Payments**

#### **3.1 Security:**

Security associated with this NUCRA shall be the Security provided by each Project Developer as set forth in section 7 of this NUCRA above.

#### **3.2 Adjustments to Security:**

The Security provided by each Project Developer at or before execution of the applicable GIA, Construction Service Agreement or other relevant NUCRAs the Project Developer is a party to shall be increased or decreased in accordance with the provisions of the applicable GIA, Construction Service Agreement or other relevant NUCRAs the Project Developer is a party to, and consistent with the Project Developer's cost responsibility set forth in Schedule B of this NUCRA.

#### **3.3 Invoice:**

In addition to the invoice provisions set forth in the applicable GIA Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party, for purposes of this NUCRA, Transmission Provider shall bill the Project Developers in accordance with the cost responsibility set forth in Schedule B of this NUCRA.

### **3.4 Final Invoice:**

In addition to the final invoice provisions set forth in the applicable GIA Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party, for purposes of this NUCRA, the accounting and payments shall be in accordance with the cost responsibility set forth in Schedule B of this NUCRA.

### **3.5 Disputes:**

In the event of a billing dispute between any of the parties to this NUCRA, Transmission Provider shall continue to perform its obligations pursuant to this NUCRA so long as (a) Project Developer continues to make all payments not in dispute, and (b) the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute, or (c) Project Developer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Project Developer fails to meet any of these requirements, then Transmission Provider shall so inform the other parties to this NUCRA and Transmission Provider may provide notice to Project Developer of a Breach pursuant to section 6 of this Appendix 2.

### **3.6 No Waiver:**

Payment of an invoice shall not relieve Project Developer from any other responsibilities or obligations it has under this NUCRA, nor shall such payment constitute a waiver of any claims arising hereunder.

### **3.7 Interest:**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

## **4 Assignment**

### **4.1 Assignment with Prior Consent:**

Except as provided in section 4.2 to this Appendix 2, no party to this NUCRA shall assign its rights or delegate its duties, or any part of such rights or duties, under this NUCRA without the written consent of the other parties, which consent shall not be unreasonably withheld, conditioned, or delayed. Any such assignment or delegation made without such written consent shall be null and void. A party may make an assignment in connection with the sale, merger, or transfer of a substantial portion or all of the Common Use Upgrades which it owns or will own upon completion of construction and the transfer of title required by the applicable GIA or Construction Service Agreement, so long as the assignee in such a sale, merger, or transfer assumes in writing all rights, duties and obligations arising under this NUCRA.

## **4.2 Assignment Without Prior Consent:**

### **4.2.1 Assignment to Owners:**

Project Developer may assign the NUCRA without the prior consent of any other party to the NUCRA to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Common Use Upgrades, provided that prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical and operational competence to comply with the requirements of this NUCRA and assumes in a writing provided to the Transmission Provider all rights, duties, and obligations of Project Developer arising under this NUCRA. However, any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Provider, such consent not to be unreasonably withheld, conditioned or delayed. Project Developer shall provide Transmission Provider with notice of any such assignment in accordance with the PJM Manuals.

### **4.2.2 Assignment to Lenders:**

Project Developer may, without the consent of any other party to this NUCRA, assign the NUCRA to any Project Finance Entity(ies), provided that such assignment shall not alter or diminish Project Developer's duties and obligations under this NUCRA. If Project Developer provides the parties to this NUCRA with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 12 of this Appendix 2, the Transmission Provider shall provide notice and reasonable opportunity for such entity(ies) to cure any Breach under this Appendix 2 in accordance with this Appendix 2. Transmission Provider shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment and status of the NUCRA, provided that such documents do not alter or diminish the rights of the Transmission Provider under this Appendix 2, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider's invoice therefor, Project Developer shall pay the Transmission Provider reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Project Developer from any of its obligations hereunder absent the written consent of the Transmission Provider.

## **4.3 Successors and Assigns:**

This NUCRA and all of its provisions are binding upon, and inure to the benefit of, the parties to this NUCRA and their respective successors and permitted assigns.

## **5 Indemnity**

### **5.1 Indemnity:**

Each Project Developer to this NUCRA shall indemnify and hold harmless the other parties to this NUCRA, and the other parties' officers, shareholders, stakeholders, members, managers,

representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying party's breach of any of the representations or warranties made in, or failure of the indemnifying party or any of its subcontractors to perform any of its obligations under, this NUCRA (including Appendix 2), or (ii) the negligence or willful misconduct of the indemnifying party or its contractors; provided, however, that no party shall have any indemnification obligations under this section 5.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the party seeking indemnity.

## **5.2 Indemnity Procedures:**

Promptly after receipt by a party entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in section 5.1 may apply, the Indemnified Person shall notify the indemnifying party(ies) of such fact. Any failure of or delay in such notification shall not affect the indemnifying party's(ies') indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party(ies). The Indemnified Person shall cooperate with the indemnifying party(ies) with respect to the matter for which indemnification is claimed. The indemnifying party(ies) shall have the right to assume the defense thereof with counsel designated by such indemnifying party(ies) and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying party(ies) and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying party(ies), the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying party(ies) shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying party(ies). Notwithstanding the foregoing, the indemnifying party(ies) (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the indemnifying party(ies), in such event the indemnifying party(ies) shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

### **5.3 Indemnified Person:**

If an Indemnified Person is entitled to indemnification under this section 5 as a result of a claim by a third party, and the indemnifying party(ies) fails, after notice and reasonable opportunity to proceed under section 5.2 of this Appendix 2, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying party(ies) contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

### **5.4 Amount Owing:**

If an indemnifying party(ies) is obligated to indemnify and hold any Indemnified Person harmless under this section 5, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

### **5.5 Limitation on Damages:**

Except as otherwise provided in this section 5, the liability of a party(ies) under this Appendix 2 shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any party(ies) or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another party, whether in tort, contract or other basis in law or equity for any special, indirect punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 5.5 are without regard to the cause or causes related thereto, including the negligence of any party(ies), whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any party's rights to obtain equitable relief as otherwise provided in this Appendix 2. The provisions of this section 5.5 shall survive the termination or expiration of this NUCRA.

### **5.6 Limited Liability in Emergency Conditions:**

Except as otherwise provided in the Tariff or the Operating Agreement, no party shall be liable to any other party for any action that it takes in responding to an Emergency Condition, so long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or of the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Project Developer shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.

## **6 Breach, Cure and Default**

### **6.1 Breach:**

A Breach of the NUCRA shall include, but not be limited to:

- (a) The failure to pay any amount when due;

(b) The failure to comply with any material term or condition of this NUCRA including but not limited to any material breach of a representation, warranty or covenant (other than in sections 6.1(a) and (c)-(d) hereof) made in this Appendix 2;

(c) Assignment of the NUCRA in a manner inconsistent with the terms of this Appendix 2; or

(d) Failure of any party to provide information or data required to be provided to another party under this Appendix 2 for such other party to satisfy its obligations under this NUCRA.

## **6.2 Notice of Breach:**

A party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Project Developer, Transmission Provider agrees to provide notice of such Breach and in the same manner as its notice to Project Developer, to any Project Finance Entity provided that the Project Developer has provided the notifying party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 12 of this Appendix 2.

## **6.3 Cure and Default:**

A party that commits a Breach and does not take steps to cure the Breach pursuant to this section 6.3 is automatically in Default of this Appendix 2 and of the NUCRA without further notice from the non-Breaching Parties.

## **6.4 Cure of Breach:**

**6.4.1** Except for the event of Breach set forth in section 6.1(a) above, the Breaching Party (a) may cure the Breach within 30 days of the time the non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the parties to the NUCRA. Such agreement shall not be unreasonably withheld.

**6.4.2** In an event of Breach set forth in section 6.1(a), the Breaching Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Party is a Project Developer, and the Project Developer fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use the Security provided by the Project Developer as set forth in section 7.0 of this NUCRA. Upon drawing on such Security, Project Developer shall automatically be deemed in default of this NUCRA.



## **6.5 Right to Compel Performance:**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting party(ies) shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 11 of this Appendix 2, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **7 Termination**

### **7.1 Termination of the NUCRA:**

This NUCRA may be terminated by the following means:

#### **7.1.1 By Mutual Consent:**

This NUCRA may be terminated as of the date on which the parties mutually agree to terminate this NUCRA.

#### **7.1.2 By All Project Developers:**

Subject to payment of Cancellation Costs and of all other unpaid Costs, all Project Developers that are parties to this NUCRA may at the same time unilaterally terminate the NUCRA pursuant to Applicable Laws and Regulations upon providing Transmission Provider sixty days prior written notice thereof. Termination under this section must be performed in parallel with the termination provisions of the applicable GIA, Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party. Project Developers' terminating under this section forfeit Security provided related to the applicable GIA, Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party.

#### **7.1.3 Notification of Final Payment:**

This NUCRA shall terminate upon the date Transmission Provider receives written notice, in a form acceptable to the Transmission Provider from the Transmission Owner that Transmission Owner has received final payment of all Costs for the Common Use Upgrades shown on Schedule A.

### **7.2 Upon Default by Project Developer:**

#### **7.2.1 Consequences of Default by Project Developer:**

If one or more, but not all, Project Developers that are parties to this NUCRA are in Default, such Project Developers shall remain liable for any portion of their cost responsibility for the Costs of

the Common Use Upgrades, and Cancellation Costs, in accordance with Schedule B of this NUCRA. Transmission Provider shall draw on and apply such defaulting Project Developer's Security to any amount under this NUCRA not paid by that Project Developer. Upon drawing on such Security, Project Developer is automatically in default of this NUCRA, and Project Developer's GIA and Construction Service Agreement; and all such agreements shall be deemed terminated and withdrawn, and Project Developer's project shall be removed from the relevant Cycle.

### **7.2.2 Reallocation of Costs upon Default by Project Developer:**

If a defaulting Project Developer cannot pay its amount due after exhausting all available Security, the unpaid costs shall be reallocated to the remaining Project Developers in proportion to the cost responsibility percentages set forth in Schedule B. A remaining Project Developer shall be entitled to exercise such other rights and remedies as it may have in equity or at law against the defaulting Project Developer that caused the reallocation of Costs under this section.

### **7.3 Survival of Rights:**

The obligations of the parties to this NUCRA with respect to payments, Cancellation Costs, warranties, liability and indemnification shall survive termination to the extent necessary to provide for the determination and enforcement of said obligations arising from acts or events that occurred while the NUCRA was in effect. In addition, applicable provisions of this NUCRA will continue in effect after expiration, cancellation or termination to the extent necessary to provide for final billings, payments, and billing adjustments.

## **8 Force Majeure**

### **8.1 Notice:**

A party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify each other party in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **8.2 Duration of Force Majeure:**

A party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

The party affected has a continuing notice obligation to the other parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The affected party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such party shall resume performance and give prompt written notice thereof to the other parties.

### **8.3 Obligation to Make Payments:**

Any party's obligation to make payments pursuant to applicable GIA, Construction Service Agreement, this NUCRA, or other relevant NUCRAs to which the Project Developer is a party shall not be suspended by Force Majeure.

### **8.4 Definition of Force Majeure:**

For the purposes of this section, shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a party's control that, in any of the foregoing cases, by exercise of due diligence, such party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected party.

## **9 Confidentiality**

The Confidentiality provisions of the applicable GIA Construction Service Agreement or other relevant NUCRAs to which the Project Developer is a party are incorporated by reference and shall apply to this NUCRA.

## **10 Information Access and Audit Rights**

### **10.1 Information Access:**

Subject to Applicable Laws and Regulations, each party to this NUCRA shall make available to each other party information necessary (i) to verify the costs incurred by the other party for which the requesting party is responsible under this Appendix 2, and (ii) to carry out obligations and responsibilities under this Appendix 2. The parties shall not use such information for purposes other than those set forth in this section and to enforce their rights under this Appendix 2.

## **10.2 Reporting of Non-Force Majeure Events:**

Each party to this NUCRA shall notify each other party when it becomes aware of its inability to comply with the provisions of this Appendix 2 for a reason other than an event of force majeure as defined in section 8 of this Appendix 2. The parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section shall not entitle the receiving party to allege a cause of action for anticipatory breach of this Appendix 2.

## **10.3 Audit Rights:**

Subject to the requirements of confidentiality under section 9 of this Appendix 2, each party to this NUCRA shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent party, to audit at its own expense the other party's accounts and records pertaining to such party's performance and/or satisfaction of obligations arising under this NUCRA. Any audit authorized by this section shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Appendix 2. Any request for audit shall be presented to the other party not later than 24 months after the event as to which the audit is sought. Each party shall preserve all records held by it for the duration of the audit period.

## **11 Disputes**

### **11.1 Submission:**

Any claim or dispute that any party to this NUCRA may have against another party arising out of this Appendix 2 may be submitted for resolution in accordance with the dispute resolution provisions of Tariff, Part I, section 12.

### **11.2 Rights Under The Federal Power Act:**

Nothing in this section shall restrict the rights of any party to file a complaint with FERC under relevant provisions of the Federal Power Act.

### **11.3 Equitable Remedies:**

Nothing in this section shall prevent any party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations.

## **12 Notices**

### **12.1 General:**

Any notice, demand or request required or permitted to be given by any party to this NUCRA to another and any instrument required or permitted to be tendered or delivered by any party, in writing to another shall be provided electronically or may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the party, or personally delivered to the party, at the electronic or other address specified in the NUCRA.

### **12.2 Operational Contacts:**

Each party shall designate, and shall provide to each other party contact information concerning, a representative to be responsible for addressing and resolving operational issues as they arise during the term of the NUCRA.

## **13 Miscellaneous**

### **13.1 Regulatory Filing:**

In the event that this NUCRA contains any terms that deviate materially from the form included in Tariff, Part IX or from the standard terms and conditions in this Appendix 2, the Transmission Provider shall file the executed NUCRA on behalf of itself with FERC as a service schedule under the Tariff. Project Developer may request that any information so provided be subject to the confidentiality provisions of section 9 of this Appendix 2. A Project Developer shall have the right, with respect to any NUCRA tendered to it, to request in writing (a) dispute resolution under section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (b) that Transmission Provider file the agreement unexecuted with FERC. With the filing of any unexecuted NUCRA, Transmission Provider may, in its discretion, propose to FERC a resolution of any or all of the issues in dispute between any parties to this NUCRA.

### **13.2 Waiver:**

Any waiver at any time by any party of its rights with respect to a Breach or Default under this Appendix 2, or with respect to any other matters arising in connection with this Appendix 2, shall not be deemed a waiver or continuing waiver with respect to any other Breach or Default or other matter.

### **13.3 Amendments and Rights Under the Federal Power Act:**

This NUCRA may be amended or supplemented only by a written instrument duly executed by all parties to this NUCRA. An amendment to the NUCRA shall become effective and a part of this NUCRA upon satisfaction of all Applicable Laws and Regulations. Notwithstanding the foregoing, nothing contained in this NUCRA shall be construed as affecting in any way any of the

rights of any party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this NUCRA and every appendix referred to therein shall be amended, as mutually agreed by the parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

#### **13.4 Binding Effect:**

This NUCRA, including this Appendix 2, and the rights and obligations thereunder shall be binding upon, and shall inure to the benefit of, the successors and assigns of the parties.

#### **13.5 Regulatory Requirements:**

Each party's performance of any obligation under this NUCRA for which such party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving party, or the party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

### **14 Representations and Warranties**

#### **14.1 General:**

Each party to this NUCRA hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the party during the time the NUCRA is effective:

##### **14.1.1 Good Standing:**

Such party is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated and operates as stated in the NUCRA.

##### **14.1.2 Authority:**

Such party has the right, power and authority to enter into the NUCRA, to become a party hereto and to perform its obligations hereunder. The NUCRA is a legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **14.1.3 No Conflict:**

The execution, delivery and performance of the NUCRA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of the party, or with any judgment, license, permit, order, material agreement or instrument applicable to or binding upon the party or any of its assets.

#### **14.1.4 Consent and Approval:**

Such party has sought or obtained, or, in accordance with the NUCRA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of the NUCRA and it will provide to any Governmental Authority notice of any actions under this Appendix 2 that are required by Applicable Laws and Regulations.

**SCHEDULE A**  
**COMMON USE UPGRADES**



**SCHEDULE B**

**COST RESPONSIBILITY**

**[provide as a percentage of estimated cost per Common Use Upgrade]**

## **SCHEDULE C**

### **NON-STANDARD TERMS AND CONDITIONS**

**[add provisions agreed to by the parties and accepted by FERC]**

**Tariff, Part IX, Subpart I**

**FORM OF  
SURPLUS INTERCONNECTION SERVICE STUDY AGREEMENT**

**Form of  
Surplus Interconnection Study Agreement**  
(Project Identifier #\_\_\_)

**RECITALS**

1. This Surplus Interconnection Study Agreement (the “Agreement”), dated as of \_\_\_\_\_, is entered into, by and between \_\_\_\_\_ (“Surplus Project Developer”) and PJM Interconnection, L.L.C. (“Transmission Provider”) (individually referred to as a “Party,” or collectively referred to as the “Parties”) pursuant to the Generation Interconnection Procedures (“GIP”) set forth in PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part {[instruction: {use Part VII if this is a transition period Agreement subject to Tariff, Part VII} {use Part VIII if this a new rules Agreement subject to Part VIII}]}. Capitalized terms used in this agreement, unless otherwise indicated, shall have the meanings ascribed to them in the Tariff.
2. By submitting this Agreement and complying with the GIP, the Surplus Project Developer has submitted a Surplus Interconnection Request. In accordance with Tariff, Part VIII, Subpart E, section 414, the Surplus Project Developer has also submitted with this Agreement the applicable required deposit to the Transmission Provider.
3. By submitting this Agreement to the Transmission Provider, the Surplus Project Developer requests to utilize Surplus Interconnection Service on the Transmission System of an existing Generating Facility with the following specifications:
  - a. Identification of the specific, existing Generating Facility already interconnected to the PJM Transmission System providing Surplus Interconnection Service, including whether the Surplus Project Developer requesting Surplus Interconnection Service is the owner or affiliate of the existing Generating Facility, and details regarding the existing Generating Facility’s current Generator Interconnection Agreement or Interconnection Service Agreement (“Service Agreement”).

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If the Surplus Project Developer is an unaffiliated third party, the Surplus Project Developer must submit with this Agreement the following information and documentation acceptable to the Transmission Provider:

- i. Name and address of the current owner of the existing Generating Facility, including details specific to the existing Generating Facility’s most current Service Agreement, including the Service Agreement Number:
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- ii. Written evidence from the owner of the existing Generating Facility granting Surplus Project Developer permission to utilize the existing Generating Facility's unused portion of Interconnection Service established in the existing Generating Facility's Service Agreement; and
  - iii. Written documentation stating that the owner of the surplus generating unit and the owner of the existing Generating Facility will have entered into, prior to the owner of the existing Generating Facility executing a revised Generator Interconnection Agreement, a shared facilities agreement between the owner of the existing Generating Facility and the owner of the surplus generating unit detailing their respective roles and responsibilities relative to the Surplus Interconnection Service.
- b. Evidence of ownership interest in, or right to acquire or control, the surplus generating unit for a minimum of three years, such as a deed, option agreement, lease or other similar document acceptable to the Transmission Provider. Include both a written description of the evidence to be relied upon and attach a Word or PDF version copy thereof.
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- c. Location of proposed surplus generating unit site or existing surplus generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the surplus generating unit site):
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- d. The megawatt size of the proposed surplus generating unit or the amount of increase in megawatt capability of an existing surplus generating unit.
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- 
- e. Identify the fuel type of the surplus generating unit or upgrade thereto:
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- f. A PDF format attachment of the site plan/single line diagram together with a description of the equipment configuration, including a set of preliminary electrical design specifications, and if the surplus generating unit is a wind generation facility, then also submit a set of preliminary electrical design specifications depicting the wind generation facility as a single equivalent generator:

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- g. Planned date the new surplus generating unit (or increase in megawatt capability of an existing surplus generating unit) will be in service:

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- h. Other related information, including for example, but not limited to, identifying: all of Surplus Project Developer's prior Interconnection Requests or Surplus Interconnection Requests; and stating whether the Surplus Project Developer has submitted a previous Surplus Interconnection Request for this particular project:

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- i. Describe the circumstances under which Surplus Interconnection Service will be available at the existing Point of Interconnection:

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- j. If any Energy Storage Resource, the primary frequency response operating range for a surplus generating unit:

Minimum State of Charge: \_\_\_\_\_; and

Maximum State of Charge: \_\_\_\_\_.

#### **PURPOSE OF THE SURPLUS INTERCONNECTION STUDY**

4. Consistent with the GIP, the Transmission Provider shall conduct a Surplus Interconnection Study to provide the Surplus Project Developer with a determination of whether the surplus generating unit is eligible for Surplus Interconnection Service. In the event that the Transmission Provider is unable to complete the Surplus Interconnection

Study within the timeframe prescribed in the GIP, the Transmission Provider shall notify the Surplus Project Developer and explain the reasons for the delay.

5. The Surplus Interconnection Study conducted hereunder will provide only a sensitivity analysis based on the data specified by the Surplus Project Developer in its Surplus Interconnection Request. The Surplus Interconnection Study necessarily will employ various assumptions regarding the Surplus Interconnection Request, other pending New Service Requests and PJM's Regional Transmission Expansion Plan at the time of the study. The Surplus Interconnection Study will not obligate the Transmission Provider or the Transmission Owner(s) to interconnect with the Surplus Project Developer or construct any facilities or upgrades.

### **CONFIDENTIALITY**

6. The Surplus Project Developer agrees to provide all information requested by the Transmission Provider necessary to complete the Surplus Interconnection Study. Subject to Paragraph 7 of this Agreement and to the extent required by the GIP, information provided pursuant to this Paragraph 6 shall be and remain confidential.
7. Until completion of the Surplus Interconnection Study, the Transmission Provider shall keep confidential all information provided to it by the Surplus Project Developer. Upon completion of the Surplus Interconnection Study and, to the extent required by Commission regulations, will be made publicly available upon request, except that the identity of the Surplus Project Developer shall remain confidential.
8. Surplus Project Developer acknowledges that, consistent with the Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the Surplus Interconnection Study process and that the Transmission Provider may disseminate information to the Transmission Owners.

### **COST RESPONSIBILITY**

9. The Surplus Project Developer shall reimburse the Transmission Provider for the actual cost of the Surplus Interconnection Study. The deposit paid by the Surplus Project Developer described in Paragraph 2 of this Agreement shall be applied toward the Surplus Project Developer's Surplus Interconnection Study cost responsibility. The Surplus Project Developer shall be responsible for and must pay all actual study costs. If at any time the Transmission Provider notifies the Surplus Project Developer of estimated additional study costs, the Surplus Project Developer must pay such estimated additional study costs within 20 Business Days of Transmission Provider sending the Surplus Project Developer notification of such estimated additional study costs. If the Surplus Project Developer fails to pay such estimated additional study costs within 20 Business Days of Transmission Provider sending the Surplus Project Developer notification of such estimated additional study costs, then the Surplus Interconnection Request shall be deemed to be terminated and withdrawn.

## **DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

10. In analyzing and preparing the Surplus Interconnection Study, the Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the Surplus Project Developer and possibly by third parties, including the owner of the existing Generating Facility, and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SURPLUS INTERCONNECTION STUDY. The Surplus Project Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the Surplus Interconnection Study prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of the Surplus Project Developer either at this point in time or in the future.
11. In no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission Provider's obligations under this Surplus Interconnection Study Agreement.

Without limitation of the foregoing, the Surplus Project Developer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any Surplus Interconnection Study shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty, Limitation of Liability."



## MISCELLANEOUS

12. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

**Transmission Provider**

PJM Interconnection, L.L.C.

2750 Monroe Blvd.

Audubon, PA 19403

interconnectionagreementnotices@pjm.com

**Surplus Project Developer**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
14. This Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties hereto. Parties acknowledge that, subsequent to execution of this agreement, errors may be corrected by replacing the page of the agreement containing the error with a corrected page, as agreed to and signed by the parties without modifying or altering the original date of execution or obligations contained therein.
15. This Agreement shall be binding upon the Parties hereto, their heirs, executors, administrators, successors, and assigns.
16. Neither this Agreement nor the Surplus Interconnection Study performed hereunder shall be construed as an application for service under Tariff, Part II or Tariff, Part III.
17. The provisions of the GIP that relate to Surplus Interconnection Service are incorporated herein and made a part hereof.
18. **Governing Law, Regulatory Authority, and Rules**

This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party

expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

**19. No Third-Party Beneficiaries**

Except as stated in Paragraph 11 of this Agreement, this Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

**20. Multiple Counterparts**

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all of which constitute one and the same instrument.

**21. No Partnership**

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

**22. Severability**

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

**23. Reservation of Rights**

The Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Surplus Project Developer Surplus Project Developer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered.

## **CERTIFICATION**

**By initialing the line next to each of the following required elements, Surplus Project Developer hereby certifies that it has submitted with this executed Agreement each of the required elements (if this Surplus Interconnection Request is being submitted electronically, each of the required elements must be submitted electronically as individual PDF files, together with an electronic PDF copy of this signed Agreement):**

- \_\_\_\_\_ Specification of the location of the proposed surplus generating unit site or existing surplus generating unit (including both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the surplus generating unit site)**
- \_\_\_\_\_ If the Surplus Project Developer is an unaffiliated third party, the information and evidence set forth in Paragraph 3(a)(i) – (iii) of this Agreement**
  - Evidence of an ownership interest in, or right to acquire or control the surplus generating unit site**
- \_\_\_\_\_ The megawatt size of the proposed surplus generating unit or the amount of increase in megawatt capability of an existing surplus generating unit**
- \_\_\_\_\_ Identification of the fuel type of the proposed surplus generating unit**
- \_\_\_\_\_ Description of the equipment configuration and a set of preliminary electrical design specifications, and, if the surplus generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator**
- \_\_\_\_\_ The planned date that the proposed surplus generating unit (or increase in megawatt capability of an existing surplus generating unit) will be in service**
- \_\_\_\_\_ All additional information prescribed by the Transmission Provider in the PJM Manuals**
- \_\_\_\_\_ The full amount of the required deposit**

IN WITNESS WHEREOF, the Transmission Provider and the Surplus Project Developer have caused this Agreement to be executed by their respective authorized officials.

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date  
  
\_\_\_\_\_  
Printed Name

**Surplus Project Developer: [Name of Party]**

By: \_\_\_\_\_  
Name Title Date  
  
\_\_\_\_\_  
Printed Name

**Tariff, Part IX, Subpart J**

**FORM OF  
CONSTRUCTION SERVICE AGREEMENT**

Service Agreement No. [   ]

(Project Identifier #\_\_\_\_)

**CONSTRUCTION SERVICE AGREEMENT**

**By and Among**

**PJM Interconnection, L.L.C.**

**And**

**[Name of Project Developer, Eligible Customer, or Affected System Customer]**

**And**

**[Name of Transmission Owner]**

**CONSTRUCTION SERVICE AGREEMENT**

**By and Among**

**PJM Interconnection, L.L.C.**

**And**

**[Name of Project Developer, Eligible Customer, or Affected System Customer]**

**And**

**[Name of Transmission Owner]**

(Project Identifier #\_\_\_\_)

This Construction Service Agreement, including the Appendices attached hereto and incorporated herein (collectively, “CSA”) is made and entered into as of the Effective Date (as defined in the attached Appendix III) by and among PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”), \_\_\_\_\_ (“Developer Party” [OPTIONAL: or “[short name]”]) and \_\_\_\_\_ (“Transmission Owner” [OPTIONAL: or “[short name]”]). Transmission Provider, Developer Party and Transmission Owner are referred to herein individually as “Party” and collectively as “the Parties.” Developer Party is a {instruction: select [Project Developer, Eligible Customer or Affected System Customer] as defined in in this GIP. For purposes of this Upgrade CSA, For purposes of the Agreement, the terms “Generation Interconnection Procedures” or “GIP” will refer to the interconnection procedures set forth in {Instructions: use Tariff, Part VII if this is a transition period agreement, or use Tariff, Part VIII if this is a post-transition period agreement}}.

**WITNESSETH**

WHEREAS, Developer Party (1) has requested Long-Term Firm Point-To-Point Transmission Service or Network Integration Transmission Service (“Transmission Service”) from Transmission Provider pursuant to Transmission Provider’s Open Access Transmission Tariff (the “PJM Tariff”); (2) is an Affected System Customer that requires Network Upgrades; or (3) is a Project Developer that requires Network Upgrades to the system of a Transmission Owner with which its Generation Facility or Merchant Transmission Facility does not directly interconnect;

WHEREAS, pursuant to Developer Party’s Completed Application, Affected System Customers Facility Study or Interconnection Request, Transmission Provider has conducted the required studies to determine whether such requests can be accommodated, and if so, under what terms and conditions, including the identification of any Network Upgrades that must be constructed in order to provide the service or rights requested by Developer Party;

WHEREAS, Transmission Provider’s studies have identified the Network Upgrades described in Appendix I of this CSA as necessary to provide Developer Party the service or rights it has requested; and

WHEREAS, Developer Party: (i) desires that Transmission Owner construct the required Network Upgrades; and (ii) agrees to assume cost responsibility for the design, engineering, procurement and construction of such Network Upgrades in accordance with the PJM Tariff.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, together with other good and valuable consideration, the receipt and sufficiency is hereby mutually acknowledged by each Party, the Parties mutually covenant and agree as follows:

## **Article 1 – Definitions and Other Documents**

### **1.0 Defined Terms.**

All capitalized terms used in this CSA shall have the meanings ascribed to them in the GIP or in definitions either in the body of this CSA or its attached appendices. In the event of any conflict between defined terms set forth in the PJM Tariff or defined terms in this CSA, such conflict will be resolved in favor of the terms as defined in this CSA. Any provision of the PJM Tariff relating to this CSA that uses any such defined term shall be construed using the definition given to such defined term in this CSA.

### **1.1 Incorporation of Other Documents.**

Subject to the provisions of section 1.0 above, all portions of the PJM Tariff and the Operating Agreement as of the date of this CSA, and as pertinent to the subject of this CSA, are hereby incorporated herein and made a part hereof.

## **Article 2 – Responsibility for Network Upgrades**

### **2.0 Developer Party Financial Responsibilities.**

Developer Party shall pay all Costs for the design, engineering, procurement and construction of the Network Upgrades identified in Appendix I to this CSA. An estimate of such Costs is provided in Appendix I to this CSA.

### **2.1 Obligation to Provide Security.**

Unless Security is provided pursuant to a Generation Interconnection Agreement Developer Party shall provide Security to collateralize Developer Party's obligation to pay the Costs incurred by Transmission Owner to construct the Network Upgrades identified in Appendix I to this CSA, less any Costs already paid by Developer Party, in accordance with the GIP. Developer Party shall deliver such Security to Transmission Provider prior to the Effective Date of this CSA, as described in Appendix III. Unless otherwise specified by the Transmission Provider, such Security shall take the form of a letter of credit, in the amount of \$\_\_\_\_\_ naming the Transmission Provider and Transmission Owner as beneficiaries.

### **2.2 Failure to Provide Security.**



If the Developer Party fails to provide Security in the amount, in the time or in the form required by section 2.1, then this CSA shall terminate immediately and the Developer Party's Completed Application or Interconnection Request shall be deemed terminated and withdrawn.

### **2.3 Costs.**

In accordance with the GIP, the Developer Party shall pay for the Network Upgrades identified in Appendix I to this CSA based upon the Costs of the Network Upgrades described in Appendix I. The Developer Party's obligation to pay the Costs for the Network Upgrades identified in Appendix I to this CSA, whether greater or lesser than the amount of the Security specified in section 2.1, will continue regardless of whether the Developer Party takes Transmission Service pursuant to the terms of the Transmission Service Agreement as defined in section 3.0 of this CSA, if applicable.

### **2.4 Transmission Owner Responsibilities.**

If the Developer Party satisfies all requirements of this Article 2 and applicable requirements set forth in the PJM Tariff, Transmission Owner shall use Reasonable Efforts to construct or cause to be constructed the Network Upgrades, identified in Appendix I to this CSA, on its transmission system. Transmission Owner shall own the Network Upgrades it has, or has arranged to have, constructed and shall have ongoing responsibility to maintain such Network Upgrades consistent with the Operating Agreement and the Transmission Owner's Agreement.

## **Article 3 – Rights to Transmission Service**

### **3.0 No Transmission Service.**

This CSA does not entitle the Developer Party to take Transmission Service under the PJM Tariff. Transmission Provider shall provide Transmission Service to Developer Party pursuant to a separate service agreement by and between Developer Party and Transmission Provider dated as of the same effective date as this CSA (the "Transmission Service Agreement"), if applicable.

## **Article 4 – Early Termination**

### **4.0 Termination by Developer Party.**

Subject to the terms of section 14 of Appendix III, Developer Party may terminate this CSA at any time by providing written notice of termination to Transmission Provider and Transmission Owner. Developer Party's notice of termination shall become effective sixty calendar days after either the Transmission Provider or Transmission Owner receives such notice.

## **Article 5 – Miscellaneous**

### **5.0 Notices.**

Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another

may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

**Transmission Provider:**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

**Developer Party:**

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**Transmission Owner:**

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**5.1 Waiver.**

No waiver by any Party of one or more Defaults by another in performance of any of the provisions of this CSA shall operate or be construed as a waiver of any other or further Default or Defaults, whether of a like or different character.

**5.2 Amendment.**

This CSA or any part thereof, may not be amended, modified or waived other than by a writing signed by all Parties.

**5.3 No Partnership.**

Notwithstanding any provision of this CSA, the Parties do not intend to create hereby any joint venture, partnership, association taxable as a corporation, or other entity for the conduct of any business for profit.

**5.4 Counterparts.**

This CSA may be executed in multiple counterparts to be construed as one effective as of the Effective Date.

**5.5 Addendum of Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status.**

To the extent required, in accordance with section 4.0 to Appendix III to this CSA, Schedule E to this CSA shall set forth the Interconnection Customer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

**5.6 Addendum of Non-Standard Terms and Conditions for Construction Service.**

Subject to FERC approval, the parties agree that the terms and conditions set forth in the attached Schedule F are hereby incorporated by reference, and made a part of, this CSA. In the event of any conflict between a provision of Schedule F that FERC has accepted and any provision of the standard terms and conditions set forth in Appendix III to this CSA that relates to the same subject matter, the pertinent provision of Schedule F shall control.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this CSA to be executed by their respective authorized officials.

(Project Identifier # \_\_\_\_\_)

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Developer Party: [Name of Developer Party]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

**Transmission Owner: [Name of Transmission Owner]**

By: \_\_\_\_\_  
Name Title Date

Printed name of signer: \_\_\_\_\_

## **APPENDIX I**

### **SCOPE AND SCHEDULE OF WORK FOR NETWORK UPGRADES TO BE BUILT BY TRANSMISSION OWNER**

#### **A. Scope of Work**

Transmission Owner hereby agrees to provide the following Network Upgrades pursuant to the terms of this CSA:

[Identify Network Upgrades to be constructed]

#### **B. Schedule of Work**

[Add schedule for construction work to be completed]

#### **C. Costs**

Developer Party shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with section 9.0 of Appendix III to this CSA.

Network Upgrades Charge: \$\_\_\_\_\_

[Add additional sections to list: any Contingencies, Applicable Technical Requirements, and Estimate of Tax Gross-ups, as required pursuant to Appendix III]

#### **D. Construction of Network Upgrades**

[include 1 through 3 below only for Project Developers or Affected System Customers]

1. The Network Upgrades regarding which Transmission Owner shall be the Constructing Entity are described on the attached Appendix I, section A to this CSA.

2. Election of Construction Option. Specify below whether the Constructing Entities have mutually agreed to construction of the Network Upgrades that will be built by the Transmission Owner pursuant to the Standard Option or the Negotiated Contract Option. (See sections 6.1 and 6.1.1 of Appendix III to this CSA.)

\_\_\_\_\_ Standard Option.

\_\_\_\_\_ Negotiated Contract Option.

If the parties have mutually agreed to use the Negotiated Contract Option, the permitted, negotiated terms on which they have agreed and which are not already set forth as part of the Scope of Work and/or Schedule of Work attached to this CSA, respectively, shall be as

set forth in Schedule A attached to this CSA. The Negotiated Option can only be used in connection with a Network Upgrade subject to the Network Upgrade Cost Responsibility Agreement all Project Developers and the relevant Transmission Owner agree.

3. Specify whether Developer Party has exercised the Option to Build in accordance with respect to some or all of the Stand Alone Network Upgrades:

\_\_\_\_\_ Yes

\_\_\_\_\_ No

If Yes is indicated, Developer Party shall build, in accordance with and subject to the conditions and limitations set forth in section 6.2.3 of Appendix III to this CSA, those portions of the Stand Alone Network Upgrades described below:

**[The following section applies only to Eligible Customers]**

Specify whether Developer Party has exercised the Option to Build with respect to some or all of the Stand Alone Network Upgrades:

\_\_\_\_\_ Yes

\_\_\_\_\_ No

If Yes is indicated, Developer Party shall build, in accordance with and subject to the conditions and limitations set forth in section 6.2.3 of Appendix III to this CSA, those portions of the Stand Alone Network Upgrades described below:

## **APPENDIX II**

### **DEFINITIONS**

**From the Generation Interconnection Procedures accepted for filing by FERC as of the effective date of this agreement.**

**APPENDIX III**  
**GENERAL TERMS AND CONDITIONS**



## **1.0 Effective Date and Term**

### **1.1 Effective Date.**

Subject to regulatory acceptance, this CSA shall become effective on the date the agreement has been executed by all Parties, or if the agreement is filed with FERC unexecuted, upon the date specified by FERC. The Transmission Owner shall have no obligation to begin construction or preparation for construction of the Network Upgrades, identified in Appendix I to this CSA, until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with FERC; (ii) such agreement, if unexecuted and non-conforming, has been filed with and accepted by FERC; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

### **1.2 Term.**

This CSA shall continue in full force and effect from the Effective Date until the termination hereof.

### **1.3 Survival.**

This CSA shall continue in effect after termination to the extent necessary to provide for final billings and payments, including billings and payments pursuant to this CSA, and to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this CSA was in effect.

## **2.0 Facilitation by Transmission Provider**

Transmission Provider shall keep itself apprised of the status of the Transmission Owner's construction-related activities and, upon request of Developer Party or Transmission Owner, Transmission Provider shall meet with the Developer Party and Transmission Owner separately or together to assist them in resolving issues between them regarding their respective activities, rights and obligations under this CSA. Transmission Owner shall cooperate in good faith with the other Parties in Transmission Provider's efforts to facilitate resolution of disputes.

### **3.0 Construction Obligations.**

### **3.1 Network Upgrades.**

#### **3.1.1 Generally.**

All Network Upgrades identified in Appendix I to this CSA shall be designed, engineered, procured, installed and constructed in accordance with this section 3.0, Applicable Standards, Applicable Laws and Regulations, Good Utility Practice, the Facilities Study and the Scope of Work under this CSA.

### **3.2 Scope of Applicable Technical Requirements and Standards.**

Applicable technical requirements and standards shall apply to the design, engineering, procurement, construction and installation of the Network Upgrades identified in Appendix I to this CSA only to the extent that the provisions thereof relate to the design, engineering, procurement, construction and/or installation of such Network Upgrades. Such provisions relating to the design, engineering, procurement, construction and/or installation of such Network Upgrades shall be contained in Appendix I appended to this CSA. The Parties shall mutually agree upon, or in the absence of such agreement, Transmission Provider shall determine, which provisions of the applicable technical requirements and standards should be appended to this CSA. In the event of any conflict between the provisions of the applicable technical requirements and standards that are appended to this CSA and any later-modified provisions that are stated in the pertinent PJM Manuals, the provisions appended to this CSA shall control.

## **4.0 Tax Liability**

### **4.1 Safe Harbor Provisions.**

Provided that Developer Party agrees to conform to all requirements of the Internal Revenue Service (“IRS”) (e.g., the “safe harbor” section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016)) that would confer nontaxable status on some or all of the transfer of property, including money, by Developer Party to the Transmission Owner for payment of the Costs of construction of the Network Upgrades, the Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in section 4.4.2 below, shall not include income taxes in the Costs of Network Upgrades that are payable by Developer Party under the Generation Interconnection Agreement or this Agreement. Developer Party shall document its agreement to conform to IRS requirements for such non-taxable status in the Generation Interconnection Agreement or this Agreement.

### **4.2 Tax Indemnity.**

Developer Party shall indemnify the Transmission Owner for any costs that Transmission Owner incurs in the event that the IRS and/or a state department of revenue (“State”) determines that the property, including money, transferred by Developer Party to the Transmission Owner with respect to the construction of the Network Upgrades is taxable income to the Transmission Owner. Developer Party shall pay to the Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Transmission Owner. In the event that the Transmission Owner chooses to contest such assessment, either at the request of Developer Party or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Transmission Owner shall refund to Developer Party the excess of its demand payment made to the Transmission Owner over the amount of the tax, interest and penalty for which the Transmission Owner is finally determined to be liable. Developer Party’s tax indemnification obligation under this section shall survive any termination of the Generation Interconnection Agreement or this Agreement.

### **4.3 Taxes Other Than Income Taxes.**

Upon the timely request by Developer Party, and at Developer Party’s sole expense, the Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Transmission Owner for which Developer Party may be required to reimburse Transmission Provider under the terms of this Appendix 2 or the GIP. Developer Party shall pay to the Transmission Owner on a periodic basis, as invoiced by the Transmission Owner, the Transmission Owner’s documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Developer Party and the Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Developer Party to the Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In

the event that a tax payment is withheld and ultimately due and payable after appeal, Developer Party will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Transmission Owner.

#### **4.4 Income Tax Gross-Up.**

##### **4.4.1 Additional Security.**

In the event that Developer Party does not provide the safe harbor documentation required under section 4.1 prior to execution of the Generation Interconnection Agreement or this Agreement, within the later of 15 days after execution of the Generation Interconnection Agreement or this Agreement, Transmission Provider shall notify Developer Party in writing of the amount of additional Security that Developer Party must provide. The amount of Security that a Transmission Developer Party must provide initially pursuant to the Generation Interconnection Agreement or this Agreement shall include any amounts described as additional Security under this section 4.4 regarding income tax gross-up.

##### **4.4.2 Amount.**

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of any Network Upgrades for which Developer Party previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the total Security provided to the amount that would be sufficient to permit the Transmission Owner to receive and retain, after the payment of all applicable income taxes (“Current Taxes”) and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the “Present Value Depreciation Amount”), an amount equal to the estimated Costs of the Network Upgrades for which Developer Party is responsible under the Generation Interconnection Agreement or this Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the “Current Tax Rate”); and the Present Value Depreciation Amount shall be computed by discounting the Transmission Owner’s anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

##### **4.4.3 Time for Payment.**

Developer Party must provide the additional Security, in a form and with terms as required by the GIP, within 15 days after its receipt of Transmission Provider’s notice under this section.

#### **4.5 Tax Status.**

Each Party shall cooperate with the other to maintain the other Party’s tax status. Nothing in the Generation Interconnection Agreement, this Agreement or the GIP is intended to adversely affect any Transmission Owner’s tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **5.0 Safety**

### **5.1 General.**

Transmission Owner shall perform all work hereunder in accordance with Good Utility Practice, Applicable Standards and Applicable Laws and Regulations pertaining to the safety of persons or property.

### **5.2 Environmental Releases.**

Transmission Owner shall notify Transmission Provider and Developer Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the facility or the facilities, any of which may reasonably be expected to affect Transmission Provider or Developer Party. Transmission Owner shall: (i) provide the notice as soon as possible; (ii) make a good faith effort to provide the notice within 24 hours after it becomes aware of the occurrence; and (iii) promptly furnish to Transmission Provider and Developer Party copies of any publicly available reports filed with any governmental agencies addressing such events.

## **6.0 Schedule of Work**

### **6.1 Standard Option.**

The Transmission Owner shall use Reasonable Efforts to design, engineer, procure, construct and install the Network Upgrades, identified in Appendix I to this CSA, in accordance with the Schedule and Scope of Work.

#### **6.1.1 Negotiated Contract Option.**

Consistent with Appendix 1, section D.2 (negotiated contract option), as an alternative to the Standard Option set forth in section 6.1 of this Appendix III, the Transmission Owner and the Developer Party may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Network Upgrades. Under the Negotiated Contract Option, the Affected System Customer and the Transmission Owner may agree to terms different from those included in the Standard Option of section 6.1 above and the corresponding standard terms set forth in the applicable provisions of Part VI of the Tariff and this Appendix III. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Affected System Customer and the Transmission Owner that are parties to this CSA; no other Developer Party's responsibility for Costs may be affected (section 217 of the Tariff). No other terms of the Tariff or this Appendix III shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option shall be stated in full in an appendix to this CSA.

### **6.2 Option to Build.**

#### **6.2.1 Option.**

Developer Party shall have the option, ("Option to Build"), to design, procure, construct and install all or any portion of the Stand Alone Network Upgrades on the dates specified in Appendix I of this Agreement. Transmission Provider and Developer Party must agree as to what constitutes Stand Alone Network Upgrades in Schedule C of this Agreement. If the Transmission Provider and Developer Party disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Developer Party a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination. Transmission Provider and Developer Party must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Schedule C (Option to Build) of this Agreement. Except for Stand Alone Network Upgrades, Developer Party shall have no right to construct Network Upgrades under this option. Unless a Developer party is subject to a Generation Interconnection

Agreement, in order to exercise this Option to Build, the Developer Party must provide Transmission Provider and the Transmission Owner with written notice of its election to exercise the option no later than 30 days from the date the Developer Party receives the results of the Facility Study (or, if no Facilities Study was required completion of the System Impact Study). Developer Party may not elect Option to Build after such date. Developer Party shall indicate its election to exercise the option in this CSA.

### **6.2.2 General Conditions Applicable to Option.**

In addition to the other terms and conditions applicable to the construction of facilities under this Appendix III, the Option to Build is subject to the following conditions:

(a) If Developer Party assumes responsibility for the design, procurement and construction of Stand Alone Network Upgrades:

(i) Developer Party shall engineer, procure equipment, and construct Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Transmission Owner;

(ii) Developer Party's engineering, procurement and construction of Stand Alone Network Upgrades shall comply with all requirements of law to which Transmission Owner shall be subject in the engineering, procurement or construction of Stand Alone Network Upgrades;

(iii) Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Stand Alone Network Upgrades;

(iv) Prior to commencement of construction, Developer Party shall provide to Transmission Owner a schedule for construction of Stand Alone Network Upgrades and shall promptly respond to requests for information from Transmission Owner;

(v) At any time during construction, Transmission Owner shall have the right to gain unrestricted access to the Stand Alone Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Owner, Developer Party shall be obligated to remedy deficiencies in that portion of the Stand Alone Network Upgrades;

(vii) Developer Party shall indemnify Transmission Owner and Transmission Provider for claims arising from Developer Party's construction of Network Upgrades that are Direct Connection Network Upgrades under the terms and procedures applicable to this Appendix III, sections 12.1, 12.2, 12.3, and 12.4;



(viii) Developer Party shall transfer control of Network Upgrades that are Direct Connection Network Upgrades to Transmission Owner;

(ix) Unless Parties otherwise agree, Developer Party shall transfer ownership of Stand Alone Network Upgrades to Transmission Owner;

(x) Transmission Owner shall approve and accept for operation and maintenance for Stand Alone to the extent engineered, procured, and constructed in accordance with this Agreement, Appendix 2, section 3.2.3.2;

(xi) Developer Party shall deliver to Transmission Owner “as-built” drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Stand Alone Network Upgrades are built to the standards and specifications required by Transmission Owner; and

(xii) If Developer Party exercises the Option to Build, Developer Party shall pay Transmission Owner to execute the responsibilities enumerated to Transmission Owner under section 6.2.2. Transmission Owner shall invoice Developer Party for this total amount to be divided on a monthly basis pursuant to Appendix III, section 9.3.

(b) The Developer Party must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Stand Alone Network Upgrades that it is building, provided, however, that when the Transmission Owner’s assistance is required, the Transmission Owner shall assist the Developer Party in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(c) The Developer Party must obtain all necessary land rights for the construction and installation of the Stand Alone Network Upgrades that it is building, provided, however, that upon Developer Party’s reasonable request, the Transmission Owner shall assist the Developer Party in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(d) Notwithstanding anything stated herein, each Transmission Owner shall have the exclusive right and obligation to perform the line attachments (tie-in work), and to calibrate remote terminal units and relay settings, required for the interconnection to such Transmission Owner’s existing facilities of any Stand Alone Network Upgrades that the Developer Party builds; and

(e) The Stand Alone Network Upgrades built by the Developer Party shall be successfully inspected, tested and energized pursuant to sections 19 and 20 of this Appendix III.

### **6.2.3 Additional Conditions Regarding Network Facilities.**

To the extent that the Developer Party utilizes the Option to Build for design, procurement, construction and/or installation of Stand Alone Network Upgrades in existence or under construction by or on behalf of the Transmission Owner on the date that the Developer Party solicits bids under section 6.2.7 below, or Stand Alone Network Upgrades to be located on land or in right-of-way owned or controlled by the Transmission Owner, and in addition to the other terms and conditions applicable to the design, procurement, construction and/or installation of facilities under this Appendix III, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the Developer Party shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Transmission Owner's List of Approved Contractors;

(ii) The Transmission Owner shall have full site control of, and reasonable access to, its property at all times for purposes of tagging or operation, maintenance, repair or construction of modifications to, its existing facilities and/or for performing all tie-ins of Network Upgrades built by or for the Developer Party; and for acceptance testing of any equipment that will be owned and/or operated by the Transmission Owner;

(iii) The Transmission Owner shall have the right to have a reasonable number of appropriate representatives present for all work done on its property/facilities or regarding the Stand Alone Network Upgrades, and the right to stop, or to order corrective measures with respect to, any such work that reasonably could be expected to have an adverse effect on reliability, safety or security of persons or of property of the Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Transmission Owner shall consult with the Developer Party and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The Developer Party and its contractors, employees and agents shall comply with the Transmission Owner's safety, security and work rules, environmental guidelines and training requirements applicable to the area(s) where construction activity is occurring and shall provide all reasonably required documentation to the Transmission Owner, provided that the Transmission Owner previously has provided its safety, security and work rules and training requirements applicable to work on its facilities to Transmission Provider and the Developer Party within 20 business days after a request therefore made by Developer Party following its receipt of the Facilities Study;

(v) The Developer Party shall be responsible for controlling the performance of its contractors, employees and agents; and

(vi) All activities performed by or on behalf of the Developer Party pursuant to its exercise of the Option to Build shall be subject to compliance with Applicable Laws and Regulations, including those governing union staffing and bargaining unit obligations, and Applicable Standards.

#### **6.2.4 Administration of Conditions.**

To the extent that a Transmission Owner exercises any discretion in the application of any of the conditions stated in sections 6.2.2 and 6.2.3 of this Appendix III, it shall apply each such condition in a manner that is reasonable and not unduly discriminatory and it shall not unreasonably withhold, condition, or delay any approval or authorization that the Developer Party may require for the purpose of complying with any of those conditions.

#### **6.2.5 Approved Contractors.**

(a) Each Transmission Owner shall develop and shall provide to Transmission Provider a List of Approved Contractors. Each Transmission Owner shall include on its List of Approved Contractors no fewer than three contractors and no fewer than three manufacturers or vendors of major transmission-related equipment, unless a Transmission Owner demonstrates to Transmission Provider's reasonable satisfaction that it is feasible only to include a lesser number of construction contractors, or manufacturers or vendors, on its List of Approved Contractors. Transmission Provider shall publish each Transmission Owner's List of Approved Contractors in a PJM Manual and shall make such manual available on its internet website.

(b) Upon request of a Developer Party, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the Developer Party provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate contractor is qualified to design, or to install and/or construct new facilities or upgrades or modifications to existing facilities on the Transmission Owner's system, or (2) any manufacturer or vendor of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) regarding which the Developer Party provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate entity's major transmission-related equipment is acceptable for installation and use on the Transmission Owner's system. No Transmission Owner shall unreasonably withhold, condition, or delay its acceptance of a contractor, manufacturer, or vendor proposed for addition to its List of Approved Contractors.

#### **6.2.6 Construction by Multiple Developer Parties.**

In the event that there are multiple Developer Parties that wish to exercise an Option to Build with respect to facilities of the types described in section 6.2.3 to this Appendix III, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

#### **6.2.7 Option Procedures.**

(a) Within 10 days after executing this CSA or directing that this CSA be filed, Developer Party shall solicit bids from one or more Approved Contractors named on the Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design, construct and/or install, the Network Upgrades that the Developer Party seeks to build under the Option to Build on terms (i) that will meet the Developer Party's proposed schedule; (ii) that, if

the Developer Party seeks to have an Approved Contractor construct or install Stand Alone Network Upgrades, will satisfy all of the conditions on construction specified in sections 6.2.2 and 6.2.3 of this Appendix III; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities) under this CSA.

(b) Any additional costs arising from the bidding process or from the final bid of the successful Approved Contractor shall be the sole responsibility of the Developer Party.

(c) Upon receipt of a qualifying bid acceptable to it, the Developer Party shall contract with the Approved Contractor that submitted the qualifying bid. Such contract shall meet the standards stated in paragraph (a) of this section.

(d) In the absence of a qualifying bid acceptable to the Developer Party in response to its solicitation, the Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Network Upgrades in accordance with the Standard Option described in section 6.2.1 of this Appendix III.

#### **6.2.8 Developer Party Drawings.**

Developer Party shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Network Upgrades that Developer Party arranges to build under the Option to Build. The Transmission Owner and Transmission Provider shall review the drawings to assess the consistency of Developer Party's design of the pertinent Network Upgrades with Applicable Standards and the Facilities Study. After consulting with the Transmission Owner, Transmission Provider shall provide comments on such drawings to Developer Party within sixty days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

#### **6.2.9 Effect of Review.**

Transmission Owner's and Transmission Provider's reviews of Developer Party's initial drawings of the Network Upgrades that the Developer Party is building shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, Developer Party shall make such changes to the design of the pertinent Network Upgrades as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Network Upgrades that Developer Party is building meet Applicable Standards and conform with the Facilities Study.

#### **6.3 Revisions to Schedule and Scope of Work.**

The Schedule and Scope of Work shall be revised as required in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Transmission Provider and Transmission Owner, which agreement shall not be unreasonably withheld, conditioned or delayed.

## **7.0 Suspension of Work upon Default**

Upon the occurrence of a Default by Developer Party, the Transmission Provider or the Transmission Owner may, by written notice to Developer Party, suspend further work associated with the Network Upgrades, identified in Appendix I to this CSA, Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this section 7.0. In the event of a suspension by Transmission Provider or Transmission Owner, the Developer Party shall be responsible for the Costs incurred in connection with any suspension hereunder.

## **7.1 Notification and Correction of Defects.**

7.1.1 In the event that inspection and/or testing of any Network Upgrades, identified in Appendix I to this CSA, built by Transmission Owner identifies any defects or failures to comply with Applicable Standards in such Network Upgrades, then Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. If such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion. Such acceptance does not modify and shall not limit the Project Developer's indemnification obligations set forth in Tariff, Attachment P, Appendix 2, section 3.2.3(e).

## **8.0 Transmission Outages**

### **8.1 Outages; Coordination.**

The Transmission Provider and Transmission Owner acknowledge and agree that certain outages of transmission facilities owned by the Transmission Owner, as more specifically detailed in the Scope of Work, may be necessary in order to complete the process of constructing and installing the Network Upgrades identified in Appendix I to this CSA. The Transmission Provider and Transmission Owner further acknowledge and agree that any such outages shall be coordinated by and through Transmission Provider.

## **9.0 Security, Billing and Payments**

The following provisions shall apply with respect to charges for the Costs of the Transmission Owner for which the Developer Party is responsible.

### **9.1 Adjustments to Security.**

The Security provided by Developer Party at or before the Effective Date of this CSA shall be: (a) reduced as portions of the work on Network Upgrades, identified in Appendix I to this CSA, are completed; and/or (b) increased or decreased as required to reflect adjustments to Developer Party's cost responsibility, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals.

### **9.2 Invoice.**

Transmission Owner shall provide Transmission Provider a quarterly statement of its scheduled expenditures during the next three months for, as applicable, the design, engineering and construction of, and/or for other charges related to, construction of the Network Upgrades identified in Appendix I to this CSA, or (b) in the event that the Developer Party exercises the Option to Build, for the Interconnected Transmission Owner's oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Developer Party is complying with the Transmission Owner's standards and specifications for the construction of facilities) associated with the Developer Party's building Stand Alone Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Transmission Owner's oversight costs shall be consistent with Attachment GG, Appendix III, section 6.2.2(a)(12). If Developer Party exercises the Option to Build, Developer Party shall pay Transmission Owner costs associated with its responsibilities pursuant to section 6.2.1 and in accordance with the amount agreed to by the Transmission Owner and Developer Party pursuant to Appendix III, section 6.2.1(a)(12). Transmission Provider shall bill Developer Party, on behalf of Transmission Owner, for Transmission Owner's expected costs during the subsequent three months. Developer Party shall pay each bill within 20 days after receipt thereof. Upon receipt of each of Developer Party's payments of such bills, Transmission Provider shall reimburse the Transmission Owner. Developer Party may request that the Transmission Provider provide quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that section 9.3 of this Appendix III shall govern the timing of the final cost reconciliation upon completion of the work.

### **9.3 Final Invoice.**

Within 120 days after Transmission Owner completes construction and installation of the Network Upgrades under this CSA, Transmission Provider shall provide Developer Party with an accounting of, and the appropriate Party shall make any payment to the other that is necessary to resolve, any difference between: (a) Developer Party's responsibility under the Tariff for the Costs of the Network Upgrades identified in Appendix I to this CSA; and (b) Developer Party's previous

aggregate payments to Transmission Provider for the Costs of the facilities identified in Appendix I to this CSA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to the Developer Party or the Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Party owing the payment.

#### **9.4 Disputes.**

In the event of a billing dispute among the Transmission Provider, Transmission Owner, and Developer Party, Transmission Provider and the Transmission Owner shall continue to perform their respective obligations pursuant to this CSA so long as: (a) the Developer Party continues to make all payments not in dispute, and the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute; or (b) the Developer Party pays to Transmission Provider, or into an independent escrow account established by the Developer Party, the portion of the invoice in dispute, pending resolution of such dispute. If the Developer Party fails to meet any of these requirements, then Transmission Provider shall so inform the other Parties and Transmission Provider or the Transmission Owner may provide notice to Developer Party of a Breach pursuant to section 13 of this Appendix III.

#### **9.5 Interest.**

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

#### **9.6 No Waiver.**

Payment of an invoice shall not relieve Developer Party from any other responsibilities or obligations it has under this CSA, nor shall such payment constitute a waiver of any claims arising hereunder.



## **10.0 Assignment**

### **10.1 Assignment with Prior Consent.**

Subject to section 10.2 of this Appendix III, no Party shall assign its rights or delegate its duties, or any part of such rights or duties, under this CSA without the written consent of the other Parties, which consent shall not be unreasonably withheld, conditioned or delayed. Any such assignment or delegation made without such written consent shall be null and void.

In addition, the Transmission Owner shall be entitled, subject to Applicable Laws and Regulations, to assign this CSA to any Affiliate or successor of the Transmission Owner that owns and operates all or a substantial portion of such Transmission Owner's transmission facilities.

### **10.2 Assignment Without Prior Consent.**

#### **10.2.1 Assignment by Developer Party.**

Developer Party may assign this CSA without the Transmission Owner's or Transmission Provider's prior consent to any Affiliate or person that purchases or otherwise acquires, directly or indirectly, all or substantially all of the Developer Party's assets provided that, prior to the effective date of any such assignment, the assignee shall demonstrate that, as of the effective date of the assignment, the assignee has the technical competence and financial ability to comply with the requirements of this CSA and assumes in a writing provided to the Transmission Owner and Transmission Provider all rights, duties, and obligations of Developer Party arising under this CSA. However, any assignment described herein shall not relieve or discharge the Developer Party from any of its obligations hereunder absent the written consent of the Transmission Owner, such consent not to be unreasonably withheld, conditioned, or delayed.

#### **10.2.2 Assignment by Transmission Owner.**

Transmission Owner shall be entitled, subject to applicable laws and regulations, to assign this Upgrade CSA to an Affiliate or successor that owns and operates all or a substantial portion of Transmission Owner's transmission facilities.

#### **10.2.3 Assignment to Lenders.**

Developer Party may, without the consent of the Transmission Provider or the Transmission Owner, assign this CSA to any Project Finance Entity(ies), provided that such assignment shall not alter or diminish Developer Party's duties and obligations under this CSA. If Developer Party provides the Transmission Owner with notice of an assignment to any Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to Article 6 of this CSA, the Transmission Provider or Transmission Owner shall provide notice and reasonable opportunity for such entity(ies) to cure any Breach under this CSA in accordance with this CSA. Transmission Provider or Transmission Owner shall, if requested by such lenders, provide such customary and reasonable documents, including consents to assignment, as may be reasonably requested with respect to the assignment and status of this CSA,

provided that such documents do not alter or diminish the rights of the Transmission Provider or Transmission Owner under this CSA, except with respect to providing notice of Breach to a Project Finance Entity. Upon presentation of the Transmission Provider's and/or the Transmission Owner's invoice therefore, Developer Party shall pay the Transmission Provider and/or the Transmission Owner's reasonable documented cost of providing such documents and certificates. Any assignment described herein shall not relieve or discharge the Developer Party from any of its obligations hereunder absent the written consent of the Transmission Owner and Transmission Provider.

### **10.3 Successors and Assigns.**

This CSA and all of its provisions are binding upon, and inure to the benefit of, the Transmission Provider and Transmission Owner and their respective successors and permitted assigns.

## **11.0 Insurance**

### **11.1 Required Coverages.**

Constructing Entity shall maintain, at its own expense, insurance as described in paragraphs A through E below. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Network Upgrades, identified in Appendix I to this CSA, will be located. Failure to maintain required insurance shall be a Breach of this CSA.

A. Workers Compensation Insurance with statutory limits, as required by the State and/or jurisdiction in which the work is to be performed, and employer’s liability insurance with limits of not less than one million dollars (\$1,000,000).

B. Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) each accident products and completed operations aggregate.

C. Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of no less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

D. Excess and/or Umbrella Liability Insurance with a limit of liability of twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer’s liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

E. Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Constructing Entity’s duties, responsibilities and performance outlined in this CSA, with limits of liability as follows:

\$10,000,000 each occurrence

\$10,000,000 aggregate

An entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design and engineering work associated with the Network Upgrades, identified in Appendix I to this CSA, necessary for the transmission service to procure professional liability insurance in the amounts and upon the terms prescribed by this section, and providing evidence of such insurance to the other entity. Such

insurance shall be procured from companies rated “A-,” VII or better by AM Best and authorized to do business in a State or States in which the Network Upgrades, identified in Appendix I to this CSA, are located. Nothing in this section relieves the entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the entity’s insurance obligations under this section become invalid for any reason, including but not limited to: (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the PJM Tariff; entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an entity will not design, engineer or construct or cause to design, engineer or construct any new Network Upgrades, Transmission Provider, in its discretion, may waive the requirement that an entity maintain the Professional Liability Insurance pursuant to this section.

### **11.2 Additional Insureds.**

The Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability policies procured by each Constructing Entity (“Insuring Constructing Entity”) shall include each other party (the “Insured Party”), its officers, agents and employees as additional insureds, providing all standard coverages and covering liability of the Insured Party arising out of bodily injury and/or property damage (including loss of use) in any way connected with the operations, performance, or lack of performance under this CSA.

### **11.3 Other Required Terms.**

The above-mentioned insurance policies (except workers’ compensation) shall provide the following:

(a) Each policy shall contain provisions that specify that it is primary and non-contributory for any liability arising out of that party’s negligence, and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer’s liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Insuring Constructing Entity shall be responsible for its respective deductibles or retentions.

(b) If any coverage is written on a Claims First Made Basis, continuous coverage shall be maintained or an extended discovery period will be exercised for a period of not less than two years after termination of this CSA.

(c) Provide for a waiver of all rights of subrogation which the Insuring Constructing Entity’s insurance carrier might exercise against the Insured Party.

### **11.4 No Limitation of Liability.**

The requirements contained herein as to the types and limits of all insurance to be maintained by the Constructing Entities are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this CSA.

### **11.5 Self-Insurance.**

Notwithstanding the foregoing, each Constructing Entity may self-insure to meet the minimum insurance requirements of this section to the extent it maintains a self-insurance program; provided that such Constructing Entity's senior secured debt is rated at investment grade or better by Standard & Poor's and its self-insurance program meets the minimum insurance requirements of this section 11. For any period of time that a Constructing Entity's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, it shall comply with the insurance requirements applicable to it under this section 11. In the event that a Constructing Entity is permitted to self-insure pursuant to this section, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in section 11.6 of this Appendix III.

### **11.6 Notices; Certificates of Insurance.**

Prior to the commencement of work pursuant to this CSA, the Constructing Entities agree to furnish certificate(s) of insurance evidencing the insurance coverage obtained in accordance with section 11 of this Appendix III. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation in favor of the other Interconnected Entities. All policies of insurance shall provide for 30 days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide 30 days prior written notice of cancellation or material adverse change, each Constructing Entity shall provide the other Constructing Entities with 30 days prior written notice of cancellation or material adverse change to any of the insurance required in this CSA.

### **11.7 Subcontractor Insurance.**

In accord with Good Utility Practice, each Constructing Entity shall require each of its subcontractors to maintain and provide evidence of insurance coverage of types, and in amounts, commensurate with the risks associated with the services provided by the subcontractor. Bonding of contractors or subcontractors shall be at the hiring Constructing Entity's discretion, but regardless of bonding, the Transmission Owner shall be responsible for the performance or non-performance of any contractor or subcontractor it hires.

### **11.8 Reporting Incidents.**

The Parties shall report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this CSA.

## **12.0 Indemnity**

### **12.1 Indemnity.**

Each Constructing Entity shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property of persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with or resulting from: (i) the indemnifying Constructing Entity's breach of any of the representations or warranties made in, or failure of the indemnifying Constructing Entity or any of its subcontractors to perform any of its obligations under, this CSA; or (ii) the negligence or willful misconduct of the indemnifying Constructing Entity or its contractors; provided, however, that the neither Constructing Entity shall not have any indemnification obligations under this section in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Party seeking indemnity.

### **12.2 Indemnity Procedures.**

Promptly after receipt by a person entitled to indemnity ("Indemnified Person") of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this section 12 may apply, the Indemnified Person shall notify the indemnifying Constructing Entity of such fact. Any failure of or delay in such notification shall not affect a Constructing Entity's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Constructing Entity. The Indemnified Person shall cooperate with the indemnifying Constructing Entity with respect to the matter for which indemnification is claimed. The indemnifying Constructing Entity shall have the right to assume the defense thereof with counsel designated by such indemnifying Constructing Entity and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the indemnifying Constructing Entity and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the indemnifying Constructing Entity, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Constructing Entity shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any action, suit or proceeding, the defense of which has been assumed by the indemnifying Constructing Entity. Notwithstanding the foregoing, the indemnifying Constructing Entity shall not: (i) be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified

Person and the indemnifying Constructing Entity, in such event the indemnifying Constructing Entity shall pay the reasonable expenses of the Indemnified Person; and (ii) settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be unreasonably withheld, conditioned or delayed.

### **12.3 Indemnified Person.**

If an Indemnified Person is entitled to indemnification under this section 12 as a result of a claim by a third party, and the indemnifying Constructing Entity fails, after notice and reasonable opportunity to proceed under this section 12, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Constructing Entity contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

### **12.4 Amount Owed.**

If the indemnifying Constructing Entity is obligated to indemnify and hold any Indemnified Person harmless under this section 12, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

### **12.5 Limitation on Damages.**

Except as otherwise provided in this section 12, the liability of a Party shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this section 12.5 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this CSA. The provisions of this section 12 shall survive the termination or expiration of this CSA.

### **12.6 Limitation of Liability in Event of Breach.**

A Breaching Party shall have no liability hereunder to any other Party, and each other Party hereby releases the Breaching Party, for all claims or damages it incurs that are associated with any interruption in the availability of the Network Upgrades identified in Appendix I to this CSA, the Transmission System, or Transmission Service, or associated with damage to the Network Upgrades identified in Appendix I to this CSA, except to the extent such interruption or damage is caused by the Breaching Party's gross negligence or willful misconduct in the performance of its obligations under this CSA.

### **12.7 Limited Liability in Emergency Conditions.**

Except as otherwise provided in the PJM Tariff or the Operating Agreement, no Party shall be liable to any other Party for any action that it takes in responding to an Emergency Condition, so

long as such action is made in good faith, is consistent with Good Utility Practice and is not contrary to the directives of the Transmission Provider or the Transmission Owner with respect to such Emergency Condition. Notwithstanding the above, Developer Party shall be liable in the event that it fails to comply with any instructions of Transmission Provider or the Transmission Owner related to an Emergency Condition.



### **13.0 Breach, Cure and Default**

#### **13.1 Breach.**

A Breach of this CSA shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Appendix 2 or of the other portions of the CSA or any attachments or Schedule hereto, including but not limited to any material breach of a representation, warranty or covenant (other than in subsections (a) and (c)-(e) of this section) made in this Appendix 2;
- (c) Assignment of the CSA in a manner inconsistent with its terms;
- (d) Failure of an Interconnection Party to provide access rights, or an Interconnection Party's attempt to revoke or terminate access rights, that are provided under this Appendix 2; or
- (e) Failure of an Interconnection Party to provide information or data required to be determined under this Appendix 2 to another Interconnection Party for such other Interconnection Party to satisfy its obligations under this Appendix 2.

#### **13.2 Continued Operation.**

In the event of a Breach or Default by either Interconnected Entity, and subject to termination of this CSA under section 16 of this Appendix 2, the Interconnected Entities shall continue to operate and maintain, as applicable, such DC power systems, protection and Metering Equipment, telemetering equipment, SCADA equipment, transformers, Secondary Systems, communications equipment, building facilities, software, documentation, structural components, and other facilities and appurtenances that are reasonably necessary for Transmission Provider and the Transmission Owner to operate and maintain the Transmission System and the Transmission Owner Upgrades and for Developer Party to operate and maintain the Generating Facility or Merchant Transmission Facility and the Developer Party Interconnection Facilities, in a safe and reliable manner.

#### **13.3 Notice of Breach.**

An Interconnection Party not in Breach shall give written notice of an event of Breach to the Breaching Party, to Transmission Provider and to other persons that the Breaching Party identifies in writing to the other Interconnection Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. In the event of a Breach by Developer Party, Transmission Provider or the Transmission Owner agree to provide notice of such Breach and in the same manner as its notice to Developer Party, to any Project Finance Entity provided that the Developer Party has provided the notifying Interconnection Party with notice of an assignment to such Project Finance Entity(ies) and identifies such Project Finance Entity(ies) as contacts for notice purposes pursuant to section 21 of this Appendix 2.

### **13.4 Cure and Default.**

An Interconnection Party that commits a Breach and does not take steps to cure the Breach pursuant to this section 13.4 is automatically in Default of this Appendix 2 and of the CSA, and its project and this Agreement shall be deemed terminated and withdrawn. Transmission Provider shall take all necessary steps to effectuate this termination, including submitted the necessary filings with FERC.

#### **13.4.1 Cure of Breach.**

##### **13.4.1.1**

Except for the event of Breach set forth in section 13.1(a) above, the Breaching Interconnection Party (a) may cure the Breach within 30 days of the time the Non-Breaching Party sends such notice; or (b) if the Breach cannot be cured within 30 days, may commence in good faith all steps that are reasonable and appropriate to cure the Breach within such 30 day time period and thereafter diligently pursue such action to completion pursuant to a plan to cure, which shall be developed and agreed to in writing by the Interconnection Parties. Such agreement shall not be unreasonably withheld.

##### **13.4.1.2**

In an event of Breach set forth in section 13.1(a), the Breaching Interconnection Party shall cure the Breach within five days from the receipt of notice of the Breach. If the Breaching Interconnection Party is the Developer Party, and the Developer Party fails to pay an amount due within five days from the receipt of notice of the Breach, Transmission Provider may use Security to cure such Breach. If Transmission Provider uses Security to cure such Breach, Developer Party shall be in automatic Default and its project and this Agreement shall be deemed terminated and withdrawn.

### **13.5 Right to Compel Performance.**

Notwithstanding the foregoing, upon the occurrence of a Default, a non-Defaulting Interconnection Party shall be entitled to exercise such other rights and remedies as it may have in equity or at law. Subject to section 20.1, no remedy conferred by any provision of this Appendix 2 is intended to be exclusive of any other remedy and each and every remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies shall not constitute a waiver of the right to pursue other available remedies.

## **14 Termination**

### **14.1 Termination.**

#### **14.1.1 Upon Completion of Construction.**

##### **14.1.1.1 Conforming CSAs.**

If this CSA is conforming and, therefore, is only reported to FERC on PJM' s Electric Quarterly Report, it shall terminate upon the date Transmission Provider receives written notice, in a form acceptable to the Transmission Provider from the Transmission Owner that the following conditions have occurred: (i) completion of construction of all Transmission Owner Upgrades; (ii) if Developer Party exercised the Option to Build, transfer of title under section 5.5 of this Appendix 2; (iii) final payment of all Costs due and owing under this CSA; and (iv) if Developer Party exercised the Option to Build, delivery to the Transmission Owner of final "as-built" drawings of any Stand Alone Network Upgrades built by the Developer Party in accordance with section 3.2.3.2(a)(xi) of this Appendix 2.

##### **14.1.1.2 Non-Conforming CSAs.**

If this CSA is non-conforming and, therefore, has been filed with and accepted by FERC, it shall terminate upon (a) Transmission Provider receiving written notice, in a form acceptable to Transmission Provider, from Transmission Owner that the following conditions have occurred: (i) completion of construction of all Transmission Owner Upgrades; (ii) if Developer Party exercised the Option to Build, transfer of title under section 5.5 of this Appendix 2; (iii) final payment of all Costs due and owing under this CSA; and (iv) if Developer Party exercised the Option to Build, delivery to Transmission Owner of final "as-built" drawings of any Stand Alone Network built by Developer Party in accordance with section 3.2.3.2(a)(xi) of this CSA; and (b) the effective date of Transmission Provider' s cancellation of the CSA in accordance with Commission rules and regulations. Transmission Provider shall serve the Transmission Owner and Developer Party with a copy of the notice of cancellation of any CSA in accordance with Commission rules and regulations.

#### **14.1.2 Upon Default by Either Constructing Entity.**

Either Constructing Entity may terminate its obligations hereunder in the event of a Default by the other Constructing Entity as defined in section 13.3 of this Appendix 2. Transmission Provider may terminate the CSA upon the Default of Developer Party of its obligations under this CSA or the applicable Generation Interconnection Agreement by providing Developer Party and the Transmission Owner prior written notice of termination

##### **14.1.3 By Developer Party.**

Subject to its payment of Cancellation Costs as explained in section 14.2 below, the Developer Party may be relieved of its obligations hereunder upon sixty days written notice to Transmission Provider and the Transmission Owner.

## **14.2 Cancellation by Developer Party.**

### **14.2.1 Applicability.**

The following provisions shall survive and shall apply in the event that Developer Party terminates the CSA pursuant to this section 14.2.

#### **14.2.1.1 Cancellation Cost Responsibility upon Termination.**

Upon the unilateral termination of the CSA by the Developer Party, the Developer Party shall be liable to pay to the Transmission Owner or Transmission Provider all Cancellation Costs in connection with Construction Service for the Developer Party pursuant to this CSA, including section 14.2.1.2 of this Appendix 2. Cancellation costs may include costs for Network Upgrades assigned to Developer Party, in accordance with the Tariff and as reflected in this CSA, that remain the responsibility of Developer Party under the Tariff. This shall include costs including, but not limited to, the costs for such Network Upgrades to the extent such cancellation would be a Material Modification, or would have an adverse effect or impose costs on other Developer Parties. In the event the Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Developer Party, with a written demand for payment and with reasonable documentation of such Cancellation Costs. The Developer Party shall pay the Transmission Provider each bill for Cancellation Costs within 30 days after, as applicable, the Transmission Owner's or Transmission Provider's presentation to the Developer Party of written demand therefor, provided that such demand includes reasonable documentation of the Cancellation Costs that the invoicing party seeks to collect. Upon receipt of each of Developer Party's payments of such bills of the Transmission Owner, Transmission Provider shall reimburse the Transmission Owner for Cancellation Costs incurred by the latter.

#### **14.2.1.2 Disposition of Facilities upon Termination.**

Upon termination of the CSA by a Developer Party, Transmission Provider, after consulting with the Transmission Owner, may, at the sole cost and expense of the Developer Party, authorize the Transmission Owner to (a) cancel supplier and contractor orders and agreements entered into by the Transmission Owner to design, construct, install, operate, maintain and own the Transmission Owner Upgrades, provided, however, that Developer Party shall have the right to choose to take delivery of any equipment ordered by the Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; or (b) remove any Transmission Owner Upgrades built by the Transmission Owner or any Transmission Owner Stand Alone Network (only after title to the subject facilities has been transferred to the Transmission Owner) built by the Developer Party; or (c) partially or entirely complete the Transmission Owner Upgrades as necessary to preserve the integrity or reliability of the Transmission System, provided that Developer Party shall be entitled to receive any rights associated with such facilities and

upgrades as determined in accordance with the CSA; or (d) undo any of the changes to the Transmission System that were made pursuant to this CSA. To the extent that the Developer Party has fully paid for equipment that is unused upon cancellation or which is removed pursuant to subsection (b) above, the Developer Party shall have the right to take back title to such equipment; alternatively, in the event that the Developer Party does not wish to take back title, the Transmission Owner may elect to pay the Developer Party a mutually agreed amount to acquire and own such equipment.

#### **14.2.2 Termination upon Default.**

In the event that Developer Party exercises its right to terminate under section 14.1.2 of this Appendix 2, and notwithstanding any other provision of this CSA, the Developer Party shall be liable for payment of the Transmission Owner's Costs incurred up to the date of Developer Party's notice of termination pursuant to section 14.1.2 and the costs of completion of some or all of the Transmission Owner Transmission Owner Upgrades or specific unfinished portions thereof, and/or removal of any or all of such facilities which have been installed, to the extent that Transmission Provider determines such completion or removal to be required for the Transmission Provider and/or Transmission Owner to perform their respective obligations under the GIP of the Tariff or this CSA, provided, however, that Developer Party's payment of such costs shall be without prejudice to any remedies that otherwise may be available to it under this Appendix 2 for the Default of the Transmission Owner. Developer Party will also be subject to Cancellation Cost responsibility provisions of section 14.2.1.1 of this Appendix 2.

#### **14.3 Survival of Rights.**

Termination of this CSA or the applicable Generation Interconnection Agreement shall not relieve any Interconnection Party of any of its liabilities and obligations arising under this CSA or the applicable Generation Interconnection Agreement (including Appendix 2) prior to the date on which termination becomes effective, and each Interconnection Party may take whatever judicial or administrative actions it deems desirable or necessary to enforce its rights hereunder. Applicable provisions of this Appendix 2 will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the CSA or the applicable Generation Interconnection Agreement was in effect.

## **15 Force Majeure**

### **15.1 Notice.**

A Construction Party that is unable to carry out an obligation imposed on it by this Appendix 2 due to Force Majeure shall notify each other Construction Party in writing or by telephone within a reasonable time after the occurrence of the cause relied on.

### **15.2 Duration of Force Majeure.**

A party shall not be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other parties in writing as soon as reasonably possible after the occurrence of the cause relied upon. Those notices shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred, and when the Force Majeure is reasonably expected to cease. Written notices given pursuant to this Article shall be acknowledged in writing as soon as reasonably possible. The party affected shall exercise Reasonable Efforts to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance. The party affected has a continuing notice obligation to the other parties, and must update the particulars of the original Force Majeure notice and subsequent notices, in writing, as the particulars change. The affected party shall be excused from whatever performance is affected only for the duration of the Force Majeure and while the party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing party is able to resume performance of its obligations excused because of the occurrence of Force Majeure, such party shall resume performance and give prompt written notice thereof to the other parties.

### **15.3 Obligation to Make Payments.**

Any Construction Party's obligation to make payments for services shall not be suspended by Force Majeure.

### **15.4 Definition of Force Majeure.**

For the purposes of this section, an event of force majeure shall mean shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or any other cause beyond a party's control that, in any of the foregoing cases, by exercise of due diligence, such party could not reasonably have been expected to avoid, and which, by the exercise of due diligence, it has been unable to overcome. Force majeure does not include (i) a failure of performance that is due to an affected party's own negligence or intentional wrongdoing; (ii) any removable or remediable causes (other than settlement of a strike or labor dispute) which an affected party fails to remove or remedy within a reasonable time; or (iii) economic hardship of an affected party.

## **16.0 Confidentiality**

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the other Party receiving the information that the information is confidential. If requested by any Party, the disclosing Party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting Party may disclose such writing to an appropriate Governmental Authority. Any Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **16.1 Term.**

During the term of this CSA, and for a period of three years after the termination of this CSA, except as otherwise provided in section 16 of this CSA, each Party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any Party.

### **16.2 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving Party; (ii) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (iii) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party, after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (iv) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of this CSA; or (vi) is required, in accordance with section 16.7 of this Appendix III, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this CSA. Information designated as Confidential Information shall no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

### **16.3 Release of Confidential Information.**

No Party shall disclose Confidential Information of another Party to any other person, except to its Affiliates (in accordance with FERC's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be or considering providing financing to or equity participation in Developer Party on a need-to-know basis in connection with this CSA, unless such person has first been advised of the confidentiality provisions of this section and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party that provides Confidential Information of another Party to any person shall remain responsible for any release of Confidential Information in contravention of this section.

### **16.4 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that it discloses to any other Party. A Party's disclosure to another Party of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **16.5 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to any other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **16.6 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as the Party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this CSA or to comply with Applicable Laws and Regulations.

#### **16.7 Order of Disclosure.**

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the Party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing Party may seek an appropriate protective order, or waive compliance with the terms of this CSA. Notwithstanding the absence of a protective order, or agreement, or waiver, the Party subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **16.8 Termination of Construction Service Agreement.**

Upon termination of this CSA for any reason, each Party shall, within 10 calendar days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure and deletion certified in writing to the requesting Party) or to return to the requesting Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party.

#### **16.9 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this section 16. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party



breaches or threatens to breach its obligations under this section, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed to be an exclusive remedy for the breach of this section, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, consequential, or punitive damages of any nature or kind resulting from or arising in connection with a Breach of any obligation under this section 16.

#### **16.10 Disclosure to FERC or its Staff.**

Notwithstanding anything in this section to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this CSA, the Party, shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this CSA prior to the release of the Confidential Information to FERC or its staff. A Party shall notify the other Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

#### **16.11 Non-Disclosure.**

Subject to the exception noted above in section 16.10 of this Appendix III, no Party shall disclose Confidential Information of Party to any person not employed or retained by the disclosing Party, except to the extent disclosure is: (i) required by law; (ii) reasonably deemed by the disclosing Party to be required in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the Party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this CSA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another Party's Confidential Information under this subparagraph, the disclosing Party shall promptly notify the other Parties in writing and shall assert confidentiality and cooperate with the other Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

#### **16.12 Information in the Public Domain.**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### **16.13 Return or Destruction of Confidential Information.**

If any Party provides any Confidential Information to another Party in the course of an audit or inspection, the providing Party may request the other Party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each Party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days after receiving the request and shall certify in writing to the requesting Party that it has complied with such request.

## **17.0 Information Access And Audit Rights**

### **17.1 Information Access.**

Subject to Applicable Laws and Regulations, each Party shall make available to the other Parties information necessary: (i) to verify the Costs incurred by the other Party for which the requesting Party is responsible under this CSA and the PJM Tariff; and (ii) to carry out obligations and responsibilities under this CSA and the PJM Tariff. The Parties shall not use such information for purposes other than those set forth in this section 17 and to enforce their rights under this CSA and the PJM Tariff.

### **17.2 Reporting of Non-Force Majeure Events.**

Each Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this CSA for a reason other than an event of force majeure as defined in section 1.21 of Appendix 2 of this Attachment GG. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this section 17 shall not entitle the receiving Party to allege a cause of action for anticipatory breach of this CSA and the PJM Tariff.

### **17.3 Audit Rights.**

Subject to the requirements of confidentiality of this CSA and the PJM Tariff, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the pertinent Party, to audit at its own expense the other Party's accounts and records pertaining to such Party's performance and/or satisfaction of obligations arising under this CSA and the PJM Tariff. Any audit authorized by this section 17 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this CSA. Any request for audit shall be presented to the other Party not later than 24 months after the event as to which the audit is sought. Each Party shall preserve all records held by it for the duration of the audit period.

### **17.4 Waiver.**

Any waiver at any time by any Party of its rights with respect to a Breach or Default under this CSA, or with respect to any other matters arising in connection with this CSA, shall not be deemed a waiver or continuing waiver with respect to any other Breach or Default or other matter.

### **17.5 Amendments and Rights Under the Federal Power Act.**

Except as set forth in this section 17, this CSA may be amended, modified, or supplemented only by written agreement of the Parties. Such amendment shall become effective and a part of this CSA upon satisfaction of all Applicable Laws and Regulations.

Notwithstanding the foregoing, nothing contained in this CSA shall be construed as affecting in any way any of the rights of any Party with respect to changes in applicable rates or charges under section 205 of the Federal Power Act and/or FERC's rules and regulations thereunder, or any of the rights of any Party under section 206 of the Federal Power Act and/or FERC's rules and regulations thereunder. The terms and conditions of this CSA shall be amended, as mutually agreed by the Parties, to comply with changes or alterations made necessary by a valid applicable order of any Governmental Authority having jurisdiction hereof.

#### **17.6 Regulatory Requirements.**

Each Party's performance of any obligation under this CSA for which such Party requires approval or authorization of any Governmental Authority shall be subject to its receipt of such required approval or authorization in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek, and shall use Reasonable Efforts to obtain, such required authorizations or approvals as soon as reasonably practicable.

## **18.0 Representations and Warranties**

### **18.1 General.**

Each Constructing Entity hereby represents, warrants and covenants as follows, with these representations, warranties, and covenants effective as to the Constructing Entity during the full time this CSA is effective:

#### **18.1.1 Good Standing.**

Such Constructing Entity is duly organized or formed, as applicable, validly existing and in good standing under the laws of its State of organization or formation, and is in good standing under the laws of the respective State(s) in which it is incorporated.

#### **18.1.2 Authority.**

Such Constructing Entity has the right, power and authority to enter into this CSA, to become a Party thereto and to perform its obligations thereunder. This CSA is a legal, valid and binding obligation of such Constructing Entity, enforceable against such Constructing Entity in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **18.1.3 No Conflict.**

The execution, delivery and performance of this CSA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Constructing Entity, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Constructing Entity or any of its assets.

## **19.0 Inspection and Testing of Completed Facilities**

### **19.1 Coordination.**

Developer Party and the Transmission Owner shall coordinate the timing and schedule of all inspection and testing of the Network Upgrades, identified in Appendix I to this CSA.

### **19.2 Inspection and Testing.**

Each Constructing Entity shall cause inspection and testing of any Network Upgrades that it constructs in accordance with the provisions of this section. The Parties acknowledge and agree that inspection and testing of facilities may be undertaken as facilities are completed and need not await completion of all of the facilities that a Constructing Entity is building.

#### **19.2.1 Of Developer Party-Built Facilities.**

Upon the completion of the construction and installation, but prior to energization, of any Network Upgrades constructed by the Developer Party shall have the same inspected and/or tested by an authorized electric inspection agency or qualified third party reasonably acceptable to the Transmission Owner to assess whether the facilities substantially comply with Applicable Standards. Said inspection and testing shall be held on a mutually agreed-upon date, and the Transmission Owner and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

#### **19.2.2 Of Transmission Owner-Built Facilities.**

Upon the completion of the construction and installation, but prior to energization, of any Network Upgrades constructed by the Transmission Owner, the Transmission Owner shall have the same inspected and/or tested by qualified personnel or a qualified contractor to assess whether the facilities substantially comply with Applicable Standards. Subject to Applicable Laws and Regulations, said inspection and testing shall be held on a mutually agreed-upon date, and the Developer Party and Transmission Provider shall have the right to attend and observe, and to obtain the written results of, such testing.

### **19.3 Review of Inspection and Testing by Transmission Owner.**

In the event that the written report, or the observation of either Constructing Entity or Transmission Provider, of the inspection and/or testing pursuant to section 19.2 of this Appendix III reasonably leads the Transmission Provider or Transmission Owner to believe that the inspection and/or testing of some or all of the Network Upgrades built by the Developer Party was inadequate or otherwise deficient, the Transmission Owner may, within 20 days after its receipt of the results of inspection or testing and upon reasonable notice to the Developer Party, perform its own inspection and/or testing of such Network Upgrades to determine whether the facilities are acceptable for energization, which determination shall not be unreasonably delayed, withheld or conditioned.

### **19.4 Notification and Correction of Defects.**

**19.4.1** If the Transmission Owner, based on inspection or testing pursuant to section 19.2 or 19.3 of this Appendix III, identifies any defects or failures to comply with Applicable Standards in the Network Upgrades constructed by the Developer Party, the Transmission Owner shall notify the Developer Party and Transmission Provider of any identified defects or failures within 20 days after the Transmission Owner's receipt of the results of such inspection or testing. The Developer Party shall take appropriate actions to correct any such defects or failure at its sole cost and expense, and shall obtain the Transmission Owner's acceptance of the corrections, which acceptance shall not be unreasonably delayed, withheld or conditioned.

**19.4.2** In the event that inspection and/or testing of any Network Upgrades built by the Transmission Owner identifies any defects or failures to comply with Applicable Standards in such facilities, Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. In the event that such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion.

## **19.5 Notification of Results.**

Within 10 days after satisfactory inspection and/or testing of Network Upgrades built by the Developer Party (including, if applicable, inspection and/or testing after correction of defects or failures), the Transmission Owner shall confirm in writing to the Developer Party and Transmission Provider that the successfully inspected and tested facilities are acceptable for energization.

## **20.0 Energization of Completed Facilities**

(A) Unless otherwise provided in the Schedule of Work, energization, when applicable as determined by Transmission Provider, of the Network Upgrades, identified in Appendix I to this CSA, shall occur in two stages. Stage One energization may occur prior to initial energization of the Network Upgrades. Stage Two energization shall consist of energization of the remainder of the Network Upgrades, identified in Appendix I, to the CSA.

(B) In the case of Network Upgrades for which the Transmission Provider determines that two-stage energization is inapplicable, energization shall occur in a single stage. Such a single-stage energization shall be regarded as Stage Two energization for the purposes of the remaining provisions of this section 20.0 and of section 22.0 of this Appendix III.

**20.1** Stage One energization may not occur prior to the satisfaction of the following additional conditions:

(a) The Developer Party shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Stand Alone Network Upgrades that Developer Party has constructed; and

(b) The Developer Party shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Stand Alone Network Upgrades that Developer Party has constructed.

**20.2** As soon as practicable after the satisfaction of the conditions for Stage One energization specified in sections 19 and 20.1 of this Appendix III, the Transmission Owner and the Developer Party shall coordinate and undertake the Stage One energization of facilities.

**20.3** Stage Two energization of the remainder of the Network Upgrades, identified in Appendix I to this CSA, may not occur prior to the satisfaction of the following additional conditions:

(a) The Developer Party shall have delivered to the Transmission Owner and Transmission Provider a writing transferring to the Transmission Owner and Transmission Provider operational control over any Network Upgrades that Developer Party has constructed and operational control of which it has not previously transferred pursuant to section 20.1 of this Appendix III; and

(b) The Developer Party shall have provided a mark-up of construction drawings to the Transmission Owner to show the “as-built” condition of all Network Upgrades that Developer Party has constructed and which were not included in the Stage One energization, but are included in the Stage Two energization.

**20.4** As soon as practicable after the satisfaction of the conditions for Stage Two energization specified in sections 19 and 20.3 of this Appendix III, the Transmission Owner and the Developer Party shall coordinate and undertake the Stage Two energization of facilities.



**20.5** To the extent defects in any Network Upgrades are identified during the energization process, the energization will not be deemed successful. In that event, the Constructing Entity shall take action to correct such defects in any Network Upgrades that it built as promptly as practical after the defects are identified. The affected Constructing Entity shall so notify the other Construction Parties when it has corrected any such defects, and the Constructing Entities shall recommence efforts, within 10 days thereafter, to energize the appropriate Network Upgrades in accordance with section 20.0 of this Appendix III; provided that the Transmission Owner may, in the reasonable exercise of its discretion and with the approval of Transmission Provider, require that further inspection and testing be performed in accordance with section 19 of this Appendix III.

## **21.0 Transmission Owner's Acceptance of Facilities Constructed by Developer Party**

Within five days after determining that Network Upgrades have been successfully energized, the Transmission Owner shall issue a written notice to the Developer Party accepting the Network Upgrades built by the Developer Party that were successfully energized. Such acceptance shall not be construed as confirming, endorsing or providing a warranty by the Transmission Owner as to the design, installation, construction, fitness, safety, durability or reliability of any Network Upgrades built by the Developer Party, or their compliance with Applicable Standards.

## **22.0 Transfer of Title to Certain Facilities Constructed by Developer Party**

Within 30 days after the Developer Party's receipt of notice of acceptance under section 21.0 of this Appendix III following Stage Two energization of the Network Upgrades, the Developer Party shall deliver to the Transmission Owner, for the Transmission Owner's review and approval, all of the documents and filings necessary to transfer to the Transmission Owner title to any Network Upgrades constructed by the Developer Party, and to convey to the Transmission Owner any easements and other land rights to be granted by Developer Party that have not then already been conveyed. The Transmission Owner shall review and approve such documentation, such approval not to be unreasonably withheld, delayed, or conditioned. Within 30 days after its receipt of the Transmission Owner's written notice of approval of the documentation, the Developer Party, in coordination and consultation with the Transmission Owner, shall make any necessary filings at the FERC or other governmental agencies for regulatory approval of the transfer of title. Within 20 days after the issuance of the last order granting a necessary regulatory approval becomes final (i.e., is no longer subject to rehearing), the Developer Party shall execute all necessary documentation and shall make all necessary filings to record and perfect the Transmission Owner's title in such facilities and in the easements and other land rights to be conveyed to the Transmission Owner. Prior to such transfer to the Transmission Owner of title to the Network Upgrades built by the Developer Party, the risk of loss or damages to, or in connection with, such facilities shall remain with the Developer Party. Transfer of title to facilities under this section shall not affect the Developer Party's receipt or use of the rights related to the Network Upgrades for which it otherwise may be eligible as provided in Subpart C of Part VI of the Tariff.

## **23.0 Liens**

The Developer Party shall take all reasonable steps to ensure that, at the time of transfer of title in the Network Upgrades built by the Developer Party to the Transmission Owner, those facilities shall be free and clear of any and all liens and encumbrances, including mechanics' liens. To the extent that the Developer Party cannot reasonably clear a lien or encumbrance prior to the time for transferring title to the Transmission Owner, Developer Party shall nevertheless convey title subject to the lien or encumbrance and shall indemnify, defend and hold harmless the Transmission Owner against any and all claims, costs, damages, liabilities and expenses (including without limitation reasonable attorneys' fees) which may be brought or imposed against or incurred by Transmission Owner by reason of any such lien or encumbrance or its discharge.

## **24.0 Charges**

### **24.1 Specified Charges.**

If and to the extent required by the Transmission Owner, after the Initial Operation of the Network Upgrade, Project Developer shall pay one or more of the types of recurring charges described in this section to compensate the Transmission Owner for costs incurred in performing certain of its obligations under this Appendix III. Transmission Provider will deliver a copy of such filing to Project Developer. Permissible charges under this section may include:

(a) Administration Charge - Any such charge may recover only the costs and expenses incurred by the Transmission Owner in connection with administrative obligations such as the preparation of bills. An Administration Charge shall not be permitted to the extent that the Transmission Owner's other charges to the Project Developer under the same CSA include an allocation of the Transmission Owner's administrative and general expenses and/or other corporate overhead costs.

(b) Network Upgrade Operations and Maintenance Charge - Any such charge may recover only the Transmission Owner's costs and expenses associated with operation and maintenance charges related to the Project Developer's Network Upgrade owned by the Transmission Owner.

(c) Other Charges - Any other charges applicable to the Project Developer, as mutually agreed upon by the Project Developer and the Transmission Owner and as accepted by the FERC as part of a CSA.

### **24.2 FERC Filings.**

To the extent required by law or regulation, each Party shall seek FERC acceptance or approval of its respective charges or the methodology for the calculation of such charges.

**SCHEDULE A**

**NEGOTIATED CONTRACT OPTIONS**

None.

**SCHEDULE B**

**OPERATION AND MAINTENANCE CHARGES FOR  
NETWORK UPGRADES**

None.

**SCHEDULE C**  
**SCOPE OF WORK**

**A. Transmission Owner Upgrades to be Built by Transmission Owner**

**[Specify Facilities To Be Constructed or state “None”]**

[Use the following if facilities are to be constructed or owned]

- i. Facilities for which the Developer Party has sole cost responsibility
- ii. Facilities for which a Network Upgrade Cost Responsibility Service Agreement is required.

**B. Project Developer.**

In the event Developer Party has exercised the Option to Build, it is hereby permitted to build in accordance with and subject to the conditions and limitations set forth in this CSA, the following Stand Alone Network Upgrades:

**[Specify Facilities to Be Constructed or state “None”]**



## **SCHEDULE D**

### **APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS**

{Include the following language if not required:}

Not Required.

{Otherwise, include the following language:}

The following technical requirements and standards shall apply. To the extent that these Applicable Technical Requirements and Standards conflict with the terms and conditions of the Tariff or any other provision of this CSA, the Tariff and/or this CSA shall control.

*{Instructions: If the relevant TO Applicable Technical Requirements and Standards **are** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply. The [Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] is available on the PJM website.

*{Instructions. If the relevant TO Applicable Technical Requirements and Standards **are not** posted on the PJM website, use the following language, subject to modifications as appropriate:}*

[Name of TO Standards] [version number (if known and applicable)] dated [insert effective date of the Standards] shall apply.

## **SCHEDULE E**

### **DEVELOPER PARTY'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS**

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}

Not Required.

[OR]

{Include the following language if applicable to Project Developer:}

As provided in section 4.0 of Appendix III to this CSA and subject to the requirements thereof, Developer Party represents that it meets all qualifications and requirements as set forth in section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Developer Party agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Developer Party to Transmission Owner with respect to the payment of the Costs of construction and installation of the Transmission Owner Interconnection Facilities and Transmission Owner Upgrades specified in this GIA.

Nothing in Developer Party's agreement pursuant to this Schedule E shall change Developer Party's indemnification obligations under section 4.2 of Appendix III to this CSA.

**SCHEDULE F**

**SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**

**Tariff, Part IX, Subpart K**

**FORM OF  
UPGRADE APPLICATION AND STUDIES AGREEMENT**

## Upgrade Application and Studies Agreement

1. This Upgrade Application and Studies Agreement (“Application” or “Agreement”), dated \_\_\_\_\_, is entered into by and between \_\_\_\_\_ (“Upgrade Customer” or “Applicant”) and PJM Interconnection, L.L.C. (“Transmission Provider” or “PJM”) (individually a “Party” and together the “Parties”) pursuant to PJM Interconnection, L.L.C. Open Access Transmission Tariff (“Tariff”), Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable. Capitalized terms used in this Application, unless otherwise indicated, shall have the meanings ascribed to them in Tariff, Part VII, Subpart A, section 300, or Tariff, Part VIII, Subpart A, 400, as applicable.
2. In order to have a valid Upgrade Request, Applicant must (1) electronically provide to Transmission Provider through PJM’s website a complete (i.e., non-deficient) and executed Application expressly accepted by Transmission Provider, and (2) submit to Transmission Provider the required cash Study Deposit by wire transfer in the amount of \$150,000. Upon satisfaction of the foregoing requirements, subject to Transmission Provider’s deficiency review, Transmission Provider will assign a Request Number to the Upgrade Request, which will establish (1) the validity of the Upgrade Request and (2) the priority of the Upgrade Request relative to other Upgrade Requests.

### SECTION 1: REQUIRED APPLICANT INFORMATION

3. Name, address, telephone number, and e-mail address of Applicant. If Applicant has designated an agent, include the agent’s contact information.

Applicant

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Applicant’s Agent (if applicable)

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Agent’s contact person: \_\_\_\_\_

4. An Internal Revenue Service Form W-9 or comparable state-issued document for Applicant.
5. Documentation proving the existence of a legally binding relationship between Applicant and any entity with a vested interest in this Application and associated project (*e.g.*, a parent company, a subsidiary, or financing company acting as agent for Applicant). Such

documentation may include, but is not limited to, Applicant's Articles of Organization and Operating Agreement describing the nature of the legally binding relationship.

6. Applicant's banking information, or the banking information of any entity with a legally binding relationship to Applicant that wishes to make payments and receive refunds on behalf of Applicant, in association with this Application and corresponding project:

Bank Name: \_\_\_\_\_  
Account Holder Name: \_\_\_\_\_  
ABA number: \_\_\_\_\_  
Account Number: \_\_\_\_\_  
Company: \_\_\_\_\_  
Tax Reporting Name: \_\_\_\_\_  
Tax ID: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

## **SECTION 2: REQUIRED UPGRADE REQUEST SPECIFICATIONS**

7. Specify whether Applicant submits this Application pursuant to either:

\_\_\_\_\_ the process for funding Network Upgrades and requesting Incremental Auction Revenue Rights (IARRs) under the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8; or

\_\_\_\_\_ the procedures for Merchant Network Upgrades to either (a) upgrade facilities or (b) advance certain already-identified upgrades.

8. If planning to fund Network Upgrades and request IARRs, specify the following, as further described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable, and the PJM Manuals:
- a. the station or transmission line or lines where the upgrades will be made;
  - b. the requested source and sink locations;
  - c. the increase in capability in megawatts (MW) or megavolt-amperes (MVA);
  - d. the MW amount of requested IARRs; and

- e. the proposed in-service or commencement date.
9. If planning Merchant Network Upgrades, complete the following, as further described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable, and the PJM Manuals:
- a. specify the substation or transmission facility or facilities where the upgrade(s) will be made;
  - b. specify the MW or MVA amount by which the normal or emergency rating of the identified facility is to be increased, together with the desired in-service date; or, as applicable, the Regional Transmission Expansion Plan project number and planned and requested advancement dates;
  - c. if requesting Incremental Capacity Transfer Rights (ICTRs), identify up to three Locational Deliverability Areas (LDAs) in which to determine the ICTRs; and
  - d. specify the planned date the proposed Merchant Network Upgrade will be in service, such date to be no more than seven years from the date the valid Upgrade Request is received by Transmission Provider, unless Upgrade Customer demonstrates that engineering, permitting, and construction of the Merchant Network Upgrade will take more than seven years.

### **SECTION 3: CONDUCT OF STUDIES**

- 10. Transmission Provider, in consultation with the affected Transmission Owner(s), will conduct a System Impact Study as described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable, and provide Upgrade Customer with a System Impact Study report through Transmission Provider's website. The System Impact Study report will include good faith estimates of the cost allocation of the Network Upgrades for Applicant's Upgrade Request, but those estimates shall not be deemed final or binding.
- 11. In order for the Upgrade Request to proceed to the Facilities Study, Transmission Provider must timely receive from Upgrade Customer a Readiness Deposit as described in Tariff, Part VII, Subpart H or Tariff, Part VIII, Subpart H, as applicable. If Transmission Provider does not timely receive the Readiness Deposit, then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn, and the Upgrade Request will be removed from all studies and will lose its priority position.
- 12. If Transmission Provider timely receives the Readiness Deposit, then Transmission Provider will proceed with the Facilities Study for the Upgrade Request. The Facilities Study will provide the final details regarding the type, scope, and construction schedule of Network Upgrades and any other facilities that may be required to accommodate the Upgrade Request, and will provide Upgrade Customer with a final estimate of Upgrade Customer's cost responsibility for the Upgrade Request. Upon completion of the Facilities Study, Transmission Provider will provide Upgrade Customer with a Facilities Study

report through Transmission Provider's website, and concurrently tender a draft Upgrade Construction Service Agreement, a form of which is located in Tariff, Part IX, Subpart E.

13. The System Impact Study and Facilities Study necessarily will employ various assumptions regarding Applicant's Upgrade Request, other Upgrade Requests, and PJM's Regional Transmission Expansion Plan at the time of study. IN NO EVENT SHALL THIS AGREEMENT, THE SYSTEM IMPACT STUDY, OR THE FACILITIES STUDY IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR TRANSMISSION OWNER(S) TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF APPLICANT EITHER AT THIS POINT IN TIME OR IN THE FUTURE.

#### **SECTION 4: COST RESPONSIBILITY**

14. Ten percent of Applicant's \$150,000 Study Deposit is non-refundable.
15. Transmission Provider first shall apply Applicant's Study Deposit in payment of the invoices for the costs of the System Impact Study.
16. If Study Deposit monies remain after the System Impact Study is completed, and any outstanding monies owed by Upgrade Customer in connection with outstanding invoices related to the present or prior Upgrade Requests or other New Service Requests have been paid, such remaining deposit monies either shall be:
  - a. Applied to the Facilities Study, if Upgrade Customer decides to remain in the Upgrade Request process; or
  - b. Returned to Upgrade Customer, less actual study costs incurred, if Upgrade Customer decides to withdraw its Upgrade Request.
17. Actual costs for the System Impact Study and Facilities Study may exceed the Study Deposit. Notwithstanding the amount of the Study Deposit, Applicant shall reimburse Transmission Provider for all, or for Applicant's allocated portion of, the actual cost of the studies in accordance with Applicant's cost responsibility. Applicant is responsible for, and must pay, all actual study costs. If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 days (or, if the 20<sup>th</sup> day is not a Business Day, then the next Business Day) of Transmission Provider sending the notification of such additional study costs, or (ii) withdraw its Upgrade Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn.

#### **SECTION 5: CONFIDENTIALITY**

18. Applicant agrees to provide all information requested by Transmission Provider necessary to complete and review this Application. Subject to this section 5, and to the extent



required by Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable, information provided pursuant to this Application shall be and remain confidential.

19. Upon completion of the System Impact Study and Facilities Study, the corresponding reports will be listed on Transmission Provider's website and, to the extent required by Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable or Commission regulations, will be made publicly available. Applicant acknowledges and consents to such disclosures as may be required under Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable or Commission regulations.
20. Applicant acknowledges that, consistent with the confidentiality provisions of Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, as applicable, Transmission Provider may contract with consultants, including Transmission Owners, to provide services or expertise in the study process, and Transmission Provider may disseminate information as necessary to those consultants, and rely upon them to conduct part or all of the System Impact Studies.

#### **SECTION 6: DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

21. In completing the System Impact Study and Facilities Study, Transmission Provider, Transmission Owner(s), and any other subcontractors employed by Transmission Provider must rely on information provided by Applicant and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDY AND FACILITIES STUDY. Applicant acknowledges that it has not relied on any representations or warranties not specifically set forth herein, and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the System Impact Study and Facilities Study conducted hereunder is intended, nor shall be interpreted, to constitute agreement by Transmission Provider or Transmission Owner(s) to provide Interconnection Service or transmission service to or on behalf of Applicant either at this time or in the future.
22. In no event will Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this agreement or otherwise, even if Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider have been advised of the possibility of

such a loss. Nor shall Transmission Provider, Transmission Owner(s), or other subcontractors employed by Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of Transmission Provider's obligations under this Agreement.

## SECTION 7: MISCELLANEOUS

23. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

Transmission Provider:

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
[interconnectionagreementnotices@pjm.com](mailto:interconnectionagreementnotices@pjm.com)

Applicant:

\_\_\_\_\_  
\_\_\_\_\_

24. No waiver by either Party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
25. This Agreement, or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties.
26. This Agreement shall be binding upon the Parties, their heirs, executors, administrators, successors, and permitted assigns.
27. This Agreement shall become effective on the date it is executed by both Parties and shall remain in effect until the earlier of (a) the date on which Applicant enters into an Upgrade Construction Service Agreement with PJM and Transmission Owner, a form of which is available at Tariff, Part IX, Subpart E; or (b) termination or withdrawal of this Application.
28. Prior to entering into a final Upgrade Construction Service Agreement, an Upgrade Customer may assign its Upgrade Request to another entity only if the acquiring entity accepts and acquires all rights and obligations as identified in the Upgrade Request for such project, as evidenced in a writing acceptable to Transmission Provider.

29. **Governing Law, Regulatory Authority, and Rules:**  
This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal laws and/or laws of the State of Delaware without regard to conflicts of law provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
30. **No Third-Party Beneficiaries:**  
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest, and where permitted their assigns.
31. **Multiple Counterparts:**  
This Agreement may be executed in two or more counterparts, each of which is deemed an original but all of which constitute one and the same instrument.
32. **No Partnership:**  
This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
33. **Severability:**  
If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
34. **Reservation of Rights:**  
Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; and Applicant shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power

Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

Applicant: **[Name of Party]**

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

**Tariff, Part IX, Subpart L**

**FORM OF  
AFFECTED SYSTEM CUSTOMER FACILITIES STUDY  
APPLICATION AND AGREEMENT**

**Affected System Customer Facilities Study  
Application and Agreement**  
(Project Identifier #\_\_\_\_\_)

**RECITALS**

1. This Affected System Customer Facilities Study Application and Agreement ("Agreement"), dated as of \_\_\_\_\_, is entered into by and between \_\_\_\_\_ ("Affected System Customer") and PJM Interconnection, L.L.C. ("Transmission Provider"), pursuant to the PJM Interconnection, L.L.C. Open Access Transmission Tariff ("PJM Tariff").
2. Pursuant to Tariff, Part VII, Subpart G (Affected System rules) or Tariff, Part VIII, Subpart G (Affected System rules), as applicable, Affected System Customer is responsible for an Affected System Facility that requires, or Affected System Facilities that require, Network Upgrades to Transmission Provider's Transmission System, and Transmission Provider has notified Affected System Customer of the need to enter this Agreement.
3. Transmission Provider has informed Affected System Customer that it will use Reasonable Efforts to complete this Affected System Customer Facilities Study by {date}.
4. Affected System Customer desires that Transmission Provider commence an Affected System Customer Facilities Study in connection with the following interconnection request: {instruction – list adjacent region transmission provide and interconnection request number} ("Affected System interconnection request").

**PREVIOUS SUBMISSIONS**

5. Previous submissions: {instructions – complete the following section if there was an earlier Affected System Customer Facilities Study Agreement or other agreement between PJM and the Affected System Customer, otherwise replace the following language with "Not Applicable"} Except as otherwise specifically set forth in an attachment to this Agreement, Affected System Customer represents and warrants that the information provided in {list applicable agreement} dated \_\_\_\_\_, is accurate and complete as of the date of execution of this Agreement.

**MILESTONES**

6. Affected System Customer must meet the following milestone dates relating to the development of its generation or merchant transmission project(s) or interconnection request:

**[Specify Project Specific Milestones]**

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand]

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## **PURPOSE AND SCOPE OF THE AFFECTED SYSTEM CUSTOMER FACILITIES STUDY**

7. Transmission Provider, in consultation with the affected Transmission Owner(s), shall commence an Affected System Customer Facilities Study pursuant to this Agreement to evaluate the Network Upgrades to the Transmission Provider's Transmission System necessary to accommodate Affected System Customer's Affected System interconnection request.
  - A. **Scope of Affected System Customer Facilities Study:** The purpose of the Affected System Customer Facilities Study is to provide, commensurate with any mutually agreed parameters regarding the scope and degree of specificity described in Schedule A attached to this agreement, an assessment of project related system reliability issues and conceptual engineering and, as appropriate, detailed design, plus cost estimates and project schedules, to implement the conclusions of the Facilities Study regarding the Network Upgrades necessary to accommodate the Affected System interconnection request. The nature and scope of the materials that Transmission Provider shall deliver to the Affected System Customer upon completion of the Affected System Customer Facilities Study shall be described in the PJM Manuals.
  - B. **Affected System Customer Facilities Study Time Estimate:** Transmission Provider's estimates of the date for completion of the Affected System Customer Facilities Study is stated in section 3 of this Agreement. In the event that Transmission Provider determines that it will be unable to complete the Affected System Customer Facilities Study by the estimated completion date stated in section 3 of this Agreement, it shall notify Affected System Customer and will explain the reasons for the delay.
  - C. **Issuance of Affected System Customer Facility Study Report and Obligation to Construction Service Agreement:** Upon receipt of the Affected System Customer Facility Study report, Transmission Provider and the Affected System Customer shall enter into a stand-alone Construction Service Agreement and, if applicable Network Upgrade Cost Responsibility Agreement (forms of which are set forth in Tariff, Part IX) for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades. Transmission



Provider shall provide in electronic form a draft stand-alone Construction Service Agreement and, if applicable a Network Upgrade Cost Responsibility Agreement.

8. The Affected System Customer Facilities Study necessarily will employ various assumptions including assumptions regarding Affected System Customer's Affected System interconnection request, other pending Interconnection Request(s), and PJM's Regional Transmission Expansion Plan at the time of the study. IN NO EVENT SHALL THIS AGREEMENT OR THE AFFECTED SYSTEM CUSTOMER FACILITIES STUDY IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR THE TRANSMISSION OWNERS TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF NEW SERVICE CUSTOMER EITHER AT THIS POINT IN TIME OR IN THE FUTURE.

### **CONFIDENTIALITY**

9. Affected System Customer agrees to provide all information requested by Transmission Provider necessary to complete the Affected System Customer Facilities Study. Subject to section 10 of this Agreement and to the extent required by Tariff, Part VII, Subpart E, section 327, or Tariff, Part VIII, Subpart E, section 425, information provided pursuant to this section 9 shall be and remain confidential.
10. Until completion of the Affected System Customer Facilities Study, Transmission Provider shall keep confidential all information provided to it by the Affected System Customer. Upon completion of the Affected System Customer Facilities Study, the Affected System Customer Facilities Study results will be publicly available on Transmission Provider's website; Affected System Customers must obtain the results from Transmission Provider's website. Transmission Provider shall provide a copy of the study to Affected System Customer, along with (to the extent consistent with Transmission Provider's confidentiality obligations in section 18.17 of the Operating Agreement) all related work papers. Affected System Customer acknowledges and consents to such other, additional disclosures of information as may be required under the PJM Tariff or the FERC's rules and regulations.
11. Affected System Customer acknowledges the affected Transmission Owner(s) may participate in the Affected System Customer Facilities Study process and that Transmission Provider may disseminate information to the affected Transmission Owner(s) and may consult with them regarding part or all of the Affected System Customer Facilities Study.

### **COST RESPONSIBILITY**

12. Concurrent with execution of this Agreement, Affected System Customer shall provide a study deposit of \$100,000 ("Study Deposit"), through electronic wire transfer, which must in cash. Transmission Provider shall apply Affected System Customer's Study Deposit in payment of the invoices for the costs of the Affected System Customer Facilities Study. Actual study costs may exceed the Study Deposit. Affected System Customer shall include the project identification or reference number assigned to the Affected System Facility by

the Affected System Operator and attach the relevant Affected System Operator Study that identified the need for such Facilities Study Agreement. Notwithstanding the amount of the Study Deposit, Affected System Customer shall reimburse Transmission Provider for all of the actual cost of the Affected System Customer Facilities Study. If Transmission Provider sends Affected System Customer notification of additional study costs, then Affected System Customer must pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs. If Affected System Customer fails to pay such amounts, then Transmission Provider shall deem this Agreement to be terminated and withdrawn.

#### **DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY**

13. In analyzing and preparing the Affected System Customer Facilities Study, Transmission Provider, the Transmission Owners, and any other subcontractors employed by Transmission Provider shall have to rely on information provided by Affected System Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNERS, NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE AFFECTED SYSTEM CUSTOMER FACILITIES STUDY. Affected System Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Agreement nor the Facilities Studies prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by Transmission Provider or Transmission Owner(s) to provide Interconnection Service or transmission service to or on behalf of Applicant either at this time or in the future.
14. In no event will Transmission Provider, the Transmission Owners or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the Affected System Customer Facilities Study, even if Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider be liable for any delay in delivery, or for the non-performance or delay in performance, of Transmission Provider's obligations under this Agreement.

Without limitation of the foregoing, Affected System Customer further agrees that the Transmission Owners and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Affected System Customer Facilities Study shall

be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

## **MISCELLANEOUS**

15. Any notice, demand, or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another may be so given, tendered, or delivered electronically, or by recognized national courier or by depositing the same with the United States Postal Service, with postage prepaid for delivery by certified or registered mail addressed to the Party, or by personal delivery to the Party, at the address specified below.

### **Transmission Provider**

PJM Interconnection, L.L.C.  
2750 Monroe Blvd.  
Audubon, PA 19403  
interconnectionagreementnotices@pjm.com

### **Affected System Customer**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

16. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
17. This Agreement or any part thereof, may not be amended, modified, assigned or waived other than by a writing signed by all parties hereto.
18. This Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
19. Neither this Agreement nor the Affected System Customer Facilities Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
20. The provisions of Tariff, Part VII or Tariff, Part VIII, as applicable are incorporated herein and made a part hereof.
21. Capitalized terms used but not otherwise defined herein shall have the meaning ascribed to them in the PJM Tariff.
22. This Agreement shall become effective on the date it is executed by all parties and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders

the completed Affected System Customer Facilities Study and, as applicable, a proposed Upgrade Construction Service Agreement to Affected System Customer, or (b) termination and withdrawal of the Affected System interconnection request(s).

23. No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.

24. Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

25. No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

26. Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

27. Governing Law, Regulatory Authority, and Rules

This Agreement shall be deemed a contract made under, and the interpretation and performance of this Agreement and each of its provisions shall be governed and construed in accordance with, the applicable Federal and/or laws of the State of Delaware without regard to conflicts of laws provisions that would apply the laws of another jurisdiction. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

28. Reservation of Rights

Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("FERC") to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; and Applicant shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, Transmission Provider and the Affected System Customer have caused this Agreement to be executed by their respective authorized officials.

(Project Identifier #\_\_\_\_)

**Transmission Provider: PJM Interconnection, L.L.C.**

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

**Affected System Customer: [Name of Party]**

By: \_\_\_\_\_  
Name Title Date

\_\_\_\_\_  
Printed Name

**Schedule A**  
**Details of Design and Cost Estimates/Quality**  
**For the Affected System Customer Facilities Study**

[insert details regarding degree of accuracy of cost estimates and associated scope of design as mutually agreed by Transmission Provider and Affected System Customer]

Effective December 31, 9998

(Clean Format)



## **TABLE OF CONTENTS**

### **I. COMMON SERVICE PROVISIONS**

- 1 Definitions**
  - OATT Definitions – A – B**
  - OATT Definitions – C – D**
  - OATT Definitions – E – F**
  - OATT Definitions – G – H**
  - OATT Definitions – I – J – K**
  - OATT Definitions – L – M – N**
  - OATT Definitions – O – P – Q**
  - OATT Definitions – R – S**
  - OATT Definitions – T – U – V**
  - OATT Definitions – W – X – Y – Z**
- 2 Initial Allocation and Renewal Procedures**
- 3 Ancillary Services**
- 3B PJM Administrative Service**
- 3C Mid-Atlantic Area Council Charge**
- 3D Transitional Market Expansion Charge**
- 3E Transmission Enhancement Charges**
- 3F Transmission Losses**
- 4 Open Access Same-Time Information System (OASIS)**
- 5 Local Furnishing Bonds**
- 6 Reciprocity**
- 6A Counterparty**
- 7 Billing and Payment**
- 8 Accounting for a Transmission Owner's Use of the Tariff**
- 9 Regulatory Filings**
- 10 Force Majeure and Indemnification**
- 11 Creditworthiness**
- 12 Dispute Resolution Procedures**
- 12A PJM Compliance Review**

### **II. POINT-TO-POINT TRANSMISSION SERVICE**

#### **Preamble**

- 13 Nature of Firm Point-To-Point Transmission Service**
- 14 Nature of Non-Firm Point-To-Point Transmission Service**
- 15 Service Availability**
- 16 Transmission Customer Responsibilities**
- 17 Procedures for Arranging Firm Point-To-Point Transmission Service**
- 18 Procedures for Arranging Non-Firm Point-To-Point Transmission Service**
- 19 System Impact Feasibility Study Procedures For Long-Term Firm Point-To-Point Transmission Service Requests**
- 20 [Reserved]**

- 21 [Reserved]
- 22 Changes in Service Specifications
- 23 Sale or Assignment of Transmission Service
- 24 Metering and Power Factor Correction at Receipt and Delivery Points(s)
- 25 Compensation for Transmission Service
- 26 Stranded Cost Recovery
- 27 Compensation for New Facilities and Redispatch Costs
- 27A Distribution of Revenues from Non-Firm Point-to-Point Transmission Service

### **III. NETWORK INTEGRATION TRANSMISSION SERVICE**

#### **Preamble**

- 28 Nature of Network Integration Transmission Service
- 29 Initiating Service
- 30 Network Resources
- 31 Designation of Network Load
- 32 System Impact Study Procedures for Network Integration Transmission Service Requests
- 33 Load Shedding and Curtailments
- 34 Rates and Charges
- 35 Operating Arrangements

### **IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM**

#### **Preamble**

#### **Subpart A –INTERCONNECTION PROCEDURES**

- 36 Interconnection Requests
- 37 Additional Procedures
- 38 Service on Merchant Transmission Facilities
- 39 Local Furnishing Bonds
- 40 Non-Binding Dispute Resolution Procedures
- 41 Interconnection Study Statistics

42 – 108 [Reserved]

Subpart B – [Reserved]

Subpart C – [Reserved]

Subpart D – [Reserved]

Subpart E – [Reserved]

Subpart F – [Reserved]

#### **Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE**

#### **Preamble**

- 109 Pre-application Process
- 110 Permanent Capacity Resource Additions Of 20 MW Or Less
- 111 Permanent Energy Resource Additions of 20 MW or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)
- 112 Temporary Energy Resource Additions of 20 MW or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW (Inverter-based)

- 112A Permanent or Temporary Energy Resources of 2 MW or Less (Synchronous) or 5 MW or Less (Inverter-based)
- 112B Certified Inverter-Based Small Generating Facilities No Larger than 10 kW
- 112C [Reserved]

**V. GENERATION DEACTIVATION**

**Preamble**

- 113 Notices
- 114 Deactivation Avoidable Cost Credit
- 115 Deactivation Avoidable Cost Rate
- 116 Filing and Updating of Deactivation Avoidable Cost Rate
- 117 Excess Project Investment Required
- 118 Refund of Project Investment Reimbursement
- 118A Recovery of Project Investment
- 119 Cost of Service Recovery Rate
- 120 Cost Allocation
- 121 Performance Standards
- 122 Black Start Units
- 123-199 [Reserved]

**VI. ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; RIGHTS ASSOCIATED WITH CUSTOMER-FUNDED UPGRADES**

**Preamble**

- 200 Applicability
  - 201 Queue Position
- Subpart A – SYSTEM IMPACT STUDIES AND FACILITIES STUDIES FOR NEW SERVICE REQUESTS**

- 202 Coordination with Affected Systems
- 203 System Impact Study Agreement
- 204 Tender of System Impact Study Agreement
- 205 System Impact Study Procedures
- 206 Facilities Study Agreement
- 207 Facilities Study Procedures
- 208 Expedited Procedures for Part II Requests
- 209 Optional Interconnection Studies
- 210 Responsibilities of the Transmission Provider and Transmission Owners

**Subpart B– AGREEMENTS AND COST RESPONSIBILITY FOR CUSTOMER-FUNDED UPGRADES**

- 211 Interim Interconnection Service Agreement
- 212 Interconnection Service Agreement
- 213 Upgrade Construction Service Agreement
- 214 Filing/Reporting of Agreements
- 215 Transmission Service Agreements
- 216 Interconnection Requests Designated as Market Solutions
- 217 Cost Responsibility for Necessary Facilities and Upgrades

- 218 New Service Requests Involving Affected Systems
- 219 Inter-queue Allocation of Costs of Transmission Upgrades
- 220 Advance Construction of Certain Network Upgrades
- 221 Transmission Owner Construction Obligation for Necessary Facilities and Upgrades
- 222 Confidentiality
- 223 Confidential Information
- 224 – 229 [Reserved]
- Subpart C – RIGHTS RELATED TO CUSTOMER-FUNDED UPGRADES
- 230 Capacity Interconnection Rights
- 231 Incremental Auction Revenue Rights
- 232 Transmission Injection Rights and Transmission Withdrawal Rights
- 233 Incremental Available Transfer Capability Revenue Rights
- 234 Incremental Capacity Transfer Rights
- 235 Incremental Deliverability Rights
- 236 Interconnection Rights for Certain Transmission Interconnections
- 237 IDR Transfer Agreements
- 238 – 299 [Reserved]

## **VII. TRANSITION CYCLE, GENERATION INTERCONNECTION PROCEDURE**

### **Subpart A – INTRODUCTION**

- 300 Definitions
- 301 Transition Introduction
- 302 Site Control

### **Subpart B – AE1-AG1 TRANSITION CYCLE #1**

- 303 Transition Eligibility
- 304 AE1-AG1 Expedited Process Eligibility

### **Subpart C – AG2-AH1 TRANSITION CYCLE #2**

- 305 Introduction, Overview and Eligibility
- 306 Application Rules

### **Subpart D – PHASES AND DECISION POINTS**

- 307 Introduction
- 308 Phase I
- 309 Decision Point I
- 310 Phase II
- 311 Decision Point II
- 312 Phase III
- 313 Decision Point III

- 314 Final Agreement Negotiation Phase

### **Subpart E – MISCELLANEOUS**

- 315 Assignment of Project Identifier
- 316 Service Below The Meter Generator
- 317 Behind The Meter Generation
- 318 Base Case Data
- 319 Service on Merchant Transmission Facilities

320	Local Furnishing Bonds
321	Internal Dispute Resolution Procedures
322	Responsibilities of Transmission Provider and Transmission Owner
323	Additional Upgrades
324	IDR Transfer Agreement
325	Regional Transmission Expansion Plan
326	Transmission Owner Construction Obligation for Necessary Facilities and Upgrade
327	Confidentiality
328	Capacity Interconnection Rights
329	Incremental Rights
330	Rights for Transmission Interconnections
331	Milestones
332	Winter Capacity Interconnection Rights
333	Interconnection Studies Processing Time and Metrics
334	Transmission Provider Website Postings
Subpart F – WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL AGREEMENTS	
335	Wholesale Market Participation Agreement/Non-Jurisdictional Agreements
Subpart G – AFFECTED SYSTEM RULES	
336	Affected System Rules
Subpart H – UPGRADE REQUESTS	
337	Upgrade Requests
338 – 399 [Reserved]	

## **VIII. NEW RULES, GENERATION INTERCONNECTION PROCEDURE**

### **Subpart A – INTRODUCTION**

400	Definitions
401	Applications for Cycle Process, Introduction
402	Applications for Cycle Process, Site Control

### **Subpart B – APPLICATION RULES**

403	Application Rules
-----	-------------------

### **Subpart C – PHASES AND DECISION POINTS**

404	Introduction
405	Phase I
406	Decision Point I
407	Phase II
408	Decision Point II
409	Phase III
410	Decision Point III

### **Subpart D – FINAL AGREEMENT NEGOTIATION PHASE**

411	Final Agreement Negotiation Phase
-----	-----------------------------------

### **Subpart E – MISCELLANEOUS**

412	Assignment of Project Identifier
413	Service Below Generating Capability
414	Surplus Interconnection Service

415	Behind The Meter Generation
416	Base Case Data
417	Service on Merchant Transmission Facilities
418	Local Furnishing Bonds
419	Internal Dispute Resolution Procedures
420	Responsibilities of Transmission Provider and Transmission Owners
421	Additional Upgrades
422	IDR Transfer Agreement
423	Regional Transmission Expansion Plan
424	Transmission Owner Construction Obligation for Necessary Facilities and Upgrades
425	Confidentiality
426	Capacity Interconnection Rights
427	Incremental Rights
428	Rights for Transmission Interconnections
429	Milestones
430	Winter Capacity Interconnection Rights
431	Interconnection Studies Processing Time and Metrics
432	Transmission Provider Website Postings
Subpart F – WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL AGREEMENTS	
433	Wholesale Market Participation Agreement/Non-Jurisdictional Agreements
Subpart G – AFFECTED SYSTEM RULES	
434	Affected System Rules
Subpart H – UPGRADE REQUESTS	
435	Upgrade Requests
436 – 499 [Reserved]	

## **IX. FORMS OF INTERCONNECTION-RELATED AGREEMENTS**

500	Execution Deadlines
Subpart A – FORM OF APPLICATION AND STUDIES AGREEMENT	
Subpart B – FORM OF GENERATION INTERCONNECTION AGREEMENT COMBINED WITH CONSTRUCTION SERVICE AGREEMENT	
Subpart C – FORM OF WHOLESALE MARKET PARTICIPATION AGREEMENT	
Subpart D – FORM OF ENGINEERING AND PROCUREMENT AGREEMENT	
Subpart E – FORM OF UPGRADE CONSTRUCTION SERVICE AGREEMENT	
Subpart F – FORM OF COST RESPONSIBILITY AGREEMENT	
Subpart G – FORM OF NECESSARY STUDIES AGREEMENT	
Subpart H – FORM OF NETWORK UPGRADE COST RESPONSIBILITY AGREEMENT	
Subpart I – FORM OF SURPLUS INTERCONNECTION SERVICE STUDY AGREEMENT	
Subpart J – FORM OF CONSTRUCTION SERVICE AGREEMENT	
Subpart K – FORM OF UPGRADE APPLICATION AND STUDIES AGREEMENT	

**Subpart L – FORM OF AFFECTED SYSTEM CUSTOMER FACILITIES STUDY  
APPLICATION AND AGREEMENT**

**SCHEDULE 1**

**Scheduling, System Control and Dispatch Service**

**SCHEDULE 1A**

**Transmission Owner Scheduling, System Control and Dispatch Service**

**SCHEDULE 2**

**Reactive Supply and Voltage Control from Generation Sources Service**

**SCHEDULE 3**

**Regulation and Frequency Response Service**

**SCHEDULE 4**

**Energy Imbalance Service**

**SCHEDULE 5**

**Operating Reserve – Synchronized Reserve Service**

**SCHEDULE 6**

**Operating Reserve - Supplemental Reserve Service**

**SCHEDULE 6A**

**Black Start Service**

**SCHEDULE 7**

**Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service**

**SCHEDULE 8**

**Non-Firm Point-To-Point Transmission Service**

**SCHEDULE 9**

**PJM Interconnection L.L.C. Administrative Services**

**SCHEDULE 9-1**

**Control Area Administration Service**

**SCHEDULE 9-2**

**Financial Transmission Rights Administration Service**

**SCHEDULE 9-3**

**Market Support Service**

**SCHEDULE 9-4**

**Regulation and Frequency Response Administration Service**

**SCHEDULE 9-5**

**Capacity Resource and Obligation Management Service**

**SCHEDULE 9-6**

**Management Service Cost**

**SCHEDULE 9-FERC**

**FERC Annual Charge Recovery**

**SCHEDULE 9-OPSI**

**OPSI Funding**

**SCHEDULE 9-CAPS**

**CAPS Funding**

**SCHEDULE 9-FINCON**

**Finance Committee Retained Outside Consultant**

**SCHEDULE 9-MMU**

**MMU Funding**  
**SCHEDULE 9 – PJM SETTLEMENT**  
**SCHEDULE 10 - [Reserved]**  
**SCHEDULE 10-NERC**  
**North American Electric Reliability Corporation Charge**  
**SCHEDULE 10-RFC**  
**Reliability First Corporation Charge**  
**SCHEDULE 11**  
**[Reserved for Future Use]**  
**SCHEDULE 11A**  
**Additional Secure Control Center Data Communication Links and Formula Rate**  
**SCHEDULE 12**  
**Transmission Enhancement Charges**  
**SCHEDULE 12 APPENDIX**  
**SCHEDULE 12-A**  
**SCHEDULE 13**  
**Expansion Cost Recovery Change (ECRC)**  
**SCHEDULE 14**  
**Transmission Service on the Neptune Line**  
**SCHEDULE 14 - Exhibit A**  
**SCHEDULE 15**  
**Non-Retail Behind The Meter Generation Maximum Generation Emergency Obligations**  
**SCHEDULE 16**  
**Transmission Service on the Linden VFT Facility**  
**SCHEDULE 16 Exhibit A**  
**SCHEDULE 16 – A**  
**Transmission Service for Imports on the Linden VFT Facility**  
**SCHEDULE 17**  
**Transmission Service on the Hudson Line**  
**SCHEDULE 17 - Exhibit A**  
**ATTACHMENT A**  
**Form of Service Agreement For Firm Point-To-Point Transmission Service**  
**ATTACHMENT A-1**  
**Form of Service Agreement For The Resale, Reassignment or Transfer of Point-to-Point Transmission Service**  
**ATTACHMENT B**  
**Form of Service Agreement For Non-Firm Point-To-Point Transmission Service**  
**ATTACHMENT C**  
**Methodology To Assess Available Transfer Capability**  
**ATTACHMENT C-1**  
**Conversion of Service in the Dominion and Duquesne Zones**  
**ATTACHMENT C-2**  
**Conversion of Service in the Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc, (“DEOK”) Zone**  
**ATTACHMENT C-4**



	Conversion of Service in the OVEC Zone
ATTACHMENT D	Methodology for Completing a System Impact Study
ATTACHMENT E	Index of Point-To-Point Transmission Service Customers
ATTACHMENT F	Service Agreement For Network Integration Transmission Service
ATTACHMENT F-1	Form of Umbrella Service Agreement for Network Integration Transmission Service Under State Required Retail Access Programs
ATTACHMENT G	Network Operating Agreement
ATTACHMENT H-1	Annual Transmission Rates -- Atlantic City Electric Company for Network Integration Transmission Service
ATTACHMENT H-1A	Atlantic City Electric Company Formula Rate Appendix A
ATTACHMENT H-1B	Atlantic City Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-2	Annual Transmission Rates -- Baltimore Gas and Electric Company for Network Integration Transmission Service
ATTACHMENT H-2A	Baltimore Gas and Electric Company Formula Rate
ATTACHMENT H-2B	Baltimore Gas and Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-3	Annual Transmission Rates -- Delmarva Power & Light Company for Network Integration Transmission Service
ATTACHMENT H-3A	Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3B	Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3C	Delmarva Power & Light Company Under-Frequency Load Shedding Charge
ATTACHMENT H-3D	Delmarva Power & Light Company Formula Rate – Appendix A
ATTACHMENT H-3E	Delmarva Power & Light Company Formula Rate Implementation Protocols
ATTACHMENT H-3F	Old Dominion Electric Cooperative Formula Rate – Appendix A
ATTACHMENT H-3G	Old Dominion Electric Cooperative Formula Rate Implementation Protocols
ATTACHMENT H-4	

**Annual Transmission Rates -- Jersey Central Power & Light Company for Network Integration Transmission Service**  
**ATTACHMENT H-4A**  
**Other Supporting Facilities - Jersey Central Power & Light Company**  
**ATTACHMENT H-4B**  
**Jersey Central Power & Light Company – [Reserved]**  
**ATTACHMENT H-5**  
**Annual Transmission Rates -- Metropolitan Edison Company for Network Integration Transmission Service**  
**ATTACHMENT H-5A**  
**Other Supporting Facilities -- Metropolitan Edison Company**  
**ATTACHMENT H-6**  
**Annual Transmission Rates -- Pennsylvania Electric Company for Network Integration Transmission Service**  
**ATTACHMENT H-6A**  
**Other Supporting Facilities Charges -- Pennsylvania Electric Company**  
**ATTACHMENT H-7**  
**Annual Transmission Rates -- PECO Energy Company for Network Integration Transmission Service**  
**ATTACHMENT H-7A**  
**PECO Energy Company Formula Rate Template**  
**ATTACHMENT H-7B**  
**PECO Energy Company Monthly Deferred Tax Adjustment Charge**  
**ATTACHMENT H-7C**  
**PECO Energy Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-8**  
**Annual Transmission Rates – PPL Group for Network Integration Transmission Service**  
**ATTACHMENT H-8A**  
**Other Supporting Facilities Charges -- PPL Electric Utilities Corporation**  
**ATTACHMENT 8C**  
**UGI Utilities, Inc. Formula Rate – Appendix A**  
**ATTACHMENT 8D**  
**UGI Utilities, Inc. Formula Rate Implementation Protocols**  
**ATTACHMENT 8E**  
**UGI Utilities, Inc. Formula Rate – Appendix A**  
**ATTACHMENT H-8G**  
**Annual Transmission Rates – PPL Electric Utilities Corp.**  
**ATTACHMENT H-8H**  
**Formula Rate Implementation Protocols – PPL Electric Utilities Corp.**  
**ATTACHMENT H-9**  
**Annual Transmission Rates -- Potomac Electric Power Company for Network Integration Transmission Service**  
**ATTACHMENT H-9A**  
**Potomac Electric Power Company Formula Rate – Appendix A**  
**ATTACHMENT H-9B**

**Potomac Electric Power Company Formula Rate Implementation Protocols**  
**ATTACHMENT H-9C**  
**Annual Transmission Rate – Southern Maryland Electric Cooperative, Inc. for**  
**Network Integration Transmission Service**

**ATTACHMENT H-10**  
**Annual Transmission Rates -- Public Service Electric and Gas Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-10A**  
**Formula Rate -- Public Service Electric and Gas Company**

**ATTACHMENT H-10B**  
**Formula Rate Implementation Protocols – Public Service Electric and Gas Company**

**ATTACHMENT H-11**  
**Annual Transmission Rates -- Allegheny Power for Network Integration**  
**Transmission Service**

**ATTACHMENT 11A**  
**Other Supporting Facilities Charges - Allegheny Power**

**ATTACHMENT H-12**  
**Annual Transmission Rates -- Rockland Electric Company for Network Integration**  
**Transmission Service**

**ATTACHMENT H-13**  
**Annual Transmission Rates – Commonwealth Edison Company for Network**  
**Integration Transmission Service**

**ATTACHMENT H-13A**  
**Commonwealth Edison Company Formula Rate – Appendix A**

**ATTACHMENT H-13B**  
**Commonwealth Edison Company Formula Rate Implementation Protocols**

**ATTACHMENT H-14**  
**Annual Transmission Rates – AEP East Operating Companies for Network**  
**Integration Transmission Service**

**ATTACHMENT H-14A**  
**AEP East Operating Companies Formula Rate Implementation Protocols**

**ATTACHMENT H-14B Part 1**

**ATTACHMENT H-14B Part 2**

**ATTACHMENT H-15**  
**Annual Transmission Rates -- The Dayton Power and Light Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-16**  
**Annual Transmission Rates -- Virginia Electric and Power Company**  
**for Network Integration Transmission Service**

**ATTACHMENT H-16A**  
**Formula Rate - Virginia Electric and Power Company**

**ATTACHMENT H-16B**  
**Formula Rate Implementation Protocols - Virginia Electric and Power Company**

**ATTACHMENT H-16C**  
**Virginia Retail Administrative Fee Credit for Virginia Retail Load Serving**  
**Entities in the Dominion Zone**

**ATTACHMENT H-16D – [Reserved]**

**ATTACHMENT H-16E – [Reserved]**

**ATTACHMENT H-16AA**

**Virginia Electric and Power Company**

**ATTACHMENT H-17**

**Annual Transmission Rates -- Duquesne Light Company for Network Integration  
Transmission Service**

**ATTACHMENT H-17A**

**Duquesne Light Company Formula Rate – Appendix A**

**ATTACHMENT H-17B**

**Duquesne Light Company Formula Rate Implementation Protocols**

**ATTACHMENT H-17C**

**Duquesne Light Company Monthly Deferred Tax Adjustment Charge**

**ATTACHMENT H-18**

**Annual Transmission Rates – Trans-Allegheny Interstate Line Company**

**ATTACHMENT H-18A**

**Trans-Allegheny Interstate Line Company Formula Rate – Appendix A**

**ATTACHMENT H-18B**

**Trans-Allegheny Interstate Line Company Formula Rate Implementation Protocols**

**ATTACHMENT H-19**

**Annual Transmission Rates – Potomac-Appalachian Transmission Highline, L.L.C.**

**ATTACHMENT H-19A**

**Potomac-Appalachian Transmission Highline, L.L.C. Summary**

**ATTACHMENT H-19B**

**Potomac-Appalachian Transmission Highline, L.L.C. Formula Rate Implementation  
Protocols**

**ATTACHMENT H-20**

**Annual Transmission Rates – AEP Transmission Companies (AEPTCo) in the AEP  
Zone**

**ATTACHMENT H-20A**

**AEP Transmission Companies (AEPTCo) in the AEP Zone - Formula Rate  
Implementation Protocols**

**ATTACHMENT H-20A APPENDIX A**

**Transmission Formula Rate Settlement for AEPTCo**

**ATTACHMENT H-20B - Part I**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-20B - Part II**

**AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate  
Template**

**ATTACHMENT H-21**

**Annual Transmission Rates – American Transmission Systems, Inc. for Network  
Integration Transmission Service**

**ATTACHMENT H-21A - ATSI**

**ATTACHMENT H-21A Appendix A - ATSI**

**ATTACHMENT H-21A Appendix B - ATSI**

**ATTACHMENT H-21A Appendix C - ATSI**  
**ATTACHMENT H-21A Appendix C - ATSI [Reserved]**  
**ATTACHMENT H-21A Appendix D – ATSI**  
**ATTACHMENT H-21A Appendix E - ATSI**  
**ATTACHMENT H-21A Appendix F – ATSI [Reserved]**  
**ATTACHMENT H-21A Appendix G - ATSI**  
**ATTACHMENT H-21A Appendix G – ATSI (Credit Adj)**  
**ATTACHMENT H-21B ATSI Protocol**  
**ATTACHMENT H-22**  
    **Annual Transmission Rates – DEOK for Network Integration Transmission Service and Point-to-Point Transmission Service**  
**ATTACHMENT H-22A**  
    **Duke Energy Ohio and Duke Energy Kentucky (DEOK) Formula Rate Template**  
**ATTACHMENT H-22B**  
    **DEOK Formula Rate Implementation Protocols**  
**ATTACHMENT H-22C**  
    **Additional provisions re DEOK and Indiana**  
**ATTACHMENT H-23**  
    **EP Rock springs annual transmission Rate**  
**ATTACHMENT H-24**  
    **EKPC Annual Transmission Rates**  
**ATTACHMENT H-24A APPENDIX A**  
    **EKPC Schedule 1A**  
**ATTACHMENT H-24A APPENDIX B**  
    **EKPC RTEP**  
**ATTACHMENT H-24A APPENDIX C**  
    **EKPC True-up**  
**ATTACHMENT H-24A APPENDIX D**  
    **EKPC Depreciation Rates**  
**ATTACHMENT H-24-B**  
    **EKPC Implementation Protocols**  
**ATTACHMENT H-25 - [Reserved]**  
**ATTACHMENT H-25A - [Reserved]**  
**ATTACHMENT H-25B - [Reserved]**  
**ATTACHMENT H-26**  
    **Transource West Virginia, LLC Formula Rate Template**  
**ATTACHMENT H-26A**  
    **Transource West Virginia, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-27**  
    **Annual Transmission Rates – Silver Run Electric, LLC**  
**ATTACHMENT H-27A**  
    **Silver Run Electric, LLC Formula Rate Template**  
**ATTACHMENT H-27B**  
    **Silver Run Electric, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-28**

**Annual Transmission Rates – Mid-Atlantic Interstate Transmission, LLC for  
Network Integration Transmission Service**  
**ATTACHMENT H-28A**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Template**  
**ATTACHMENT H-28B**  
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-29**  
**Annual Transmission Rates – Transource Pennsylvania, LLC**  
**ATTACHMENT H-29A**  
**Transource Pennsylvania, LLC Formula Rate Template**  
**ATTACHMENT H-29B**  
**Transource Pennsylvania, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-30**  
**Annual Transmission Rates – Transource Maryland, LLC**  
**ATTACHMENT H-30A**  
**Transource Maryland, LLC Formula Rate Template**  
**ATTACHMENT H-30B**  
**Transource Maryland, LLC Formula Rate Implementation Protocols**  
**ATTACHMENT H-31**  
**Annual Transmission Revenue Requirement – Ohio Valley Electric Corporation for  
Network Integration Transmission Service**  
**ATTACHMENT H-32**  
**Annual Transmission Revenue Requirements and Rates - AMP Transmission, LLC**  
**ATTACHMENT H-32A**  
**AMP Transmission, LLC - Formula Rate Template**  
**ATTACHMENT H-32B**  
**AMP Transmission, LLC - Formula Rate Implementation Protocols**  
**ATTACHMENT H-32C**  
**Annual Transmission Revenue Requirement and Rates - AMP Transmission, LLC  
for Network Integration Transmission Service**  
**ATTACHMENT H-33**  
**Annual Transmission Rates – NextEra Energy Transmission MidAtlantic Indiana,  
Inc.**  
**ATTACHMENT H-33A**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate  
Implementation Protocols**  
**ATTACHMENT H-33B**  
**NextEra Energy Transmission MidAtlantic Indiana, Inc. Formula Rate Template**  
**ATTACHMENT H-A**  
**Annual Transmission Rates -- Non-Zone Network Load for Network Integration  
Transmission Service**  
**ATTACHMENT I**  
**Index of Network Integration Transmission Service Customers**  
**ATTACHMENT J**  
**PJM Transmission Zones**  
**ATTACHMENT K**

# **Transmission Congestion Charges and Credits**

## **Preface**

### **ATTACHMENT K -- APPENDIX**

#### **Preface**

#### **1. MARKET OPERATIONS**

- 1.1 Introduction
- 1.2 Cost-Based Offers
- 1.2A Transmission Losses
- 1.3 [Reserved for Future Use]
- 1.4 Market Buyers
- 1.5 Market Sellers
- 1.5A Economic Load Response Participant
- 1.6 Office of the Interconnection
- 1.6A PJM Settlement
- 1.7 General
- 1.8 Selection, Scheduling and Dispatch Procedure Adjustment Process
- 1.9 Prescheduling
- 1.10 Scheduling
- 1.11 Dispatch
- 1.12 Dynamic Transfers

#### **2. CALCULATION OF LOCATIONAL MARGINAL PRICES**

- 2.1 Introduction
- 2.2 General
- 2.3 Determination of System Conditions Using the State Estimator
- 2.4 Determination of Energy Offers Used in Calculating
- 2.5 Calculation of Real-time Prices
- 2.6 Calculation of Day-ahead Prices
- 2.6A Interface Prices
- 2.7 Performance Evaluation

#### **3. ACCOUNTING AND BILLING**

- 3.1 Introduction
- 3.2 Market Buyers
- 3.3 Market Sellers
  - 3.3A Economic Load Response Participants
- 3.4 Transmission Customers
- 3.5 Other Control Areas
- 3.6 Metering Reconciliation
- 3.7 Inadvertent Interchange
- 3.8 Market-to-Market Coordination

#### **4. [Reserved For Future Use]**

#### **5. CALCULATION OF CHARGES AND CREDITS FOR TRANSMISSION CONGESTION AND LOSSES**

- 5.1 Transmission Congestion Charge Calculation
- 5.2 Transmission Congestion Credit Calculation
- 5.3 Unscheduled Transmission Service (Loop Flow)
- 5.4 Transmission Loss Charge Calculation
- 5.5 Distribution of Total Transmission Loss Charges

- 5.6 Transmission Constraint Penalty Factors
- 6. **“MUST-RUN” FOR RELIABILITY GENERATION**
  - 6.1 Introduction
  - 6.2 Identification of Facility Outages
  - 6.3 Dispatch for Local Reliability
  - 6.4 Offer Price Caps
  - 6.5 [Reserved]
  - 6.6 Minimum Generator Operating Parameters –  
Parameter-Limited Schedules
- 6A. **[Reserved]**
  - 6A.1 [Reserved]
  - 6A.2 [Reserved]
  - 6A.3 [Reserved]
- 7. **FINANCIAL TRANSMISSION RIGHTS AUCTIONS**
  - 7.1 Auctions of Financial Transmission Rights
  - 7.1A Long-Term Financial Transmission Rights Auctions
  - 7.2 Financial Transmission Rights Characteristics
  - 7.3 Auction Procedures
  - 7.4 Allocation of Auction Revenues
  - 7.5 Simultaneous Feasibility
  - 7.6 New Stage 1 Resources
  - 7.7 Alternate Stage 1 Resources
  - 7.8 Elective Upgrade Auction Revenue Rights
  - 7.9 Residual Auction Revenue Rights
  - 7.10 Financial Settlement
  - 7.11 PJM Settlement as Counterparty
- 8. **EMERGENCY AND PRE-EMERGENCY LOAD RESPONSE PROGRAM**
  - 8.1 Emergency Load Response and Pre-Emergency Load Response Program Options
  - 8.2 Participant Qualifications
  - 8.3 Metering Requirements
  - 8.4 Registration
  - 8.5 Pre-Emergency Operations
  - 8.6 Emergency Operations
  - 8.7 Verification
  - 8.8 Market Settlements
  - 8.9 Reporting and Compliance
  - 8.10 Non-Hourly Metered Customer Pilot
  - 8.11 Emergency Load Response and Pre-Emergency Load Response Participant  
Aggregation

## **ATTACHMENT L**

### **List of Transmission Owners**

## **ATTACHMENT M**

### **PJM Market Monitoring Plan**

## **ATTACHMENT M – APPENDIX**

### **PJM Market Monitor Plan Attachment M Appendix**

#### **I Confidentiality of Data and Information**



- II Development of Inputs for Prospective Mitigation
- III Black Start Service
- IV Deactivation Rates
- V Opportunity Cost Calculation
- VI FTR Forfeiture Rule
- VII Forced Outage Rule
- VIII Data Collection and Verification

**ATTACHMENT M-1 (FirstEnergy)**

**Energy Procedure Manual for Determining Supplier Total Hourly Energy Obligation**

**ATTACHMENT M-2 (First Energy)**

**Energy Procedure Manual for Determining Supplier Peak Load Share**

**Procedures for Load Determination**

**ATTACHMENT M-2 (ComEd)**

**Determination of Capacity Peak Load Contributions and Network Service Peak Load Contributions**

**ATTACHMENT M-2 (PSE&G)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Atlantic City Electric Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Delmarva Power & Light Company)**

**Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-2 (Duke Energy Ohio, Inc.)**

**Procedures for Determination of Peak Load Contributions, Network Service Peak Load and Hourly Load Obligations for Retail Customers**

**ATTACHMENT M-3**

**Additional Procedures for Planning of Supplemental Projects**

**ATTACHMENT N**

**Form of Generation Interconnection Feasibility Study Agreement**

**ATTACHMENT N-1**

**Form of System Impact Study Agreement**

**ATTACHMENT N-2**

**Form of Facilities Study Agreement**

**ATTACHMENT N-3**

**Form of Optional Interconnection Study Agreement**

**ATTACHMENT O**

**Form of Interconnection Service Agreement**

- 1.0 Parties
- 2.0 Authority
- 3.0 Customer Facility Specifications
- 4.0 Effective Date

- 5.0 Security
- 6.0 Project Specific Milestones
- 7.0 Provision of Interconnection Service
- 8.0 Assumption of Tariff Obligations
- 9.0 Facilities Study
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 11.0 Interconnection Specifications
- 12.0 Power Factor Requirement
- 12.0A RTU
- 13.0 Charges
- 14.0 Third Party Benefits
- 15.0 Waiver
- 16.0 Amendment
- 17.0 Construction With Other Parts Of The Tariff
- 18.0 Notices
- 19.0 Incorporation Of Other Documents
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 21.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 22.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 23.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

**Specifications for Interconnection Service Agreement**

- 1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the  
Customer Facility) to be Interconnected with the Transmission System in the PJM  
Region
- 2.0 Rights
- 3.0 Construction Responsibility and Ownership of Interconnection Facilities
- 4.0 Subject to Modification Pursuant to the Negotiated Contract Option
- 4.1 Attachment Facilities Charge
- 4.2 Network Upgrades Charge
- 4.3 Local Upgrades Charge
- 4.4 Other Charges
- 4.5 Cost breakdown
- 4.6 Security Amount Breakdown

**ATTACHMENT O APPENDIX 1: Definitions**

**ATTACHMENT O APPENDIX 2: Standard Terms and Conditions for Interconnections**

**1 Commencement, Term of and Conditions Precedent to  
Interconnection Service**

- 1.1 Commencement Date
- 1.2 Conditions Precedent
- 1.3 Term
- 1.4 Initial Operation
- 1.4A Other Interconnection Options
- 1.5 Survival

- 2 Interconnection Service**
  - 2.1 Scope of Service
  - 2.2 Non-Standard Terms
  - 2.3 No Transmission Services
  - 2.4 Use of Distribution Facilities
  - 2.5 Election by Behind The Meter Generation
- 3 Modification Of Facilities**
  - 3.1 General
  - 3.2 Interconnection Request
  - 3.3 Standards
  - 3.4 Modification Costs
- 4 Operations**
  - 4.1 General
  - 4.2 [Reserved]
  - 4.3 Interconnection Customer Obligations
  - 4.4 Transmission Interconnection Customer Obligations
  - 4.5 Permits and Rights-of-Way
  - 4.6 No Ancillary Services
  - 4.7 Reactive Power
  - 4.8 Under- and Over-Frequency and Under- and Over- Voltage Conditions
  - 4.9 System Protection and Power Quality
  - 4.10 Access Rights
  - 4.11 Switching and Tagging Rules
  - 4.12 Communications and Data Protocol
  - 4.13 Nuclear Generating Facilities
- 5 Maintenance**
  - 5.1 General
  - 5.2 [Reserved]
  - 5.3 Outage Authority and Coordination
  - 5.4 Inspections and Testing
  - 5.5 Right to Observe Testing
  - 5.6 Secondary Systems
  - 5.7 Access Rights
  - 5.8 Observation of Deficiencies
- 6 Emergency Operations**
  - 6.1 Obligations
  - 6.2 Notice
  - 6.3 Immediate Action
  - 6.4 Record-Keeping Obligations
- 7 Safety**
  - 7.1 General
  - 7.2 Environmental Releases
- 8 Metering**
  - 8.1 General
  - 8.2 Standards
  - 8.3 Testing of Metering Equipment

- 8.4 Metering Data
- 8.5 Communications
- 9 Force Majeure**
  - 9.1 Notice
  - 9.2 Duration of Force Majeure
  - 9.3 Obligation to Make Payments
  - 9.4 Definition of Force Majeure
- 10 Charges**
  - 10.1 Specified Charges
  - 10.2 FERC Filings
- 11 Security, Billing And Payments**
  - 11.1 Recurring Charges Pursuant to Section 10
  - 11.2 Costs for Transmission Owner Interconnection Facilities
  - 11.3 No Waiver
  - 11.4 Interest
- 12 Assignment**
  - 12.1 Assignment with Prior Consent
  - 12.2 Assignment Without Prior Consent
  - 12.3 Successors and Assigns
- 13 Insurance**
  - 13.1 Required Coverages for Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 13.1A Required Coverages for Generation Resources Of 20 Megawatts Or Less
  - 13.2 Additional Insureds
  - 13.3 Other Required Terms
  - 13.3A No Limitation of Liability
  - 13.4 Self-Insurance
  - 13.5 Notices; Certificates of Insurance
  - 13.6 Subcontractor Insurance
  - 13.7 Reporting Incidents
- 14 Indemnity**
  - 14.1 Indemnity
  - 14.2 Indemnity Procedures
  - 14.3 Indemnified Person
  - 14.4 Amount Owing
  - 14.5 Limitation on Damages
  - 14.6 Limitation of Liability in Event of Breach
  - 14.7 Limited Liability in Emergency Conditions
- 15 Breach, Cure And Default**
  - 15.1 Breach
  - 15.2 Continued Operation
  - 15.3 Notice of Breach
  - 15.4 Cure and Default
  - 15.5 Right to Compel Performance
  - 15.6 Remedies Cumulative

- 16 Termination**
  - 16.1 Termination
  - 16.2 Disposition of Facilities Upon Termination
  - 16.3 FERC Approval
  - 16.4 Survival of Rights
- 17 Confidentiality**
  - 17.1 Term
  - 17.2 Scope
  - 17.3 Release of Confidential Information
  - 17.4 Rights
  - 17.5 No Warranties
  - 17.6 Standard of Care
  - 17.7 Order of Disclosure
  - 17.8 Termination of Interconnection Service Agreement
  - 17.9 Remedies
  - 17.10 Disclosure to FERC or its Staff
  - 17.11 No Interconnection Party Shall Disclose Confidential Information
  - 17.12 Information that is Public Domain
  - 17.13 Return or Destruction of Confidential Information
- 18 Subcontractors**
  - 18.1 Use of Subcontractors
  - 18.2 Responsibility of Principal
  - 18.3 Indemnification by Subcontractors
  - 18.4 Subcontractors Not Beneficiaries
- 19 Information Access And Audit Rights**
  - 19.1 Information Access
  - 19.2 Reporting of Non-Force Majeure Events
  - 19.3 Audit Rights
- 20 Disputes**
  - 20.1 Submission
  - 20.2 Rights Under The Federal Power Act
  - 20.3 Equitable Remedies
- 21 Notices**
  - 21.1 General
  - 21.2 Emergency Notices
  - 21.3 Operational Contacts
- 22 Miscellaneous**
  - 22.1 Regulatory Filing
  - 22.2 Waiver
  - 22.3 Amendments and Rights Under the Federal Power Act
  - 22.4 Binding Effect
  - 22.5 Regulatory Requirements
- 23 Representations And Warranties**
  - 23.1 General
- 24 Tax Liability**
  - 24.1 Safe Harbor Provisions

- 24.2. Tax Indemnity
- 24.3. Taxes Other Than Income Taxes
- 24.4. Income Tax Gross-Up
- 24.5. Tax Status

**ATTACHMENT O - SCHEDULE A**

**Customer Facility Location/Site Plan**

**ATTACHMENT O - SCHEDULE B**

**Single-Line Diagram**

**ATTACHMENT O - SCHEDULE C**

**List of Metering Equipment**

**ATTACHMENT O - SCHEDULE D**

**Applicable Technical Requirements and Standards**

**ATTACHMENT O - SCHEDULE E**

**Schedule of Charges**

**ATTACHMENT O - SCHEDULE F**

**Schedule of Non-Standard Terms & Conditions**

**ATTACHMENT O - SCHEDULE G**

**Interconnection Customer's Agreement to Conform with IRS Safe Harbor**

**Provisions for Non-Taxable Status**

**ATTACHMENT O - SCHEDULE H**

**Interconnection Requirements for a Wind Generation Facility**

**ATTACHMENT O - SCHEDULE I**

**Interconnection Specifications for an Energy Storage Resource**

**ATTACHMENT O - SCHEDULE J**

**Schedule of Terms and Conditions for Surplus Interconnection Service**

**ATTACHMENT O - SCHEDULE K**

**Requirements for Interconnection Service Below Full Electrical Generating Capability**

**ATTACHMENT O-1**

**Form of Interim Interconnection Service Agreement**

**ATTACHMENT O-2**

**Form of Network Upgrade Funding Agreement**

**ATTACHMENT P**

**Form of Interconnection Construction Service Agreement**

- 1.0 Parties
- 2.0 Authority
- 3.0 Customer Facility
- 4.0 Effective Date and Term
  - 4.1 Effective Date
  - 4.2 Term
  - 4.3 Survival
- 5.0 Construction Responsibility
- 6.0 [Reserved.]
- 7.0 Scope of Work
- 8.0 Schedule of Work
- 9.0 [Reserved.]

- 10.0 Notices
- 11.0 Waiver
- 12.0 Amendment
- 13.0 Incorporation Of Other Documents
- 14.0 Addendum of Interconnection Customer's Agreement  
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 15.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 16.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 17.0 Infrastructure Security of Electric System Equipment and Operations and Control  
Hardware and Software is Essential to Ensure Day-to-Day Reliability and  
Operational Security

## **ATTACHMENT P - APPENDIX 1 – DEFINITIONS**

## **ATTACHMENT P - APPENDIX 2 – STANDARD CONSTRUCTION TERMS AND CONDITIONS**

### **Preamble**

### **1 Facilitation by Transmission Provider**

### **2 Construction Obligations**

- 2.1 Interconnection Customer Obligations
- 2.2 Transmission Owner Interconnection Facilities and Merchant  
Network Upgrades
- 2.2A Scope of Applicable Technical Requirements and Standards
- 2.3 Construction By Interconnection Customer
- 2.4 Tax Liability
- 2.5 Safety
- 2.6 Construction-Related Access Rights
- 2.7 Coordination Among Constructing Parties

### **3 Schedule of Work**

- 3.1 Construction by Interconnection Customer
- 3.2 Construction by Interconnected Transmission Owner
  - 3.2.1 Standard Option
  - 3.2.2 Negotiated Contract Option
  - 3.2.3 Option to Build
- 3.3 Revisions to Schedule of Work
- 3.4 Suspension
  - 3.4.1 Costs
  - 3.4.2 Duration of Suspension
- 3.5 Right to Complete Transmission Owner Interconnection  
Facilities
- 3.6 Suspension of Work Upon Default
- 3.7 Construction Reports
- 3.8 Inspection and Testing of Completed Facilities
- 3.9 Energization of Completed Facilities
- 3.10 Interconnected Transmission Owner's Acceptance of  
Facilities Constructed by Interconnection Customer

### **4 Transmission Outages**

- 4.1 Outages; Coordination

- 5 Land Rights; Transfer of Title**
  - 5.1 Grant of Easements and Other Land Rights
  - 5.2 Construction of Facilities on Interconnection Customer Property
  - 5.3 Third Parties
  - 5.4 Documentation
  - 5.5 Transfer of Title to Certain Facilities Constructed By Interconnection Customer
  - 5.6 Liens
- 6 Warranties**
  - 6.1 Interconnection Customer Warranty
  - 6.2 Manufacturer Warranties
- 7 [Reserved.]**
- 8 [Reserved.]**
- 9 Security, Billing And Payments**
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10 Assignment**
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11 Insurance**
  - 11.1 Required Coverages For Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
  - 11.1A Required Coverages For Generation Resources of 20 Megawatts Or Less
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.3A No Limitation of Liability
  - 11.4 Self-Insurance
  - 11.5 Notices; Certificates of Insurance
  - 11.6 Subcontractor Insurance
  - 11.7 Reporting Incidents
- 12 Indemnity**
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing
  - 12.5 Limitation on Damages
  - 12.6 Limitation of Liability in Event of Breach
  - 12.7 Limited Liability in Emergency Conditions
- 13 Breach, Cure And Default**
  - 13.1 Breach



	13.2	Notice of Breach
	13.3	Cure and Default
	13.3.1	Cure of Breach
	13.4	Right to Compel Performance
	13.5	Remedies Cumulative
<b>14</b>		<b>Termination</b>
	14.1	Termination
	14.2	[Reserved.]
	14.3	Cancellation By Interconnection Customer
	14.4	Survival of Rights
<b>15</b>		<b>Force Majeure</b>
	15.1	Notice
	15.2	Duration of Force Majeure
	15.3	Obligation to Make Payments
	15.4	Definition of Force Majeure
<b>16</b>		<b>Subcontractors</b>
	16.1	Use of Subcontractors
	16.2	Responsibility of Principal
	16.3	Indemnification by Subcontractors
	16.4	Subcontractors Not Beneficiaries
<b>17</b>		<b>Confidentiality</b>
	17.1	Term
	17.2	Scope
	17.3	Release of Confidential Information
	17.4	Rights
	17.5	No Warranties
	17.6	Standard of Care
	17.7	Order of Disclosure
	17.8	Termination of Construction Service Agreement
	17.9	Remedies
	17.10	Disclosure to FERC or its Staff
	17.11	No Construction Party Shall Disclose Confidential Information of Another Construction Party 17.12 Information that is Public Domain
	17.13	Return or Destruction of Confidential Information
<b>18</b>		<b>Information Access And Audit Rights</b>
	18.1	Information Access
	18.2	Reporting of Non-Force Majeure Events
	18.3	Audit Rights
<b>19</b>		<b>Disputes</b>
	19.1	Submission
	19.2	Rights Under The Federal Power Act
	19.3	Equitable Remedies
<b>20</b>		<b>Notices</b>
	20.1	General
	20.2	Operational Contacts
<b>21</b>		<b>Miscellaneous</b>

21.1	Regulatory Filing
21.2	Waiver
21.3	Amendments and Rights under the Federal Power Act
21.4	Binding Effect
21.5	Regulatory Requirements
<b>22</b>	<b>Representations and Warranties</b>
22.1	General
<b>ATTACHMENT P - SCHEDULE A</b>	
	<b>Site Plan</b>
<b>ATTACHMENT P - SCHEDULE B</b>	
	<b>Single-Line Diagram of Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE C</b>	
	<b>Transmission Owner Interconnection Facilities to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE D</b>	
	<b>Transmission Owner Interconnection Facilities to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE E</b>	
	<b>Merchant Network Upgrades to be Built by Interconnected Transmission Owner</b>
<b>ATTACHMENT P - SCHEDULE F</b>	
	<b>Merchant Network Upgrades to be Built by Interconnection Customer Pursuant to Option to Build</b>
<b>ATTACHMENT P - SCHEDULE G</b>	
	<b>Customer Interconnection Facilities</b>
<b>ATTACHMENT P - SCHEDULE H</b>	
	<b>Negotiated Contract Option Terms</b>
<b>ATTACHMENT P - SCHEDULE I</b>	
	<b>Scope of Work</b>
<b>ATTACHMENT P - SCHEDULE J</b>	
	<b>Schedule of Work</b>
<b>ATTACHMENT P - SCHEDULE K</b>	
	<b>Applicable Technical Requirements and Standards</b>
<b>ATTACHMENT P - SCHEDULE L</b>	
	<b>Interconnection Customer's Agreement to Confirm with IRS Safe Harbor Provisions For Non-Taxable Status</b>
<b>ATTACHMENT P - SCHEDULE M</b>	
	<b>Schedule of Non-Standard Terms and Conditions</b>
<b>ATTACHMENT P - SCHEDULE N</b>	
	<b>Interconnection Requirements for a Wind Generation Facility</b>
<b>ATTACHMENT Q</b>	
	<b>PJM Credit Policy</b>
<b>ATTACHMENT R</b>	
	<b>Lost Revenues Of PJM Transmission Owners And Distribution of Revenues Remitted By MISO, SECA Rates to Collect PJM Transmission Owner Lost Revenues Under Attachment X, And Revenues From PJM Existing Transactions</b>
<b>ATTACHMENT S</b>	

**Form of Transmission Interconnection Feasibility Study Agreement**  
**ATTACHMENT T**  
**Identification of Merchant Transmission Facilities**  
**ATTACHMENT U**  
**Independent Transmission Companies**  
**ATTACHMENT V**  
**Form of ITC Agreement**  
**ATTACHMENT W**  
**COMMONWEALTH EDISON COMPANY**  
**ATTACHMENT X**  
**Seams Elimination Cost Assignment Charges**  
**NOTICE OF ADOPTION OF NERC TRANSMISSION LOADING RELIEF**  
**PROCEDURES**  
**NOTICE OF ADOPTION OF LOCAL TRANSMISSION LOADING RELIEF**  
**PROCEDURES**  
**SCHEDULE OF PARTIES ADOPTING LOCAL TRANSMISSION LOADING**  
**RELIEF PROCEDURES**  
**ATTACHMENT Y**  
**Forms of Screens Process Interconnection Request (For Generation Facilities of 2**  
**MW or less)**  
**ATTACHMENT Z**  
**Certification Codes and Standards**  
**ATTACHMENT AA**  
**Certification of Small Generator Equipment Packages**  
**ATTACHMENT BB**  
**Form of Certified Inverter-Based Generating Facility No Larger Than 10 kW**  
**Interconnection Service Agreement**  
**ATTACHMENT CC**  
**Form of Certificate of Completion**  
**(Small Generating Inverter Facility No Larger Than 10 kW)**  
**ATTACHMENT DD**  
**Reliability Pricing Model**  
**ATTACHMENT EE**  
**Form of Upgrade Request**  
**ATTACHMENT FF**  
**[Reserved]**  
**ATTACHMENT GG**  
**Form of Upgrade Construction Service Agreement**  
**Article 1 – Definitions And Other Documents**  
    1.0     Defined Terms  
    1.1     Incorporation of Other Documents  
**Article 2 – Responsibility for Direct Assignment Facilities or Customer-Funded**  
**Upgrades**  
    2.0     New Service Customer Financial Responsibilities  
    2.1     Obligation to Provide Security  
    2.2     Failure to Provide Security

- 2.3 Costs
- 2.4 Transmission Owner Responsibilities
- Article 3 – Rights To Transmission Service
  - 3.0 No Transmission Service
- Article 4 – Early Termination
  - 4.0 Termination by New Service Customer
- Article 5 – Rights
  - 5.0 Rights
    - 5.1 Amount of Rights Granted
    - 5.2 Availability of Rights Granted
    - 5.3 Credits
- Article 6 – Miscellaneous
  - 6.0 Notices
  - 6.1 Waiver
  - 6.2 Amendment
  - 6.3 No Partnership
  - 6.4 Counterparts

**ATTACHMENT GG - APPENDIX I –**

**SCOPE AND SCHEDULE OF WORK FOR DIRECT ASSIGNMENT  
FACILITIES OR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY  
TRANSMISSION OWNER**

**ATTACHMENT GG - APPENDIX II - DEFINITIONS**

- 1 Definitions
  - 1.1 Affiliate
  - 1.2 Applicable Laws and Regulations
  - 1.3 Applicable Regional Reliability Council
  - 1.4 Applicable Standards
  - 1.5 Breach
  - 1.6 Breaching Party
  - 1.7 Cancellation Costs
  - 1.8 Commission
  - 1.9 Confidential Information
  - 1.10 Constructing Entity
  - 1.11 Control Area
  - 1.12 Costs
  - 1.13 Default
  - 1.14 Delivering Party
  - 1.15 Emergency Condition
  - 1.16 Environmental Laws
  - 1.17 Facilities Study
  - 1.18 Federal Power Act
  - 1.19 FERC
  - 1.20 Firm Point-To-Point
  - 1.21 Force Majeure
  - 1.22 Good Utility Practice
  - 1.23 Governmental Authority

- 1.24 Hazardous Substances
- 1.25 Incidental Expenses
- 1.26 Local Upgrades
- 1.27 Long-Term Firm Point-To-Point Transmission Service
- 1.28 MAAC
- 1.29 MAAC Control Zone
- 1.30 NERC
- 1.31 Network Upgrades
- 1.32 Office of the Interconnection
- 1.33 Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement
- 1.34 Part I
- 1.35 Part II
- 1.36 Part III
- 1.37 Part IV
- 1.38 Part VI
- 1.39 PJM Interchange Energy Market
- 1.40 PJM Manuals
- 1.41 PJM Region
- 1.42 PJM West Region
- 1.43 Point(s) of Delivery
- 1.44 Point(s) of Receipt
- 1.45 Project Financing
- 1.46 Project Finance Entity
- 1.47 Reasonable Efforts
- 1.48 Receiving Party
- 1.49 Regional Transmission Expansion Plan
- 1.50 Schedule and Scope of Work
- 1.51 Security
- 1.52 Service Agreement
- 1.53 State
- 1.54 Transmission System
- 1.55 VACAR

#### **ATTACHMENT GG - APPENDIX III – GENERAL TERMS AND CONDITIONS**

- 1.0 Effective Date and Term
  - 1.1 Effective Date
  - 1.2 Term
  - 1.3 Survival
- 2.0 Facilitation by Transmission Provider
- 3.0 Construction Obligations
  - 3.1 Direct Assignment Facilities or Customer-Funded Upgrades
  - 3.2 Scope of Applicable Technical Requirements and Standards
- 4.0 Tax Liability
  - 4.1 New Service Customer Payments Taxable
  - 4.2 Income Tax Gross-Up
  - 4.3 Private Letter Ruling

- 4.4 Refund
  - 4.5 Contests
  - 4.6 Taxes Other Than Income Taxes
  - 4.7 Tax Status
- 5.0 Safety
  - 5.1 General
  - 5.2 Environmental Releases
- 6.0 Schedule Of Work
  - 6.1 Standard Option
  - 6.2 Option to Build
  - 6.3 Revisions to Schedule and Scope of Work
  - 6.4 Suspension
- 7.0 Suspension of Work Upon Default
  - 7.1 Notification and Correction of Defects
- 8.0 Transmission Outages
  - 8.1 Outages; Coordination
- 9.0 Security, Billing and Payments
  - 9.1 Adjustments to Security
  - 9.2 Invoice
  - 9.3 Final Invoice
  - 9.4 Disputes
  - 9.5 Interest
  - 9.6 No Waiver
- 10.0 Assignment
  - 10.1 Assignment with Prior Consent
  - 10.2 Assignment Without Prior Consent
  - 10.3 Successors and Assigns
- 11.0 Insurance
  - 11.1 Required Coverages
  - 11.2 Additional Insureds
  - 11.3 Other Required Terms
  - 11.4 No Limitation of Liability
  - 11.5 Self-Insurance
  - 11.6 Notices: Certificates of Insurance
  - 11.7 Subcontractor Insurance
  - 11.8 Reporting Incidents
- 12.0 Indemnity
  - 12.1 Indemnity
  - 12.2 Indemnity Procedures
  - 12.3 Indemnified Person
  - 12.4 Amount Owing
  - 12.5 Limitation on Damages
  - 12.6 Limitation of Liability in Event of Breach
  - 12.7 Limited Liability in Emergency Conditions
- 13.0 Breach, Cure And Default
  - 13.1 Breach

- 13.2 Notice of Breach
- 13.3 Cure and Default
- 13.4 Right to Compel Performance
- 13.5 Remedies Cumulative
- 14.0 Termination
  - 14.1 Termination
  - 14.2 Cancellation By New Service Customer
  - 14.3 Survival of Rights
  - 14.4 Filing at FERC
- 15.0 Force Majeure
  - 15.1 Notice
  - 15.2 Duration of Force Majeure
  - 15.3 Obligation to Make Payments
- 16.0 Confidentiality
  - 16.1 Term
  - 16.2 Scope
  - 16.3 Release of Confidential Information
  - 16.4 Rights
  - 16.5 No Warranties
  - 16.6 Standard of Care
  - 16.7 Order of Disclosure
  - 16.8 Termination of Upgrade Construction Service Agreement
  - 16.9 Remedies
  - 16.10 Disclosure to FERC or its Staff
  - 16.11 No Party Shall Disclose Confidential Information of Party 16.12  
Information that is Public Domain
  - 16.13 Return or Destruction of Confidential Information
- 17.0 Information Access And Audit Rights
  - 17.1 Information Access
  - 17.2 Reporting of Non-Force Majeure Events
  - 17.3 Audit Rights
  - 17.4 Waiver
  - 17.5 Amendments and Rights under the Federal Power Act
  - 17.6 Regulatory Requirements
- 18.0 Representation and Warranties
  - 18.1 General
- 19.0 Inspection and Testing of Completed Facilities
  - 19.1 Coordination
  - 19.2 Inspection and Testing
  - 19.3 Review of Inspection and Testing by Transmission Owner
  - 19.4 Notification and Correction of Defects
  - 19.5 Notification of Results
- 20.0 Energization of Completed Facilities
- 21.0 Transmission Owner's Acceptance of Facilities Constructed  
by New Service Customer
- 22.0 Transfer of Title to Certain Facilities Constructed By New Service Customer

23.0 Liens

**ATTACHMENT HH – RATES, TERMS, AND CONDITIONS OF SERVICE FOR PJMSETTLEMENT, INC.**

**ATTACHMENT II – MTEP PROJECT COST RECOVERY FOR ATSI ZONE**

**ATTACHMENT JJ – MTEP PROJECT COST RECOVERY FOR DEOK ZONE**

**ATTACHMENT KK - FORM OF DESIGNATED ENTITY AGREEMENT**

**ATTACHMENT LL - FORM OF INTERCONNECTION COORDINATION AGREEMENT**

**ATTACHMENT MM – FORM OF PSEUDO-TIE AGREEMENT – WITH NATIVE BA AS PARTY**

**ATTACHMENT MM-1 – FORM OF SYSTEM MODIFICATION COST REIMBURSEMENT AGREEMENT – PSEUDO-TIE INTO PJM**

**ATTACHMENT NN – FORM OF PSEUDO-TIE AGREEMENT WITHOUT NATIVE BA AS PARTY**

**ATTACHMENT OO – FORM OF DYNAMIC SCHEDULE AGREEMENT INTO THE PJM REGION**

**ATTACHMENT PP – FORM OF FIRM TRANSMISSION FEASIBILITY STUDY AGREEMENT**



**Tariff, Part VIII**  
**NEW RULES**  
**GENERATION INTERCONNECTION PROCEDURE**

**Tariff, Part VIII, Subpart A**  
**INTRODUCTION**

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions**

For purposes of these Generation Interconnection Procedures and any agreement set forth in Tariff, Part IX, in the event of a conflict between the definitions set forth herein and the definitions set forth in Tariff, Part I, the definitions set forth in these Generation Interconnection Procedures shall control.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions A**

**Abnormal Condition:**

“Abnormal Condition” shall mean any condition on the Interconnection Facilities which, determined in accordance with Good Utility Practice, is: (i) outside normal operating parameters such that facilities are operating outside their normal ratings or that reasonable operating limits have been exceeded; and (ii) could reasonably be expected to materially and adversely affect the safe and reliable operation of the Interconnection Facilities; but which, in any case, could reasonably be expected to result in an Emergency Condition. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not, standing alone, constitute an Abnormal Condition.

**Affected System:**

“Affected System” shall mean an electric system other than the Transmission Provider’s Transmission System that may be affected by a proposed interconnection or on which a proposed interconnection or addition of facilities or upgrades may require modifications or upgrades to the Transmission System.

**Affected System Customer**

“Affected System Customer” shall mean the developer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider’s Transmission System,

**Affected System Facility**

“Affected System Facility” shall mean a new, expanded or upgraded generation or transmission facility outside of Transmission Provider’s Transmission System, the effect of which requires Network Upgrades to Transmission Provider’s Transmission System.

**Affected System Operator**

“Affected System Operator” shall mean an entity that operates an Affected System or, if the Affected System is under the operational control of an independent system operator or a regional transmission organization, such independent entity.

**Affected System Study Agreement**

“Affected System Study Agreement” shall mean the agreement set forth in Tariff, Part IX, Subpart N.

**Affiliate:**

“Affiliate” shall mean any two or more entities, one of which Controls the other or that are under common Control. “Control,” as that term is used in this definition, shall mean the possession, directly or indirectly, of the power to direct the management or policies of an entity. Ownership of publicly-traded equity securities of another entity shall not result in Control or affiliation for purposes of the Tariff or Operating Agreement if the securities are held as an investment, the holder owns (in its name or via intermediaries) less than 10 percent of the outstanding securities of the entity, the holder does not have representation on the entity’s board of directors (or equivalent managing entity) or vice versa, and the holder does not in fact exercise influence over day-to-day management decisions. Unless the contrary is demonstrated to the satisfaction of the Members Committee, Control shall be presumed to arise from the ownership of or the power to vote, directly or indirectly, 10 percent or more of the voting securities of such entity.

**Ancillary Services:**

“Ancillary Services” shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider’s Transmission System in accordance with Good Utility Practice.

**Applicable Laws and Regulations:**

“Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the relevant parties, their respective facilities, and/or the respective services they provide.

**Applicable Regional Entity:**

“Applicable Regional Entity” shall mean the Regional Entity for the region in which a Network Customer, Transmission Customer, Project Developer, Eligible Customer, or Transmission Owner operates.

**Applicable Standards:**

“Applicable Standards” shall mean the requirements and guidelines of NERC, the Applicable Regional Entity, the Control Area in which the Generating Facility or Merchant Transmission Facility is electrically located and the Transmission Owner FERC Form No. 715 – Annual Transmission Planning and Evaluation Report for each Applicable Regional Entity; the PJM Manuals; and Applicable Technical Requirements and Standards.

**Applicable Technical Requirements and Standards:**

“Applicable Technical Requirements and Standards” shall mean those certain technical requirements and standards applicable to interconnections of generation and/or transmission facilities with the facilities of an Transmission Owner or, as the case may be and to the extent applicable, of an Electric Distributor, as published by Transmission Provider in a PJM Manual.

All Applicable Technical Requirements and Standards shall be publicly available through postings on Transmission Provider's internet website.

**Application and Studies Agreement:**

"Application and Studies Agreement" shall mean the application that must be submitted by a Project Developer or Eligible Customer that seeks to initiate a New Service Request, a form of which is set forth in Tariff, Part VIII, Subpart A. An Application and Studies Agreement must be submitted electronically through PJM's web site in accordance with PJM's Manuals.

**Application Deadline:**

"Application Deadline" shall mean the Cycle deadline for submitting a Completed New Service Request, as set forth in Tariff, Part VIII, Subpart B, section 403(A). If Project Developer's or Eligible Customer's Completed New Service Request is received by Transmission Provider after a particular Cycle deadline, such Completed New Service Request shall automatically be considered as part of the immediate subsequent Cycle.

**Application Phase:**

"Application Phase" shall mean the Cycle period encompassing both the submission and review of New Service Requests as set forth in Tariff, Part VIII, Subpart B, subsections 403(A) and (B).

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions B**

**Behind The Meter Generation:**

“Behind The Meter Generation” shall refer to a generation unit that delivers energy to load without using the Transmission System or any distribution facilities (unless the entity that owns or leases the distribution facilities has consented to such use of the distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection); provided, however, that Behind The Meter Generation does not include (i) at any time, any portion of such generating unit’s capacity that is designated as a Generation Capacity Resource; or (ii) in an hour, any portion of the output of such generating unit that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy Market.

**Breach:**

“Breach” shall mean the failure of a party to perform or observe any material term or condition of the Tariff, Part VIII, or any agreement entered into thereunder as described in the relevant provisions of such agreement.

**Breaching Party:**

“Breaching Party” shall mean a party that is in Breach of the Tariff, Part VIII and/or an agreement entered into thereunder.

**Business Day:**

“Business Day” shall mean a day ending at 5 pm Eastern prevailing time in which the Federal Reserve System is open for business and is not a scheduled PJM holiday.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions C**

**Cancellation Costs:**

“Cancellation Costs” shall mean costs and liabilities incurred in connection with: (a) cancellation of supplier and contractor written orders and agreements entered into to design, construct and install Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, and/or (b) completion of some or all of the required Transmission Owner Interconnection Facilities, and/or Customer-Funded Upgrades, or specific unfinished portions and/or removal of any or all of such facilities which have been installed, to the extent required for the Transmission Provider and/or Transmission Owner(s) to perform their respective obligations under the Tariff, Part VIII. Cancellation costs may include costs for Customer-Funded Upgrades assigned to Project Developer or Eligible Customer, in accordance with the Tariff and as reflected in this GIA, that remain the responsibility of Project Developer or Eligible Customer under the Tariff, even if such New Service Request is terminated or withdrawn.

**Capacity:**

“Capacity” shall mean the installed capacity requirement of the Reliability Assurance Agreement or similar such requirements as may be established.

**Capacity Interconnection Rights:**

“Capacity Interconnection Rights” shall mean the rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection.

**Capacity Resource:**

“Capacity Resource” shall have the meaning provided in the Reliability Assurance Agreement.

**Commencement Date:**

“Commencement Date” shall mean the date on which Interconnection Service commences in accordance with a Generation Interconnection Agreement.

**Common Use Upgrade:**

“Common Use Upgrade” or “CUU” shall mean a Network Upgrade that is needed for the interconnection of Generating Facilities or Merchant Transmission Facilities of more than one Project Developer or Eligible Customer and which is the shared responsibility of each Project Developer or Eligible Customer.

**Completed Application:**



“Completed Application” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

**Completed New Service Request:**

“Completed New Service Request” shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit(s). A Completed New Service Request, if accepted upon review, shall become a valid New Service Request.

**Confidential Information:**

“Confidential Information” shall mean any confidential, proprietary, or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy, or compilation relating to the present or planned business of a Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party, which is designated as confidential by the party supplying the information, whether conveyed verbally, electronically, in writing, through inspection, or otherwise, and shall include, without limitation, all information relating to the producing party’s technology, research and development, business affairs and pricing, and any information supplied by any Project Developer, Eligible Customer, Transmission Owner, or other Interconnection Party or Construction Party to another such party prior to the execution of an Generation Interconnection Agreement or a Construction Service Agreement.

**Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:**

“Consolidated Transmission Owners Agreement,” “PJM Transmission Owners Agreement” or “Transmission Owners Agreement” shall mean the certain Consolidated Transmission Owners Agreement dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

**Constructing Entity:**

“Constructing Entity” shall mean either the Transmission Owner, Project Developer, Eligible Customer, or Affected System Customer, depending on which entity has the construction responsibility pursuant to the Tariff, Part VIII and the applicable GIA or Construction Service Agreement; this term shall also be used to refer to a Project Developer or Eligible Customer with respect to the construction of the Interconnection Facilities.

**Construction Party:**

“Construction Party” shall mean a party to a Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or a party to a GIA that requires activities pursuant to a GIA.

**Construction Service Agreement:**

“Construction Service Agreement” shall mean either an Interconnection Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

**Contingent Facilities:**

“Contingent Facilities” shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Control Area:**

“Control Area” shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common automatic generation control scheme is applied in order to:

- (1) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
- (2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
- (3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and
- (4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Controllable A.C. Merchant Transmission Facilities:**

“Controllable A.C. Merchant Transmission Facilities” shall mean transmission facilities that (1) employ technology which Transmission Provider reviews and verifies will permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were direct current transmission facilities, and (2) that are interconnected with the Transmission System pursuant to the Tariff, Part VIII.

**Cost Responsibility Agreement:**

“Cost Responsibility Agreement” shall mean a form of agreement between Transmission Provider and a Project Developer with an existing generating facility, intended to provide the terms and conditions for the Transmission Provider to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner. A form of the Cost Responsibility Agreement is set forth in Tariff, Part IX, Subpart F.

**Costs:**

As used in the Tariff, Part VIII and related agreements and attachments, “Costs” shall mean costs and expenses, as estimated or calculated, as applicable, including, but not limited to, capital expenditures, if applicable, and overhead, return, and the costs of financing and taxes and any Incidental Expenses.

**Customer-Funded Upgrade:**

“Customer-Funded Upgrade” shall mean any Network Upgrade, Distribution Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on a Project Developer or Eligible Customer pursuant to Tariff, Part VIII, Subpart C, section 404(A)(5), or (ii) is voluntarily undertaken by an Upgrade Customer in fulfillment of an Upgrade Request. No Network Upgrade, Distribution Upgrade or Merchant Network Upgrade or other transmission expansion or enhancement shall be a Customer-Funded Upgrade if and to the extent that the costs thereof are included in the rate base of a public utility on which a regulated return is earned.

**Cycle:**

“Cycle” shall mean that period of time between the start of an Application phase and conclusion of the corresponding Final Agreement Negotiation Phase. The Cycle consists of the Application Phase, Phase I, Decision Point I, Phase II, Decision Point II, Phase III, Decision Point III, and the Final Agreement Negotiation Phase.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions D**

**Decision Point I:**

“Decision Point I” shall mean the time period that commences on the first Business Day immediately following Phase I of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point II:**

“Decision Point II” shall mean the time period that commences on the first Business Day immediately following Phase II of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Decision Point III:**

“Decision Point III” shall mean the time period that commences on the first Business Day immediately following Phase III of a Cycle, and shall end within 30 calendar days; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day.

**Default:**

As used in the Generation Interconnection Agreement, Construction Service Agreement, and Network Upgrade Cost Responsibility Agreement, “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with the applicable provisions of a Generation Interconnection Agreement, Construction Service Agreement, or Network Upgrade Cost Responsibility Agreement.

**Distribution System:**

“Distribution System” shall mean the Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades:**

“Distribution Upgrades” shall mean the additions, modifications, and upgrades to the Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the delivery service necessary to affect Project Developer’s wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions E**

**Eligible Customer:**

“Eligible Customer” shall mean:

(i) Any electric utility (including any Transmission Owner and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner.

(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff. As used in Tariff, Part VIII, Eligible Customer shall mean only those Eligible Customers that have submitted an Application and Study Agreement.

**Emergency Condition:**

“Emergency Condition” shall mean a condition or situation (i) that in the judgment of any Interconnection Party is imminently likely to endanger life or property; or (ii) that in the judgment of the Transmission Owner or Transmission Provider is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Transmission System, the Interconnection Facilities, or the transmission systems or distribution systems to which the Transmission System is directly or indirectly connected; or (iii) that in the judgment of Project Developer is imminently likely (as determined in a non-discriminatory manner) to cause damage to the Generating Facility or to the Project Developer Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions, provided that a Generation Project Developer is not obligated by a Generation Interconnection Agreement to possess black start capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one or more of the enumerated conditions or situations identified in this definition also exists.

**Energy Resource:**

“Energy Resource” shall mean a Generating Facility that is not a Capacity Resource.

**Energy Storage Resource:**

“Energy Storage Resource” shall mean a resource capable of receiving electric energy from the grid and storing it for later injection to the grid that participates in the PJM Energy, Capacity and/or Ancillary Services markets as a Market Participant

**Engineering and Procurement Agreement:**

“Engineering and Procurement Agreement” shall mean an agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request. An Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. A form of the Engineering and Procurement Agreement is set forth in Tariff, Part IX, Subpart D. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions F**

**Facilities Study:**

"Facilities Study" shall be an engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to: (1) determine the required modifications to the Transmission Provider's Transmission System necessary to implement the conclusions of the System Impact Studies; and (2) complete any additional studies or analyses documented in the System Impact Studies or required by PJM Manuals, and determine the required modifications to the Transmission Provider's Transmission System based on the conclusions of such additional studies.

**Federal Power Act:**

"Federal Power Act" shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a, et seq.

**FERC or Commission:**

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

**Final Agreement Negotiation Phase:**

"Final Agreement Negotiation Phase" shall mean the phase set forth in Tariff, Part VIII, Subpart D, section 411 to tender, negotiate, and execute any service agreement in Tariff, Part IX.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions G**

**Generating Facility:**

“Generating Facility” shall mean Project Developer’s device for the production and/or storage for later injection of electricity identified in the New Service Request, but shall not include the Project Developer’s Interconnection Facilities. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**Generation Interconnection Agreement (“GIA”):**

“Generation Interconnection Agreement” (“GIA”) shall mean the form of interconnection agreement applicable to a Generation Interconnection Request or Transmission Interconnection Request. A form of the GIA is set forth in Tariff, Part IX, Subpart B.

**Generation Interconnection Procedures (“GIP”):**

“Generation Interconnection Procedures” (“GIP”) shall mean the interconnection procedures set forth in Tariff, Part VIII.

**Generation Interconnection Request:**

“Generation Interconnection Request” shall mean a request by a Generation Project Developer pursuant to Tariff, Part VIII, Subpart B, section 403(A)(1), to interconnect a generating unit with the Transmission System or to increase the capacity of a generating unit interconnected with the Transmission System in the PJM Region.

**Generation Project Developer:**

“Generation Project Developer” shall mean an entity that submits a Generation Interconnection Request to interconnect a new generation facility or to increase the capacity of an existing generation facility interconnected with the Transmission System in the PJM Region.

**Good Utility Practice:**

“Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act, section 215(a)(4).



**Governmental Authority:**

“Governmental Authority” shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, arbitrating body, or other governmental authority having jurisdiction over any Interconnection Party or Construction Party or regarding any matter relating to a Generation Interconnection Agreement or Construction Service Agreement, as applicable.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions H**

**Hazardous Substances:**

“Hazardous Substance” shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions I**

**Incidental Expenses:**

“Incidental Expenses” shall mean those expenses incidental to the performance of construction pursuant to an Interconnection Construction Service Agreement, including, but not limited to, the expense of temporary construction power, telecommunications charges, Interconnected Transmission Owner expenses associated with, but not limited to, document preparation, design review, installation, monitoring, and construction-related operations and maintenance for the Customer Facility and for the Interconnection Facilities.

**Incremental Auction Revenue Rights:**

“Incremental Auction Revenue Rights” shall mean the additional Auction Revenue Rights, not previously feasible, created by the addition of Incremental Rights-Eligible Required Transmission Enhancements, Merchant Transmission Facilities, or of one or more Customer-Funded Upgrades.

**Incremental Capacity Transfer Rights:**

“Incremental Capacity Transfer Right” shall mean a Capacity Transfer Right allocated to a Generation Project Developer or Transmission Project Developer obligated to fund a transmission facility or upgrade, to the extent such upgrade or facility increases the transmission import capability into a Locational Deliverability Area, or a Capacity Transfer Right allocated to a Responsible Customer in accordance with Tariff, Schedule 12A.

**Incremental Deliverability Rights (IDRs):**

“Incremental Deliverability Rights” (“IDR”) shall mean the rights to the incremental ability, resulting from the addition of Merchant Transmission Facilities, to inject energy and capacity at a point on the Transmission System, such that the injection satisfies the deliverability requirements of a Capacity Resource. Incremental Deliverability Rights may be obtained by a generator or a Generation Project Developer, pursuant to an IDR Transfer Agreement, to satisfy, in part, the deliverability requirements necessary to obtain Capacity Interconnection Rights.

**Initial Operation:**

“Initial Operation” shall mean the commencement of operation of the Generating Facility and Project Developer Interconnection Facilities after satisfaction of the conditions of Tariff, Part IX, Subpart B, Appendix 2, section 1.4.

**Interconnected Entity:**

“Interconnected Entity” shall mean either the Project Developer or the Transmission Owner; Interconnected Entities shall mean both of them.

**Interconnection Construction Service Agreement:**

“Interconnection Construction Service Agreement” shall mean the agreement entered into by an Project Developer, Transmission Owner and the Transmission Provider pursuant to this Tariff, Part VIII in the form set forth in Tariff, Part IX, Subpart J or Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades, Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades and/or Transmission Owner Interconnection Facilities and coordination of the construction and interconnection of an associated Generating Facility.

**Interconnection Facilities:**

“Interconnection Facilities” shall mean the Transmission Owner’s Interconnection Facilities and the Project Developer’s Interconnection Facilities. Collectively Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modifications, additions, or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades, or Network Upgrades.

**Interconnection Party:**

“Interconnection Party” shall mean a Transmission Provider, Project Developer, or the Transmission Owner. Interconnection Parties shall mean all of them.

**Interconnection Request:**

“Interconnection Request” shall mean a Generation Interconnection Request, a Transmission Interconnection Request and/or an IDR Transfer Agreement.

**Interconnection Service:**

“Interconnection Service” shall mean the physical and electrical interconnection of the Generating Facility with the Transmission System pursuant to the terms of this Tariff, Part VIII and the Generation Interconnection Agreement entered into pursuant thereto by Project Developer, the Transmission Owner and Transmission Provider.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions L**

**List of Approved Contractors:**

“List of Approved Contractors” shall mean a list developed by each Transmission Owner and published in a PJM Manual of (a) contractors that the Transmission Owner considers to be qualified to install or construct new facilities and/or upgrades or modifications to existing facilities on the Transmission Owner’s system, provided that such contractors may include, but need not be limited to, contractors that, in addition to providing construction services, also provide design and/or other construction-related services, and (b) manufacturers or vendors of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) whose products the Transmission Owner considers acceptable for installation and use on its system.

**Load Serving Entity (LSE):**

“Load Serving Entity” or “LSE” shall have the meaning specified in the Reliability Assurance Agreement.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions M**

**Material Modification:**

“Material Modification” shall mean, as determined through a Necessary Study, any modification to a Generation Interconnection Agreement that has a material adverse effect on the cost or timing of Interconnection Studies related to, or any Distribution Upgrades, Network Upgrades, Stand Alone Network Upgrades or Transmission Owner Interconnection Facilities needed to accommodate, any Interconnection Request with a later Cycle.

**Maximum Facility Output:**

“Maximum Facility Output” shall mean the maximum (not nominal) net electrical power output in megawatts, specified in the Generation Interconnection Agreement, after supply of any parasitic or host facility loads, that a Generation Project Developer’s Generating Facility is expected to produce, provided that the specified Maximum Facility Output shall not exceed the output of the proposed Generating Facility that Transmission Provider utilized in the System Impact Study.

**Maximum State of Charge:**

“Maximum State of Charge” shall mean the maximum State of Charge that should not be exceeded, measured in units of megawatt-hours.

**Merchant A.C. Transmission Facilities:**

“Merchant A.C. Transmission Facility” shall mean Merchant Transmission Facilities that are alternating current (A.C.) transmission facilities, other than those that are Controllable A.C. Merchant Transmission Facilities.

**Merchant D.C. Transmission Facilities:**

“Merchant D.C. Transmission Facilities” shall mean direct current (D.C.) transmission facilities that are interconnected with the Transmission System pursuant to the Tariff.

**Merchant Network Upgrades:**

“Merchant Network Upgrades” shall mean additions to, or modifications or replacements of, or advancement of additions to, or modifications or replacement of, physical facilities of the Transmission Owner that, on the date of the pertinent Upgrade Customer’s Upgrade Request, are part of the Transmission System or are included in the Regional Transmission Expansion Plan, but that are not already subject to an already existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.

**Merchant Transmission Facilities:**

“Merchant Transmission Facilities” shall mean A.C. or D.C. transmission facilities that are interconnected with or added to the Transmission System pursuant to the Tariff, Part VIII and that are so identified in Tariff, Attachment T, provided, however, that Merchant Transmission Facilities shall not include (i) any Project Developer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20, 2003 ; (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Tariff, Attachment T, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.

**Merchant Transmission Provider:**

“Merchant Transmission Provider” shall mean an Project Developer that (1) owns, controls, or controls the rights to use the transmission capability of, Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area, (2) has elected to receive Transmission Injection Rights and Transmission Withdrawal Rights associated with such facility pursuant to this Tariff, Part VIII, Subpart E, section 428, and (3) makes (or will make) the transmission capability of such facilities available for use by third parties under terms and conditions approved by the Commission and stated in the Tariff, consistent with Tariff, Part VIII, Subpart E, section 417.

**Metering Equipment:**

“Metering Equipment” shall mean all metering equipment installed at the metering points designated in the appropriate appendix to a Generation Interconnection Agreement.

**Minimum State of Charge:**

“Minimum State of Charge” shall mean the minimum State of Charge that should be maintained in units of megawatt-hours.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions N**

**NERC:**

“NERC” shall mean the North American Electric Reliability Corporation or any successor thereto.

**Necessary Study Agreement:**

“Necessary Study Agreement” shall mean the form of agreement for preparation of one or more Necessary Studies, as set forth in Tariff, Part IX, Subpart G.

**Necessary Study:**

“Necessary Study(ies)” shall mean the assessment(s) undertaken by the Transmission Provider to determine whether a planned modification under Appendix 2, section 3.4.1 of the GIA will have a permanent material impact on the Transmission System and to identify the additions, modifications, or replacements to the Transmission System, if any, that are necessary, in accordance with Good Utility Practice, and/or to maintain compliance with Applicable Laws and Regulations or Applicable Standards, to accommodate the planned modifications. A form of the Necessary Study Agreement is set forth in Tariff, Part IX, Subpart G.

**Network Upgrade Cost Responsibility Agreement:**

“Network Upgrade Cost Responsibility Agreement” shall mean the agreement entered into by the Project Developer Parties and the Transmission Provider pursuant to this GIP, and in the form set forth in Tariff, Part IX, Subpart H, relating to construction of Common Use Upgrades and coordination of the construction and interconnection of associated Generating Facilities. In regard to Common Use Upgrades, a separate Network Upgrade Cost Responsibility Agreement will be executed for each set of Common Use Upgrades on the system of a specific Transmission Owner that is associated with the interconnection of a Generating Facility.

**Network Upgrades:**

“Network Upgrades” shall mean modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System. Network Upgrades shall include Stand Alone Network Upgrades which are Network Upgrades that are not part of an Affected System; only serve the Generating Facility or Merchant Transmission Facility; and have no impact or potential impact on the Transmission System until the final tie-in is complete. Both Transmission Provider and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in the GIA, Schedule L or in the Interconnection Construction Service Agreement, Schedule D. If the Transmission Provider and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider must provide the Project Developer a written technical explanation outlining why the



Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**New Service Request:**

“New Service Request” shall mean an Interconnection Request or a Completed Application.

**Nominal Rated Capability:**

“Nominal Rated Capability” shall mean the nominal maximum rated capability in megawatts of a Transmission Project Developer’s Generating Facility or the nominal increase in transmission capability in megawatts of the Transmission System resulting from the interconnection or addition of a Transmission Project Developer’s Generating Facility, as determined in accordance with pertinent Applicable Standards and specified in the Generation Interconnection Agreement.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions O**

**Open Access Same-Time Information System (OASIS) or PJM Open Access Same-Time Information System:**

“Open Access Same-Time Information System,” “PJM Open Access Same-Time Information System” or “OASIS” shall mean the electronic communication and information system and standards of conduct contained in Part 37 and Part 38 of the Commission’s regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS for the collection and dissemination of information about transmission services in the PJM Region, established and operated by the Office of the Interconnection in accordance with FERC standards and requirements.

**Operating Agreement of the PJM Interconnection, L.L.C., Operating Agreement or PJM Operating Agreement:**

“Operating Agreement of the PJM Interconnection, L.L.C.,” “Operating Agreement” or “PJM Operating Agreement” shall mean the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. dated as of April 1, 1997 and as amended and restated as of June 2, 1997, including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time thereafter, among the Members of the PJM Interconnection, L.L.C., on file with the Commission.

**Option to Build:**

“Option to Build” shall mean the option of the Project Developer to build certain Stand Alone Network Upgrades, as set forth in, and subject to the terms of, the Construction Service Agreement.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions P**

**Part I:**

“Part I” shall mean the Tariff Definitions and Common Service Provisions contained in Tariff, Part I, sections 1 through 12A.

**Part II:**

“Part II” shall mean Tariff, Part II, sections 13 through 27A pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part III:**

“Part III” shall mean Tariff, Part III, sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part IV:**

“Part IV” shall mean Tariff, Part IV, sections 36 through 112C pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VI:**

“Part VI” shall mean Tariff, Part VI, sections 200 through 237 pertaining to the queuing, study, and agreements relating to New Service Requests, and the rights associated with Customer-Funded Upgrades in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VII:**

“Part VII” shall mean Tariff, Part VII, sections 300 through 337 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

**Part VIII:**

“Part VIII” shall mean Tariff, Part VIII, sections 400 through 435 pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the

applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

#### **Part IX:**

“Part IX” shall mean Tariff, Part IX, section 500 and Subparts A through L pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

#### **Parties:**

“Parties” shall mean the Transmission Provider, as administrator of the Tariff, and the Transmission Customer receiving service under the Tariff. PJMSettlement shall be the Counterparty to Transmission Customers.

#### **Permissible Technological Advancement:**

"Permissible Technological Advancement" shall mean a proposed technological change such as an advancement to turbines, inverters, plant supervisory controls or other similar advancements to the technology proposed in the Interconnection Request that is submitted to the Transmission Provider no later than the end of Decision Point II. Provided such change may not: (i) increase the capability of the Generating Facility or Merchant Transmission Facility as specified in the original Interconnection Request; (ii) represent a different fuel type from the original Interconnection Request; or (iii) cause any material adverse impact(s) on the Transmission System with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response. If the proposed technological advancement is a Permissible Technological Advancement, no additional study will be necessary and the proposed technological advancement will not be considered a Material Modification.

#### **Phase I**

“Phase I” shall start on the first Business Day immediately after the close of the Application Phase of a Cycle, but no earlier than 30 calendar days following the distribution of the Phase I System Impact Study Base Case Data. During Phase I, Transmission Provider shall conduct the Phase I System Impact Study.

#### **Phase I System Impact Study:**

“Phase I System Impact Study” shall mean System Impact Study conducted during the Phase I System Impact Study Phase.

#### **Phase II**

“Phase II” shall start on the first Business Day immediately after the close of Decision Point I Phase unless the Decision Point III of the immediately preceding Cycle is still open. In no event,

shall Phase II of a Cycle commence before the conclusion of Decision Point III of the immediately preceding Cycle. During Phase II, Transmission Provider shall conduct the Phase II System Impact Study.

**Phase II System Impact Study:**

“Phase II System Impact Study” shall mean System Impact Study conducted during the Phase II System Impact Study Phase.

**Phase III**

“Phase III” shall start on the first Business Day immediately after the close of Decision Point II, unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle. During Phase III, Transmission Provider shall conduct the Phase III System Impact Study.

**Phase III System Impact Study:**

“Phase III System Impact Study” shall mean System Impact Study conducted during Phase III.

**PJM:**

“PJM” shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

**PJM Manuals:**

“PJM Manuals” shall mean the instructions, rules, procedures and guidelines established by the Office of the Interconnection for the operation, planning, and accounting requirements of the PJM Region and the PJM Interchange Energy Market.

**PJM Region:**

“PJM Region” shall have the meaning specified in the Operating Agreement.

**PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:**

“PJM Tariff,” “Tariff,” “O.A.T.T.,” “OATT,” or “PJM Open Access Transmission Tariff” shall mean that certain PJM Open Access Transmission Tariff, including any schedules, appendices or exhibits attached thereto, on file with FERC and as amended from time to time thereafter.

**Point of Change in Ownership:**

“Point of Change in Ownership” shall mean the point, as set forth Schedule B of the Generation Interconnection Agreement, where the Project Developer’s Interconnection Facilities connect to the Transmission Owner’s Interconnection Facilities.

**Point of Interconnection:**

“Point of Interconnection” shall mean the point or points where the Interconnection Facilities connect with the Transmission System.

**Project Developer:**

“Project Developer” shall mean a Generation Project Developer and/or a Transmission Project Developer.

**Project Developer Interconnection Facilities:**

“Project Developer Interconnection Facilities” shall mean all facilities and equipment owned and/or controlled, operated and maintained by Project Developer on Project Developer’s side of the Point of Change of Ownership identified in the Schedule B of the Generation Interconnection Agreement, including any modifications, additions, or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System.

**Project Finance Entity:**

“Project Finance Entity” shall mean: (a) a holder, trustee or agent for holders, of any component of Project Financing; or (b) any purchaser of capacity and/or energy produced by the Generating Facility to which Project Developer has granted a mortgage or other lien as security for some or all of Project Developer’s obligations under the corresponding power purchase agreement.

**Provisional Interconnection Service:**

“Provisional Interconnection Service” shall mean interconnection service provided by Transmission Provider associated with interconnecting the Project Developer’s Generating Facility to Transmission Provider’s Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions Q**

**Qualifying Facility:**

“Qualifying Facility” shall mean means an electric energy generating facility that complies with the qualifying facility definition established by Public Utility Regulatory Policies Act (“PURPA”) and any FERC rules as amended from time to time (18 C.F.R. part 292, section 292.203 et seq.) implementing PURPA and, to the extent required to obtain or maintain Qualifying Facility status, is self-certified as a Qualifying Facility or is certified as a Qualified Facility by the FERC.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions R**

**Readiness Deposit:**

“Readiness Deposit” shall mean the deposit or deposits required by Tariff, Part VIII, Subpart A, section 401(D).

**Reasonable Efforts:**

“Reasonable Efforts” shall mean, with respect to any action required to be made, attempted, or taken by an Interconnection Party under the Tariff, Part VIII, a Generation Interconnection Agreement, or a Construction Service Agreement, such efforts as are timely and consistent with Good Utility Practice and with efforts that such party would undertake for the protection of its own interests.

**Regional Entity:**

“Regional Entity” shall have the same meaning specified in the Operating Agreement.

**Regional Transmission Expansion Plan:**

“Regional Transmission Expansion Plan” shall mean the plan prepared by the Office of the Interconnection pursuant to Operating Agreement, Schedule 6 for the enhancement and expansion of the Transmission System in order to meet the demands for firm transmission service in the PJM Region.

**Reliability Assurance Agreement or PJM Reliability Assurance Agreement:**

“Reliability Assurance Agreement” or “PJM Reliability Assurance Agreement” shall mean that certain Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, on file with FERC as PJM Interconnection L.L.C. Rate Schedule FERC No. 44, and as amended from time to time thereafter.



**Tariff, Part VIII, Subpart A, section 400**  
**Definitions S**

**Schedule of Work:**

“Schedule of Work” shall mean that Schedule of Work set forth in section 8.0 of a GIA, or Schedule of an ICSA, as applicable, setting forth the timing of work to be performed by the Constructing Entity(ies), based upon the System Impact Study(ies) and subject to modification, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Scope of Work:**

“Scope of Work” shall mean that scope of the work set forth in Specification section 3.0 of the GIA to be performed by the Constructing Entity(ies) pursuant to the Interconnection Construction Service Agreement, provided that such Scope of Work may be modified, as required, in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.

**Secondary Systems:**

“Secondary Systems” shall mean control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers.

**Security:**

“Security” shall mean the financial guaranty provided by the Project Developer, Eligible Customer or Upgrade Customer pursuant to Tariff, Part VIII, Subpart C, sections 406(A)(2) and (3), 408(A)(2)(d), and 410(A)(1) to secure the Project Developer’s, Eligible Customer’s or Upgrade Customer responsibility for Costs under an interconnection-related agreement set forth in Tariff, Part IX.

**Service Agreement:**

“Service Agreement” shall mean the initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

**Site:**

“Site” shall mean all of the real property including, but not limited to, any owned or leased real property, bodies of water and/or submerged land, and easements, or other forms of property rights acceptable to PJM, on which the Generating Facility or Merchant Transmission Facility is situated and/or on which the Project Developer Interconnection Facilities are to be located.

**Site Control:**

“Site Control” shall mean the evidentiary documentation provided by Project Developer in relation to a New Service Request demonstrating the requirements as set forth in the following Tariff, Part VIII, Subpart A, section 402, and Tariff, Part VIII, Subpart B, section 403, and Subpart C, sections 406 and 410.

**Stand Alone Network Upgrades:**

“Stand Alone Network Upgrades” shall mean Network Upgrades, which are not part of an Affected System, which a Project Developer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Project Developer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Specifications section 3.0 of Appendix L of the GIA. If the Transmission Provider or Transmission Owner and Project Developer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider or Transmission Owner that disagrees with the Project Developer must provide the Project Developer a written technical explanation outlining why the Transmission Provider or Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**State:**

“State” shall mean the District of Columbia and any State or Commonwealth of the United States.

**State of Charge:**

“State of Charge” shall mean the operating parameter that represents the quantity of physical energy stored (measured in units of megawatt-hours) in an Energy Storage Resource Model Participant in proportion to its maximum State of Charge capability. State of Charge is quantified as defined in the PJM Manuals.

**Station Power:**

“Station Power” shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility; (iii) used in association with restoration or black start service; or (iv) that is Direct Charging Energy.

**Study Deposit:**

“Study Deposit” shall mean the payment in the form of cash required to initiate and fund any study provided for in Tariff, Part VIII, Subpart A, section 401.

**Surplus Project Developer:**

“Surplus Project Developer” shall mean either a Project Developer whose Generating Facility is already interconnected to the PJM Transmission System or one of its affiliates, or an unaffiliated entity that submits a Surplus Interconnection Request to utilize Surplus Interconnection Service within the Transmission System in the PJM Region.

**Surplus Interconnection Request:**

“Surplus Interconnection Request” shall mean a request submitted by a Surplus Project Developer, pursuant to Tariff, Part VIII, Subpart E, section 414, to utilize Surplus Interconnection Service within the Transmission System in the PJM Region. A Surplus Interconnection Request is not a New Service Request.

**Surplus Interconnection Service:**

“Surplus Interconnection Service” shall mean any unneeded portion of Interconnection Service established in a Generation Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

**Switching and Tagging Rules:**

“Switching and Tagging Rules” shall mean the switching and tagging procedures of Transmission Owners and Project Developer as they may be amended from time to time.

**System Impact Study:**

“System Impact Study” shall mean an assessment(s) by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a New Service Request, (ii) whether any additional costs may be incurred in order to provide such transmission service or to accommodate a New Service Request, and (iii) an estimated date that the New Service Requests can be interconnected with the Transmission System and an estimate of the cost responsibility for the interconnection of the New Service Request; and (iv) with respect to an Upgrade Request, the estimated cost of the requested system upgrades or expansion, or of the cost of the system upgrades or expansion, necessary to provide the requested incremental rights.

**System Protection Facilities:**

“System Protection Facilities” shall refer to the equipment required to protect (i) the Transmission System, other delivery systems and/or other generating systems connected to the Transmission System from faults or other electrical disturbance occurring at or on the Generating Facility, and (ii) the Generating Facility from faults or other electrical system disturbance occurring on the Transmission System or on other delivery systems and/or other generating systems to which the Transmission System is directly or indirectly connected. System Protection Facilities shall include such protective and regulating devices as are identified in the Applicable Technical Requirements

and Standards or that are required by Applicable Laws and Regulations or other Applicable Standards, or as are otherwise necessary to protect personnel and equipment and to minimize deleterious effects to the Transmission System arising from the Generating Facility.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions T**

**Transmission Facilities:**

“Transmission Facilities” shall have the meaning set forth in the Operating Agreement.

**Transmission Injection Rights:**

“Transmission Injection Rights” shall mean Capacity Transmission Injection Rights and Energy Transmission Injection Rights.

**Transmission Interconnection Request:**

“Transmission Interconnection Request” shall mean a request by a Transmission Interconnection Project Developer pursuant to Tariff, Part VIII, Subpart B, section 403(A)(4) to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of existing Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

**Transmission Owner:**

“Transmission Owner” shall mean a Member that owns or leases with rights equivalent to ownership Transmission Facilities and is a signatory to the PJM Transmission Owners Agreement. Taking transmission service shall not be sufficient to qualify a Member as a Transmission Owner.

**Transmission Owner Interconnection Facilities:**

“Transmission Owner Interconnection Facilities” shall mean all Interconnection Facilities that are not Project Developer Interconnection Facilities and that, after the transfer under Appendix 2, section 23.3.5 of the GIA to the Transmission Owner of title to any Transmission Owner Interconnection Facilities that the Project Developer constructed, are owned, controlled, operated and maintained by the Transmission Owner on the Transmission Owner’s side of the Point of Change of Ownership identified in appendices to the Generation Interconnection Agreement and if applicable, the Interconnection Construction Service Agreement, including any modifications, additions or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Generating Facility with the Transmission System or interconnected distribution facilities.

**Transmission Owner Upgrades:**

“Transmission Owner Upgrades” shall mean Distribution Upgrades, Merchant Transmission Upgrades, Network Upgrades and Stand-Alone Network Upgrades.

**Transmission Project Developer:**

“Transmission Project Developer” shall mean an entity that submits a request to interconnect or add Merchant Transmission Facilities to the Transmission System or to increase the capacity of Merchant Transmission Facilities interconnected with the Transmission System in the PJM Region.

**Transmission Provider:**

The “Transmission Provider” shall be the Office of the Interconnection for all purposes, provided that the Transmission Owners will have the responsibility for the following specified activities:

- (a) The Office of the Interconnection shall direct the operation and coordinate the maintenance of the Transmission System, except that the Transmission Owners will continue to direct the operation and maintenance of those transmission facilities that are not listed in the PJM Designated Facilities List contained in the PJM Manual on Transmission Operations;
- (b) Each Transmission Owner shall physically operate and maintain all of the facilities that it owns; and
- (c) When studies conducted by the Office of the Interconnection indicate that enhancements or modifications to the Transmission System are necessary, the Transmission Owners shall have the responsibility, in accordance with the applicable terms of the Tariff, Operating Agreement and/or the Consolidated Transmission Owners Agreement to construct, own, and finance the needed facilities or enhancements or modifications to facilities.

**Transmission Service:**

“Transmission Service” shall mean Point-To-Point Transmission Service provided under Tariff, Part II on a firm and non-firm basis.

**Transmission System:**

“Transmission System” shall mean the facilities controlled or operated by the Transmission Provider within the PJM Region that are used to provide transmission service under Tariff, Part II and Part III.

**Transmission Withdrawal Rights:**

“Transmission Withdrawal Rights” shall mean Firm Transmission Withdrawal Rights and Non-Firm Transmission Withdrawal Rights.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions U**

**Upgrade Customer:**

“Upgrade Customer” shall mean an entity that submits an Upgrade Request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8, or that submits an Upgrade Request for Merchant Network Upgrades (including accelerating the construction of any transmission enhancement or expansion, other than Merchant Transmission Facilities, that is included in the Regional Transmission Expansion Plan prepared pursuant to Operating Agreement, Schedule 6).

**Upgrade Request:**

“Upgrade Request” shall mean a request submitted in the form prescribed in Tariff, Part IX, Subpart K, for evaluation by the Transmission Provider of the feasibility and estimated costs of (a) a Merchant Network Upgrade or (b) the Customer-Funded Upgrades that would be needed to provide Incremental Auction Revenue Rights specified in a request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8.

**Tariff, Part VIII, Subpart A, section 400**  
**Definitions V**

**Valid Upgrade Request:**

“Valid Upgrade Request” shall mean an Upgrade Request that has been determined by Transmission Provider to meet the requirements of Tariff, Part VIII, Subpart B, section 403.



**Tariff, Part VIII, Subpart A, section 400**  
**Definitions W**

**Wholesale Market Participation Agreement (“WMPA”):**

“Wholesale Market Participation Agreement” (“WMPA”) shall mean the form of agreement intended to allow a Project Developer to effectuate in wholesale sales in the PJM markets. A form of the WMPA is set forth in Tariff, Part IX, Subpart C.

**Wholesale Transaction:**

“Wholesale Transaction” shall mean any transaction involving the transmission or sale for resale of electricity in interstate commerce that utilizes any portion of the Transmission System.

**Tariff, Part VIII, Subpart A, section 401**  
**Applications for Cycle Process**  
**Introduction**

A. New Cycle Process

Part VIII of the Tariff applies to valid New Service Requests submitted on or after October 1, 2021, and sets forth the procedures and other terms governing the Transmission Provider's administration of the Cycle process; procedures and other terms regarding studies and other processing of New Service Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to Project Developers and Eligible Customers. To initiate a New Services Request, Eligible Customers must first submit a Completed Application following the procedures outlined in Tariff, Parts II and III as applicable. For projects submitted by Eligible Customers, the project's priority is defined by the Cycle in which an Eligible Customer submits a Completed Application. For projects submitted by Project Developers, the project's priority is defined by the Cycle in which a Project Developer submits a completed New Service Request. A Cycle's priority is established by the Application deadline. A given Cycle has priority over Cycles that commence at a later date.

B. Part VIII of the Tariff applies to (a) Generation Interconnection Requests; (b) Transmission Interconnection Requests; and (c) Completed Applications.

C. A Project Developer that proposes to (i) interconnect a Generating Facility to the Transmission System in the PJM Region, (ii) increase the capability of a Generating Facility in the PJM Region, (iii) interconnect Merchant Transmission Facilities with the Transmission System; (iv) increase the capability of existing Merchant Transmission Facilities interconnected to the Transmission System, or (v) interconnect a Generating Facility to distribution facilities located in the PJM Region that are used for transmission of power in interstate commerce, and to make wholesale sales using the output of the Generating Facility, shall request interconnection with the Transmission System pursuant to, and shall comply with, the terms, conditions, and procedures set forth in Tariff, Part VIII and related portions of the PJM Manuals.

D. Required Study Deposits and Readiness Deposits.

1. Study Deposits. Pursuant to Tariff, Part VIII, Subpart B, section 403, each New Service Request must submit with its Application a Study Deposit, the amount of which will be determined based upon the MWs requested in such Application. Ten percent of the Study Deposit is non-refundable. Project Developer and Eligible Customers are responsible for actual study costs, which may exceed the Study Deposit amount.

a. If any Study Deposit monies remain after all System Impact Studies are completed and any outstanding monies owed by Project Developer or Eligible Customer in connection with outstanding invoices related to the

present or prior New Service Requests have been paid, such remaining deposit monies shall be returned to the Project Developer or Eligible Customer at the conclusion of the required studies for the New Service Request.

2. Readiness Deposits. Readiness Deposits are funds committed by the Project Developer or Eligible Customer based upon the MW size of the project and, where applicable, the study results.
  - a. Readiness Deposits are due at the following Phases of a Cycle:
    - i. Readiness Deposit No. 1: Application Submission
    - ii. Readiness Deposit No. 2: Decision Point I; and
    - iii. Readiness Deposit No. 3: Decision Point II
  - b. Readiness Deposits No. 2 and/or No. 3 may equal an amount equal to or greater than zero, but may never be a negative dollar amount.
  - c. Readiness Deposit refunds will be handled as follows:
    - i. If the project is withdrawn or terminated, the Readiness Deposit refunds for the project will be determined by the study phase at which the project was withdrawn or terminated, and adverse study results tests, as set forth below in Tariff, Part VIII, Subpart C, section 408(B)(3)(b).
    - ii. When all Cycle New Service Requests have either entered into final agreements and met the Decision Point III Site Control requirements, or have withdrawn, remaining Readiness Deposit funds will be dispositioned as follows:
      - (a) Transmission Provider will incorporate all project withdraws and retool analysis results to provide a final determination on the Network Upgrades that are required for the Cycle.
      - (b) Underfunded Network Upgrades will be identified as those where one or more withdrawn New Service Requests that were identified as having a cost allocation in the Phase III analysis results. In the event that there are no underfunded Network Upgrades, all Readiness Deposits will be refunded.
      - (c) Readiness Deposits will be applied to underfunded Network Upgrades on a pro-rata share of funds missing from the Phase III cost allocation. In the event that all underfunded Network Upgrades are made whole relative to the withdrawn New Service Requests, remaining Readiness Deposits will be refunded on a pro-rata share.

3. Study Deposits and Readiness Deposits are separate financial obligation, and non-transferrable and cannot be commingled. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific New Service Request be applied in whole or in part to a different New Service Request.
- E. If Project Developer is proposing a Generating Facility that will physically connect to non-jurisdictional distribution or sub-transmission facilities for the purpose of engaging in wholesale sales in the PJM markets, such Project Developer must provide additional required information and documentation associated with the non-jurisdictional arrangements, as set forth in Tariff, Part VIII, Subpart C, sections 406 and 410 and Tariff, Part IX, Subpart F.
- F. A Project Developer or Eligible Customer cannot combine, swap or exchange all or part of a New Service Request with any other New Service Request within the same or a different Cycle.
- G. Prior to entering into a final agreement from Tariff, Part IX, a Project Developer or Eligible Customer may assign its New Service Request to another entity only if the acquiring entity:
1. as applicable, accepts and acquires the rights to the same Point of Interconnection and Point of Change of Ownership as identified in the New Service Request for such project; and/or
  2. as applicable, accepts, the same receipt and delivery points or the same source and sink points as stated in the New Service Request for such project.
  3. Additional Interconnection-Related Agreements. In connection with interconnection with the Transmission System pursuant to Tariff, Part VIII, Project Developer may be required, or may elect, to enter into one or more of the following interconnection-related agreements:
    - a. Cost Responsibility Agreement. A Project Developer with an existing generating facility that is not a party to an interconnection agreement with Transmission Provider and the relevant Transmission Owner, that desires to enter into a GIA with Transmission Provider and Transmission Owner, shall be required to enter into a Cost Responsibility Agreement in the form set forth in Tariff, Part IX, Subpart F. The Cost Responsibility Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform certain modeling, studies or analysis to determine whether the Project Developer may enter into a GIA with Transmission Provider and Transmission Owner.
    - b. Engineering and Procurement Agreement. A Project Developer that wishes to advance the implementation of its Interconnection Request during Phase III of a Cycle may enter into an Engineering and Procurement Agreement with Transmission Provider and Transmission Owner, in the form set forth in Tariff, Part IX, Subpart D, to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. An

Engineering and Procurement Agreement is not intended to be used for the actual construction of any Interconnection Facilities or Transmission Upgrades. An Engineering and Procurement Agreement can only be requested by a Project Developer, and can only be requested in Phase III.

- c. Necessary Study Agreement. A Project Developer that has entered into a GIA that plans to undertake modifications pursuant to that GIA to its Generating Facility or Merchant Transmission Facility shall be required to enter into a Necessary Study Agreement with Transmission Provider in the form set forth in Tariff, Part IX, Subpart G. The Necessary Study Agreement provides the terms, conditions, Study Deposit, and cost responsibility for Project Developer to pay Transmission Provider's actual costs to perform the Necessary Study(ies) to determine: (a) the type and scope of the permanent material impact, if any, the change will have on the Transmission System; (b) the additions, modifications, or replacements to the Transmission System required to accommodate the change; and (c) a good faith estimate of the cost of the additions, modifications, or replacements to the Transmission System required to accommodate the change.

**Tariff, Part VIII, Subpart A, section 402**  
**Applications for Cycle Process**  
**Site Control**

A. Site Control Evidentiary Requirements

Site Control is evidence provided by the Project Developer to Transmission Provider in relation to Project Developer's New Service Request demonstrating Project Developer's interest in, control over, and right to utilize the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities, and, if applicable, the Transmission Owner's Interconnection Facilities and/or Network Upgrades at the Point of Interconnection. Specific Site Control phase requirements are set forth in the following Tariff, Part VIII, Subpart B, section 403, and Subpart C, sections 406 and 410

1. Site Control consistent with the requirements herein is required for a project to have a valid position within a Cycle.
2. Proof of Site Control can be in the form of one of the following: (1) deed; (2) lease; (3) option to lease or purchase; or (4) as deemed acceptable by the Transmission Provider, any other contractual or legal right to possess, occupy and control the Site.
  - a. Memorandums are not acceptable.
  - b. Documentation solely evidencing an intent to purchase or control the Site is not acceptable.
  - c. Rights of Way are only acceptable for Project Developer Interconnection Facilities up to the Point of Interconnection.
  - d. Notwithstanding the foregoing, for a New Service Request, all or a portion of which requires the use of Sites owned or physically controlled by a state and/or federal governmental entity, and authorization for such use is subject to environmental and other state and/or federal governmental permitting requirements, including 42 U.S.C.A. § 4331 et seq. and any succeeding statutes, acceptable evidence of Site Control can be in any form the governmental entity issues. For Decision Point I and Decision Point III, Project Developers shall provide evidence that the Project Developer is taking identifiable steps acceptable to the Transmission Provider in furtherance of the issuance of such authorization by the state and/or federal governmental entity, including documentation sufficiently describing and explaining the source of and effects of such regulatory requirements, including a description of any conditions that must be met in order to satisfy the regulatory requirements and the anticipated time by which the Project Developer expects to satisfy the regulatory requirements. For Decision Point I and Decision Point III, Project Developers shall also identify any additional property rights for the portion of the Site that is not owned or physically controlled by a state and/or federal governmental entity but

which cannot be secured until the regulatory requirements have been met and authorization has been provided by the requisite state and/or federal governmental entity.

3. Demonstration of Site Control must include verification, to PJM's satisfaction, that the total feet or acreage ("acreage") of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, as set forth in the PJM Manuals.
  - a. The Project Developer must submit a Geographic Information System (GIS) Site Plan map and data files acceptable to PJM demonstrating the arrangement of the resource-specific proposed facilities for the amount of MW requested.
  - b. Any GIS Site Plan map and data files submitted in accordance with this section must be consistent with all other modeling data submitted in connection with Project Developer's New Service Request.
  - c. In the event of a disagreement between the Transmission Provider and the Project Developer over whether the total acreage of the Site is fully sufficient for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility, Transmission Provider will accept a Professional Engineer (PE) stamped Site plan drawing (licensed in the state of the facility location) that depicts the proposed generation arrangement and specifies the Maximum Facility Output for that arrangement.
    - i. Failure to verify to Transmission Provider's satisfaction that the total acreage of the Site is adequate for the resource-specific technology and MWs requested for a proposed Generating Facility or Merchant Transmission Facility shall result in the New Service Request being deemed terminated and withdrawn.
4. Site Control must be in the name of the Project Developer identified on the corresponding New Service Request. Otherwise, the Project Developer must demonstrate to PJM's satisfaction the relationship between the entity owning or controlling the Site ("landowner" or "owner") with Site Control and the Project Developer identified on the New Service Request.
5. Project Developers are prohibited from submitting evidence of Site Control that utilizes the same Site for multiple New Service Requests unless the total acreage amount of such Site is adequate to support all such New Service Requests.
  - a. To the extent that multiple New Service Requests are submitted by a Project Developer using the same Site Control evidence and the total acreage amount of such Site is not adequate to support all such New Service Requests, all such New Service Requests shall be deemed terminated and withdrawn.

- b. To the extent that a Project Developer submits a New Service Request with Site Control evidence utilizing the Site that is also the subject of Site Control in New Service Requests submitted by other Project Developer's, such Project Developer shall include with its New Service Request evidence, to Transmission Provider's satisfaction, demonstrating that the project referenced in the Project Developer's New Service Request is concurrently feasible with the development of any other projects that will share the Site identified in the Site Control. Such proof of concurrent feasibility shall include:
    - i. Identification of any other New Service Requests that will share all or a portion of the Site identified in the Site Control; and
    - ii. Identification of the proposed location and space utilization of all projects that will share the Site, including acreage and boundaries for all projects sharing the Site identified in the Site Control; and
    - iii. Any related technical information required by the Transmission Provider to enable the Transmission Provider to determine that development of the project referenced in the submitted New Service Request is not inconsistent with development of any of the other New Service Requests that will share all or a portion of the same Site.
- 6. Multiple projects may share Project Developer Interconnection Facilities. A shared facilities agreement is required if jointly owned common Interconnection Facilities are proposed.
- 7. Project Developers are prohibited from submitting evidence of Site Control for the Site which is also the subject of an interconnect request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system. To the extent that Project Developers submit evidence of Site Control for the Site which is also the subject of an interconnection request submitted in an adjacent Regional Transmission Organization, Independent System Operator, or other system, the relevant New Service Request submitted to Transmission Provider shall be deemed terminated and withdrawn.
- 8. Site Control must demonstrate three key elements: conveyance, term, and exclusivity:
  - a. Term

Term is the minimum duration required to evidence Site Control. The Term requirements vary, and are established in the following Tariff, Part VIII rules, at various points within a Cycle. The Term cannot be satisfied by an agreement with an initial term shorter than the requisite required term that has extensions, including unilateral extensions, unless those extensions have been exercised and any requisite conditions fulfilled, including any payment obligations, by the Project Developer at the time evidence of Site Control is provided to the Transmission Provider.



b. Exclusivity

With the exception of Tariff, Part VIII, Subpart A, section 402(A)(5)(b), exclusivity is evidenced by written acknowledgement from the land owner provided to the Transmission Provider by the Project Developer as part of the Site Control that, for the Term, that the Project Developer has exclusive use of the Site for the purpose of constructing a Generating Facility, Merchant Transmission Facilities, Interconnection Facilities and, if applicable , the Transmission Owner's Interconnection Facilities and/or Network Upgrades, and the landowner cannot make the Site Control identified for the Site available for purchase or lease, to any person or entity other than the Project Developer for any purpose or use that will interfere with the rights granted to Project Developer.

c. Conveyance

The Site Control evidence submitted by the Project Developer must demonstrate that the subject Site is or will be conveyed to the Project Developer, e.g., through a deed or an option to purchase or lease or other form of property rights acceptable to PJM, or that the Project Developer is guaranteed a right to future conveyance at Project Developer's sole discretion, e.g., through a deed or an option to purchase or lease or other forms of property rights acceptable to PJM, consistent with the Site Control Evidentiary Requirements provisions in Tariff, Part VIII, Subpart A, section 302(A)(2), above.

9. At each point within a Cycle where a Project Developer is required to provide Site Control, the Project Developer shall also provide Site Control certification in a form set forth in PJM Manual 14G, executed by an officer or authorized representative of Project Developer, verifying that the Site Control requirements are met.

a. At PJM's request, Project Developer shall provide copies of landowner attestations, county recordings, or other similar documentation acceptable to PJM to validate such Site Control certifications.

**Tariff, Part VIII, Subpart B**  
**APPLICATION RULES**

**Tariff, Part VIII, Subpart B, section 403**  
**Application Rules**

**A. Application Submission**

A Project Developer or Eligible Customer (collectively, “Applicant”) that seeks to initiate a New Service Request must submit the following information to the Transmission Provider: (i) a Project Developer Applicant electronically submits through the PJM web site, an Application and Studies Agreement (“Application”), a form of which is provided in Tariff, Part IX, Subpart A, (ii) an Eligible Customer Applicant electronically submits a Completed Application and subsequently executes an Application, a form of which is provided in Tariff, Part IX, Subpart A following the procedures outlined in Tariff, Parts II and III as applicable.

To be considered in a Cycle, a Project Developer must submit a completed and signed Application, including the required Study Deposit and Readiness Deposit, to Transmission Provider prior to the Cycle’s Application Deadline. To be considered in a Cycle, an Eligible Customer must submit a Completed Application, to Transmission Provider prior to the Cycle’s Application Deadline. Transmission Provider will post a firm Application Deadline for a Cycle at the beginning of Phase II of the immediately prior Cycle, no less than 180 days in advance of the Application Deadline. Only Completed New Service Requests received from Project Developers by the Application Deadline will be considered for the corresponding Cycle. Only Completed Applications received from Eligible Customers by the Application Deadline will be considered for the corresponding Cycle. Completed New Service Requests and Completed Applications shall be assigned a tentative Project Identifier. Transmission Provider will review and validate New Service Requests and the Project Identifier during the Application Phase, prior to Phase I of the corresponding Cycle. Only valid New Service Requests will proceed past the Application Phase.

**1. Generation Interconnection Request Requirements**

For Transmission Provider to consider an Application for a Generation Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the location of the proposed Point of Interconnection to the Transmission System, including the substation name or the name of the line to be tapped (including the voltage), the estimated distance from the substation endpoints of a line tap, address, and GPS coordinates.
- c. Provide information about the Generating Facility project, including whether it is (1) a proposed new Generating Facility, (2) an increase in

capability of an existing Generating Facility, or (3) the replacement of an existing Generating Facility.

- d. Indicate the type of Interconnection Service requested, whether (1) Energy Resource only or (2) Capacity Resource (includes Energy Resource) with Capacity Interconnection Rights.
- e. Specify the project location and provide a detailed site plan.
- f. Submit required evidence of Generating Facility Site Control (including the location of the main step-up transformer), including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- g. Provide information about Qualifying Facility status under the Public Utility Regulatory Policies Act, as applicable.
- h. Submit required information and documentation if the Generating Facility will share Applicant's Interconnection Facilities with another Generating Facility.
- i. For a new Generating Facility, specify requested Maximum Facility Output and Capacity Interconnection Rights.
- j. For a requested increase in generation capability of an existing Generating Facility, specify the existing Maximum Facility Output and Capacity Interconnection Rights, and requested increases.
- k. Provide a detailed description of the equipment configuration and electrical design specifications for the Generating Facility.
- l. Specify the fuel type for the Generating Facility; or, in the case of a multi-fuel Generating Facility, the fuel types.
- m. For a multi-fuel Generating Facility, provide a detailed description of the physical and electrical configuration.
- n. If the Generating Facility will include a storage component, provide detailed information about (1) whether and how the storage device(s) will charge using energy from the Transmission System, (2) the primary frequency response operating range for the storage device(s), (3) the MWh stockpile, and (4) the hour class, as applicable.
- o. Specify the proposed date that the project or uprate associated with the Application will be in service.

- p. Provide other relevant information, including whether Applicant or an affiliate has submitted a previous Application for the Generating Facility; and, if an increase in generation capability, information about existing PJM Service Agreements and associated Queue Position Nos. or Project Identifier Nos.

## 2. Behind the Meter Generator Application Requirements

In addition to the above requirements for a Generating Facility, in order for Transmission Provider to consider an Application for behind-the-meter generation Interconnection Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Specify gross output, behind the meter load, requested Maximum Facility Output, and requested Capacity Interconnection Rights.
- b. For a requested increase in generation capability of an existing Behind the Meter Generating Facility, specify existing and requested increase in gross output, behind the meter load, Maximum Facility Output, and Capacity Interconnection Rights.

## 3. Long Term Firm Transmission Service Application Requirements

For Transmission Provider to consider an Application for Long Term Firm Transmission Service complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.
- b. Specify the locations of the Point(s) of Receipt and Point(s) of Delivery.
- c. Specify the requested Service Commencement Date and term of service.
- d. Specify the transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission System.

## 4. Merchant Transmission Application Requirements

For Transmission Provider to consider an Application for a Transmission Interconnection Request complete, Applicant must include at a minimum each of the following, as further described in the Application and PJM Manuals:

- a. Provide all Applicant information required in the Application, including parent company information and banking and wire transfer information.

- b. Specify the location of the proposed facilities, and the name and description of the substation where Applicant proposes to interconnect or add its facilities.
- c. Specify the proposed voltage and nominal capability of new facilities or increase in capability of existing facilities.
- d. Provide a detailed description of the equipment configuration and electrical design specifications for the project.
- e. Specify the proposed date that the project or increase in capability will be in service.
- f. Specify whether the proposed facilities will be either (1) merchant A.C., (2) Merchant D.C. Transmission Facilities, or (3) Controllable A.C. Merchant Transmission Facilities.
- g. If Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities, specify whether Applicant elects to receive (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR) or (2) Incremental Delivery Rights, Incremental Auction Revenue Rights, and/or Incremental Capacity Transfer Rights.
  - i. If Applicant elects to receive TIRs or TWRs, specify (1) total project MWs to be evaluated as Firm (capacity) injection for TIR; (2) total project MWs to be evaluated as Non-firm (energy) injection for TIR; (3) total project MWs to be evaluated as Firm (capacity) withdrawal for TWR; and (4) total project MWs to be evaluated as Non-firm (energy) withdrawal for TWR.
  - ii. If Applicant elects to receive Incremental Delivery Rights, specify the location on the Transmission System where it proposes to receive Incremental Delivery Rights associated with its proposed facilities.
- h. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Applicant contractually binds itself in its interconnection-related service agreement always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the interconnection-related service agreement will provide Applicant with the same types of transmission rights that are available under the Tariff for Merchant D.C. Transmission Facilities. In the Application, Applicant shall represent that, should it execute an interconnection-related service agreement for its project described in the Application, it will agree in the interconnection-

related service agreement to operate its facilities continuously in a controllable mode.

- i. Specify the site where Applicant intends to install its major equipment, and provide a detailed site plan.
- j. Submit required evidence of Site Control for the major equipment, including a certification by an officer or authorized representative of Applicant; and, at Transmission Provider's request, copies of landowner attestations or county recordings.
- k. Provide evidence acceptable to Transmission Provider that Applicant has submitted a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting, as applicable. Applicant shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Applicant fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

5. Additional Requirements Applicable to All Applications

- a. Study Deposit: For Transmission Provider to consider an Application complete, Transmission Provider must receive from the Applicant the required Study Deposit by wire transfer, the amount of which is based on the size of the project as described below. Applicant's wire transfer must specify the Application reference number to which the Study Deposit corresponds, or Transmission Provider will not review or process the Application.
  - i. Ten percent of the Study Deposit is non-refundable. If Applicant withdraws its New Service Request, or the New Service Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:
    - (a) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request;
    - (b) Any restudies required as a result of the rejection, termination, and/or withdrawal of such New Service Request; and/or

- (c) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.
- ii. Ninety percent of the Study Deposit is refundable, and Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:
  - (a) The cost of the Application review;
  - (b) The dollar amount of Applicant's cost responsibility for the System Impact Study; and
  - (c) If the New Service Request is modified, rejected, terminated, and/or withdrawn, refundable deposit money shall be applied to cover all of the costs incurred by Transmission Provider up to the point of the New Service Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:
    - (i) The costs of any restudies required as a result of the modification, rejection, termination, and/or withdrawal of the New Service Request;
    - (ii) Any outstanding monies owed by Applicant in connection with outstanding invoices due to Transmission Provider, Transmission Owner(s), and/or third party contractors, as applicable, as a result of any failure of Applicant to pay actual costs associated with the New Service Request; and/or
    - (iii) Any outstanding monies owed by Applicant in connection with outstanding invoices related to other New Service Requests.
  - (d) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to Applicant in accordance with the PJM Manuals.
- iii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
  - (a) Applicant is responsible for, and must pay, all actual study costs.



- (b) If Transmission Provider sends Applicant notification of additional study costs, then Applicant must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its New Service Request. If Applicant fails to complete either (i) or (ii), then Transmission Provider shall deem the New Service Request to be terminated and withdrawn.
- iv. The Study Deposit shall be calculated as follows, based on the number of MW energy (e.g., Maximum Facility Output) or MW capacity (e.g., Capacity Interconnection Rights), whichever is greater:
  - (a) Up to 20 MW: \$75,000;
  - (b) Over 20 MW up to 50 MW: \$200,000;
  - (c) Over 50 MW up to 100 MW: \$250,000;
  - (d) Over 100 MW up to 250 MW: \$300,000;
  - (e) Over 250 MW up to 750 MW: \$350,000; and
  - (f) Over 750 MW: \$400,000.
- b. Readiness Deposit: For Transmission Provider to consider an Application complete, Applicant must submit to Transmission Provider the required Readiness Deposit by wire transfer or letter of credit. Applicant's wire transfer or letter of credit must specify the Application reference number to which the Readiness Deposit corresponds, or Transmission Provider will not review or process the Application. Readiness Deposit No. 1 shall be an amount equal to \$4,000 per MW energy (e.g., Maximum Facility Output) or per MW capacity (e.g., Capacity Interconnection Rights), whichever is greater, as specified in the Application.

B. Application Review Phase

- 1. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Project Developers for completeness and then establishes the validity of such submitted Applications, beginning with a deficiency review, as follows:

- a. Transmission Provider will exercise Reasonable Efforts to inform Applicant of Application deficiencies within 15 Business Days after the Application Deadline.
  - b. Applicant then has 10 Business Days to respond to Transmission Provider's deficiency determination.
  - c. Transmission Provider then will exercise Reasonable Efforts to review Applicant's response within 15 Business Days, and then will either validate or reject the Application.
2. After the close of the Application Deadline, Transmission Provider will begin the Application Review Phase, wherein Transmission Provider reviews Applications received from Eligible Customers for completeness and then establishes the validity of such submitted Applications.
3. Transmission Provider will only review an Application during the Application Review Phase following the Application Deadline for which the Application was submitted and deemed complete, which will extend for 90 days or the amount of time it takes to complete all Application review activities for the relevant Cycle, whichever is greater.
4. During the Application Review Phase, and at least 30 days prior to initiating Phase I of the Cycle, Transmission Provider will post the Phase I Base Case data for review, subject to CEII protocols.
5. In the case of an Application for a Generating Facility, the Application Review Phase will include a Site Control review for the Generating Facility. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VIII, Subpart A, section 402, for at least a one-year term beginning from the Application Deadline, for 100 percent of the Generating Facility Site including the location of the high-voltage side of the Generating Facility's main power transformer(s). In addition, Applicant shall provide a certification, executed by an officer or authorized representative of Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings. The Site Control requirement in the Application includes an acreage requirement for the Generating Facility, as set forth in the PJM Manuals.
6. In the case of an Application for Merchant Transmission, the Application Review Phase will include a Site Control review for the Site of the HVDC converter station(s), phase angle regulator (PAR), and/or variable frequency transformer, as applicable. Specifically, Applicant shall provide Site Control evidence, as set forth in Tariff, Part VIII, Subpart A, section 402 for at least a one-year term beginning from the Application Deadline, for 100 percent of the Site. In addition, Applicant shall provide a certification, executed by an officer or authorized representative of

Applicant, verifying that the Site Control requirement is met. Further, at Transmission Provider's request, Applicant shall provide copies of landowner attestations or county recordings.

C. Scoping Meetings

1. During the Application Review Phase, Transmission Provider may hold a single, or several, scoping meetings for projects in each Transmission Owner zone, which are optional and may be waived by Applicants or Transmission Owner.
2. Scoping meetings may include discussion of potential Affected System needs, whereby Transmission Provider may coordinate with Affected System Operators the conduct of required studies.

D. Other Requirements

1. Applicant must submit any claim for Capacity Interconnection Rights from deactivating generation units with the Application, and it must be received by Transmission Provider prior to the Application Deadline.
2. When an Application results in a valid New Service Request, Transmission Provider shall confirm the assigned Project Identifier to the New Service Request, in accordance with Tariff, Part VIII, Subpart E, section 412. Applicant and Transmission Provider shall reference the Project Identifier in all correspondence, submissions, wire transfers, documents, and other materials relating to the New Service Request.

**Tariff, Part VIII, Subpart C**  
**PHASES AND DECISION POINTS**

**Tariff, Part VIII, Subpart C, section 404**  
**Introduction**

A. Phase I, Phase II and Phase III System Impact Studies

1. Introduction

Tariff, Part VIII, Subpart C sets forth the procedures and other terms governing the Transmission Provider's administration of the studies and procedures required under the Cycle process, and the nature and timing of such studies. The Cycle process set forth in Tariff, Part VIII includes three study Phases and the three Decision Points:

- a. Phase I: Phase I System Impact Study and Decision Point I
- b. Phase II: Phase II System Impact Study and Decision Point II; and
- c. Phase III: Phase III System Impact Study and Decision Point III.

Procedures and other terms relative to the three study Phases are set forth separately below in Tariff, Part VIII, Subpart C, sections 405, 407, and 409.

2. Overview of System Impact Studies

- a. The Phase I, Phase II and Phase III System Impact Studies are a regional analysis of the effect of adding to the Transmission System the new facilities and services proposed by valid New Service Requests and an evaluation of their impact on deliverability to the aggregate of PJM Network Load.
  - i. These studies identify the system constraints, identified with specificity by transmission element or flowgate, relating to the New Service Requests included therein and any resulting Interconnection Facilities, Network Upgrades, and/or Contingent Facilities required to accommodate such New Service Requests.
  - ii. These studies provide estimates of cost responsibility and construction lead times for new facilities required to interconnect the project and system upgrades.
  - iii. Transmission Provider, in its sole discretion, can aggregate multiple New Service Requests at the same Point of Interconnection for purposes of Phase I, Phase II and Phase III System Impact Studies.
  - iv. The scope of the studies may include (a) an assessment of sub-area import deliverability, (b) an assessment of sub-area export

deliverability, (c) an assessment of project related system stability issues (only occurs in Phase II and Phase III); (d) an assessment of project-related short circuit duty issues (only occurs in Phase II and Phase III), (e) a contingency analysis consistent with NERC's and each Applicable Regional Entity's reliability criteria and the transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity, (f) an assessment of regional transmission upgrades that most effectively meet identified needs, and (g) an analysis to determine cost allocation responsibility for required facilities and upgrades.

- v. For purposes of determining necessary Interconnection Facilities and Network Upgrades, these studies shall consider the level of service requested in the New Service Request unless otherwise required to study the full electrical capability of the New Service Request due to safety or reliability concerns.
- vi. The studies' results shall include the list and facility loading of all reliability criteria violations specific to the New Service Requests.
- vii. If applicable, the studies for a Transmission Project Developer New Service Request shall also include a preliminary estimate of the Incremental Deliverability Rights associated with the Transmission Project Developer's proposed Merchant Transmission Facilities.

### 3. Contingent Facilities

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Interconnection Facilities and/or Network Upgrades, upon which the New Service Request's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the New Service Request or reassessment of the Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies) and Generator Interconnection Agreement, including why a specific Contingent Facility was identified and how it relates to the New Service Request. Transmission Provider shall also provide, upon request of the Project Developer or Eligible Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

- a. Minimum Thresholds to Identify Contingent Facilities

i. Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least five percent distribution factor (DFAX) or contributing at least five percent of the facility rating in the applicable model.

ii. Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

iii. Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

4. Additional System Impact Study Procedures for Eligible Customers

The following provisions apply to System Impact Studies conducted for Eligible Customers:

- a. The Transmission Provider will notify Eligible Customers of the need to conduct a System Impact Study whenever the Transmission Provider determines that available transmission capability may not be sufficient to provide the requested firm service(s). The purpose of the System Impact Study will be to determine the effect the requested service(s) will have on system operations, identify any system constraints, redispatch options and whether system expansion will be required to provide the requested service(s).
- b. The Commission's comparability standard will be applied in evaluating the impact of all requests. Specifically, the Transmission Provider will use the same due diligence in completing System Impact Studies for Eligible Customers that it uses when completing studies for any Transmission Owner that requests service from the Transmission Provider.
- c. Requests for long-term firm transmission service will be evaluated, to the extent possible, as a part of the on-going planning process for Bulk Transmission Supply in the PJM Region. Appropriate planning studies will be conducted annually to assess the capability of the PJM Region Transmission System to deliver the planned Network Resources to the Forecasted Network Loads of the existing load serving entities and any prior committed Firm Point-to-Point Service transmission customers. The loads and resources of Eligible Customers requesting new or additional service

during the normal planning cycle will be incorporated into this aggregate planning process along with the loads and resources of all other Firm Point-to-Point and load serving entities for which prior commitments to provide service have been made. Requests for long-term firm service made at times that will not permit the evaluation of impacts as part of the normal planning process, and requests for short-term firm service, will require that special impact studies be completed.

- d. The Transmission Provider plans and evaluates the PJM Region Transmission System in strict compliance with the following:
  - i. North American Electric Reliability Council ("NERC") Reliability Principles and Guides
  - ii. Applicable Standards
  - iii. Transmission planning criteria, methods and procedures described in the "FERC Form No. 715 - Annual Transmission Planning and Evaluation Report" for each Applicable Regional Entity.
- e. In evaluating the impact of any request for new or additional service(s), the Transmission Provider will first determine the capability of the system to reliably provide prior committed Network and Point-to-Point service for the term of the requested new or additional service(s), or the normal planning horizon (generally 10 years), whichever is shorter. Requests for new or additional service(s) will then be incorporated into the system representation data and the appropriate system analyses will be completed to evaluate the impacts of the requested services.

## 5. Cost Allocation for Network Upgrades

- a. General: Each Project Developer and Eligible Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.



- b. Cost Responsibility for Accelerating Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of Network Upgrades that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Project Developer or Eligible Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.
- c. The Transmission Provider shall determine the minimum amount of Network Upgrades required to resolve each reliability criteria violation in each Cycle, by studying the impact of the projects the Cycle in their entirety, and not incrementally. Interconnection Facilities and Network Upgrades shall be studied in their entirety and according to the following process:

The Transmission Provider shall identify the New Service Requests in the Cycle contributing to the need for the required Network Upgrades within the Cycle. All New Service Requests that contribute to the need for a Network Upgrade will receive cost allocation for that upgrade pursuant to each New Service Request's contribution to the reliability violation identified on the transmission system in accordance with PJM Manuals.

There will be no inter-Cycle cost allocation for Interconnection Facilities or Network Upgrades identified in the System Impact Study; all such costs shall be allocated to New Service Requests in that Cycle.

6. Interconnection Facilities

A Project Developer shall be obligated to pay 100 percent of the costs of the Interconnection Facilities necessary to accommodate its Interconnection Request.

7. Facilities Study Procedures

The Facilities Studies will include good faith estimates of the cost, determined in accordance with Tariff, Part VIII, Subpart C, section 404(A)(5), (a) to be charged to each affected New Service Customer for the Interconnection Facilities and Network Upgrades that are necessary to accommodate each New Service Request evaluated in the study; (b) the time required to complete detailed design and construction of the facilities and upgrades; (c) a description of any site-specific

environmental issues or requirements that could reasonably be anticipated to affect the cost or time required to complete construction of such facilities and upgrades.

The Facilities Study will document the engineering design work necessary to begin construction of any required transmission facilities, including estimating the costs of the equipment, engineering, procurement and construction work needed to implement the conclusions of the System Impact Study in accordance with Good Utility Practice and, when applicable, identifying the electrical switching configuration of the connection equipment, including without limitation: the transformer, switchgear, meters, and other station equipment; and the nature and estimated costs of Interconnection Facilities and Network Upgrades necessary to accommodate the New Service Request.

For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Facilities Study shall consider the level of Interconnection Service requested by the Project Developer unless otherwise required to study the full electrical capability of the Generating Facility or Merchant Transmission Facility due to safety or reliability concerns. The Facilities Study will also identify any potential control equipment for requests for Interconnection Service that are lower than the full electrical capability of the Generating Facility or Merchant Transmission Facility.

**Tariff, Part VIII, Subpart C, section 405**  
**Phase I**

A. Phase I Rules

1. This Tariff, Part VIII, Subpart C, section 405 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase I of the Cycle process. After the Application Phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase I of a Cycle will commence. During Phase I of a Cycle, the Transmission Provider shall conduct a Phase I System Impact Study.
  - a. The Phase I System Impact Study is conducted on an aggregate basis within a New Services Request's Cycle, and results are provided in a single Cycle format. The Phase I System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers must obtain the results from the website.
  - b. Start and Duration of Phase I
    - i. Phase I shall start on the first Business Day immediately following the end of the Application Review phase, but no earlier than 30 days following the distribution of the Phase I Base Case Data. Transmission Provider shall use Reasonable Efforts to complete Phase I within 120 calendar days from the date such phase commenced. If the 120th day does not fall on a Business Day, Phase I shall be extended to the end of the next Business Day. If Transmission Provider is unable to complete Phase I within 120 calendar days, Transmission Provider shall notify all impacted Project Developers and Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase I.
    - ii. During Phase I, and at least 30 days prior to initiating Decision Point I of the Cycle, Transmission Provider will post an estimated start date for Decision Point I in order for Project developers and Eligible Customers to prepare to meet their Decision Point I requirements.

**Tariff, Part VIII, Subpart C, section 406**  
**Decision Point I**

A. Requirements

The Decision Point I shall commence on the first Business Day immediately following the end of Phase I. New Service Requests that are studied in Phase I will enter Decision Point I. Before the close of the Decision Point I, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such New Service Request must meet the requirements set forth below in Tariff, Part VIII, Subpart C, section 406(A)(2).
  - a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point I:
    - i. The applicable Readiness Deposit No. 2
      - (a) The Decision Point I Readiness Deposit No. 2 is to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase. The Decision Point I Readiness Deposit No. 2 will be calculated by the Transmission Provider during Phase I, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.
      - (b) At Decision Point I, the Readiness Deposit No. 2 required shall be an amount equal to:
        - (i) the greater of (i) 10 percent of the cost allocation for the Network Upgrades as calculated in Phase I or (ii) the Readiness Deposit No. 1 paid by the Project Developer with its New Service Request during the Application Phase; minus
        - (ii) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase

- (c) The Readiness Deposit No. 2 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 2).
- b. Project Developers must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:
  - i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional one-year term beginning from last day of the relevant Cycle, Phase I.
    - (a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
    - (b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 50 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
    - (c) If applicable, Interconnection Switchyard Site Control evidence for a one-year term beginning from the last day of the relevant Cycle, Phase I.
      - (i) Such Site Control evidence shall cover 50 percent of the acreage required for the identified required Interconnection Switchyard facilities associated with a New Service Request.
- c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such

adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.

- d. Evidence of air and water permits (if applicable)
- e. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
- f. Submission of New Service Request data for Phase II System Impact Study.
- g. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 406(A)(1)(a) through (f) above, before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- h. If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 406(A)(1)(a) through (f) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 406(A)(1)(b) through (e) above, as follows:
  - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase II.
  - iv. Transmission Provider's review of the above required elements may run co-extensively with Phase II.

2. Acceleration at Decision Point I. Upon completion of the Phase I System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.
  - a. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements before the close of Decision Point I:
    - i. Security
      - (a) Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.
    - ii. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
    - iii. Project Developer must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:
      - (a) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase I.
        - (i) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
      - (b) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.
        - (i) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required

Interconnection Facilities associated with a New  
Service Request.

- (c) If applicable, Interconnection Switchyard Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase I.
    - (i) Such Site Control evidence shall cover 100 percent of the acreage required identified required Interconnection Switchyard associated with a New Service Request.
- iv. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 406(A)(2)(a)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 406(A)(2)(a)(i), (ii) and (iii) above.
  - (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 406(A)(2)(a)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
    - (1) Such condition precedent shall not be extended under any circumstances for any reason.
- b. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.



- c. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.
- d. For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- e. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 406(A)(2)(a) through (d) above (noting the exception provided for Site Control), before the close of the Decision Point I Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- f. If Project Developer or Eligible Customer subject to Acceleration at Decision Point I submits all elements in Tariff, Part VIII, Subpart C, section 406(A)(2)(a) through (d) above, then, at the close of the Decision Point I, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 406(A)(2)(a) through (d) above, as follows:
  - i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - ii. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related

agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

3. For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point I to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:
  - a. Security. Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase I System Impact Study Results.
  - b. Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request
  - c. Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402 and is also in accordance with the following additional specifications:
    - i. Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
      - (a) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
    - ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

- (a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
- iii. If applicable, Interconnection Switchyard Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase I that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- iv. PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase I through a date that extends three years beyond the full execution date of the relevant state level interconnection agreement with the applicable entity
- v. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, section 406(A)(3)(c)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, section 406(A)(3)(c)(i), (ii) and (iii) above.
  - (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, section 406(A)(3)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.

- (i) Such condition precedent shall not be extended under any circumstances for any reason.
- d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle
- e. Evidence of a fully executed state level Interconnection Agreement with the applicable entity
- f. Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- g. If Project Developer fails to submit all of the criteria in Tariff, Part VIII, section 406(A)(3)(a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's New Service Request shall be deemed terminated and withdrawn.
- h. When Project Developer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in Tariff, Part VIII, section 406(A)(3)(a) through (f) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, section 406(A)(3)(a) through (f) above, as follows:

- i. Transmission Provider will exercise Reasonable Efforts to inform Project Developer of deficiencies within 10 Business Days after the close of Decision Point I.
- ii. Project Developer then has five Business Days to respond to Transmission Provider's deficiency determination.
- iii. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

4. New Service Request Withdraw or Termination at Decision Point I

- a. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point I. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point I, the Transmission Provider must receive before the close of the Decision Point I Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
- b. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point I requirements, as set forth in this Tariff, Part VIII, Subpart C, section 406.
- c. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - i. For Readiness Deposits:
    - (a) At the conclusion of Transmission Provider's deficiency review for Decision Point I or upon voluntary withdrawal of a New Service Request, refund to the Project Developer or Eligible Customer 50 percent of Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase, and 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during this Decision Point I; and

(b) At the conclusion of the Cycle, refund to Project Developer or Eligible Customer up to 50 percent of Readiness Deposit No. 1 pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).

ii. At the conclusion of Transmission Provider's deficiency review for Decision Point I, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.

B. New Service Request Modification Requests at Decision Point I

1. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.

2. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 100 percent of the requested amount

3. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.

4. Point of Interconnection.

a. The Point of Interconnection must be finalized before the close of the Decision Point I Phase.

i. Project Developer may only move the location of the Point of Interconnection 1) along the same segment of transmission line, as defined by the two electrical nodes located on the transmission line as modeled in the Phase I Base Case Data, or 2) move the location of the Point of Interconnection to a different breaker position within the same substation, subject to Transmission Owner review and approval. Project Developer may not modify its Point of Interconnection to/from a transmission line from/to a direct connection into a substation.

(a) Project Developer must notify Transmission Provider in writing of any changes to its Point of Interconnection prior

to the close of Decision Point I. No modifications to the Point of Interconnection will be accepted for any reason after the close of Decision Point I.

5. Generating Facility or Merchant Transmission Facility Site Changes

Project Developer may specify a change to the project Site only if:

- a. the Project Developer satisfied the requirements for Site Control for both the initial Site proposed in the New Service Request Application and the newly proposed Site; and
- b. the initial Site and the proposed Site are adjacent parcels.
- c. Such Site Control is subject to the verification procedures set forth in Tariff, Subpart C, sections 406(A)(1) and 406(A)(3).

6. Equipment Changes

- a. During Decision Point I, Project Developer may modify its Interconnection Request for updated equipment data. Project Developer shall submit machine modeling data as specified in the PJM Manuals before the close of Decision Point I.

**Tariff, Part VIII, Subpart C, section 407**  
**Phase II**

**A. Phase II Rules**

1. This Tariff, Part VIII, Subpart C, section 407 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase II of the Cycle process. After the Decision Point I phase of a Cycle is completed and a group of valid New Service Requests is established therein, Phase II of a Cycle will commence. During Phase II of a Cycle, the Transmission Provider shall conduct the Phase II System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VIII, Subpart C, section 406, Decision Point I phase, will be included in the Phase II System Impact Study.
  - a. The Phase II System Impact Study analysis will retool load flow results based on decisions made during Decision Point I, and perform short circuit and stability analyses as required.
  - b. The Phase II System Impact Study will identify Affected Systems, if applicable.
    - i. If an Affected System Study Agreement is required, the Transmission Provider shall notify the Project Developer or Eligible Customer prior to the end of Phase II by posting on the Transmission Provider's website of the need for Project Developer or Eligible Customer to enter into an Affected System Study Agreement.
  - c. The Phase II System Impact Study Results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.
  - d. Facilities Study. During the Phase II System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VIII, Subpart C, section 404(A)(7).
  - e. Start and Duration of Phase II
    - i. Phase II shall start on the first Business Day immediately following the end of the Decision Point I unless the Decision Point III of the immediately preceding Cycle is still open. In no event shall Phase II of a Cycle commence before the conclusion of the Decision Point III Phase of the immediately preceding Cycle.
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase II within 180 days from the date such Phase II commenced. If the 180th day does not fall on a Business Day, Phase II shall be



extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase II within 180 days, the Transmission Provider shall notify all impacted Project Developers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete Phase II.

**Tariff, Part VIII, Subpart C, section 408**  
**Decision Point II**

A. Requirements

Decision Point II shall commence on the first Business Day immediately following the end of Phase II. New Service Requests that are studied in Phase II will enter Decision Point II. Before the close of Decision Point II, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.

1. For a New Service Request to remain in the Cycle, it must either proceed as set forth immediately below, or, if Transmission Provider determines a New Service Request qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX), such new Service Request must meet the requirements set forth below in Tariff, Part VIII, Subpart C, section 408(A)(2)(d).
  - a. For a New Service Request that is not otherwise eligible to accelerate to a final interconnection related agreement (from Tariff, Part IX) to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:
    - b. The applicable Readiness Deposit No. 3
      - i. The Decision Point II Readiness Deposit No. 3 to be paid cumulatively, i.e., in addition to the Readiness Deposit No. 1 that was submitted with the New Service Request at the Application Phase, and the Readiness Deposit No. 2 that was submitted at Decision Point I. The Decision Point II Readiness Deposit No. 3 will be calculated by the Transmission Provider during Phase II, and shall not be reduced or refunded based upon subsequent New Service Request modifications or cost allocation changes.
      - ii. The Decision Point II Readiness Deposit No. 3 required amount shall be an amount equal to the greater of:
        - (a) (i) 20 percent of the cost allocation for the Network Upgrades as calculated in Phase II or (ii) the Readiness Deposit No. 1 paid by the Project Developer or Eligible Customer with its New Service Request during the Application Phase plus the Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I; minus

- (b) the Readiness Deposit No. 1 amount paid by the Project Developer with its New Service Request during the Application Phase, plus the Readiness Deposit No. 2 amount paid by the Project Developer or Eligible Customer with its New Service Request during Decision Point I.
- iii. The Readiness Deposit No. 3 amount due can be zero, but cannot be a negative number (i.e., there will not be any refunded amounts associated with Readiness Deposit No. 3).
- c. Notification in writing that Project Developer or Eligible Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its New Service Request.
- d. Evidence of Site Control. There are no Site Control evidentiary requirements at Decision Point II.
- e. Evidence of air and water permits (if applicable).
- f. For state-level, non-jurisdictional interconnection projects, evidence of participation in the state-level interconnection process with the applicable entity.
- g. Submission of New Service Request Data for Phase III System Impact Study data.
- h. Evidence that Project Developer or Eligible Customer entered into a fully executed Affected System Study Agreement, if applicable to its New Service Request by the later of Decision Point II or 60 days after notification from Transmission Provider that an Affected System Study Agreement is required.
- i. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

- j. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 408(A)(1)(a) through (i) above, before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
2. If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 408(A)(1)(a) through (i) above, then, at the close of the Decision Point II, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 408(A)(1)(a) through (i) above, as follows:
- a. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point II.
  - b. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - c. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or include the New Service Request in Phase III.
    - i. Transmission Provider's review of the above required elements may run co-extensively with Phase III.
  - d. Acceleration at Decision Point II. Upon completion of the Phase II System Impact Study, Transmission Provider may accelerate treatment of such New Service Request.
    - i. For (i) a jurisdictional project that qualifies to accelerate, or (ii) a non-jurisdictional project that qualifies to accelerate and which retains a fully executed state level interconnection agreement with the applicable entity, to remain in the Cycle, Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point II:
      - (a) Security
        - (i) Security shall be calculated for New Service Requests based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.

- (b) Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
- (c) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:
  - (i) Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase II.
    - (1) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
  - (ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.
    - (1) Such Site Control evidence shall cover 100 percent of the linear distance for identified required Interconnection Facilities associated with a New Service Request.
  - (iii) If applicable, Interconnection Switchyard Site Control evidence for a three-year term beginning from the last day of the relevant Cycle, Phase II.
    - (1) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- e. If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart

A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(d)(i)(c)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(d)(i)(c)(i), (ii) and (iii) above.

- i. If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(d)(i)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
  - (a) Such condition precedent shall not be extended under any circumstances for any reason.
  - (b) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
  - (c) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM

Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle.

- (d) For a non-jurisdictional project, evidence of a fully executed state level interconnection agreement with the applicable entity.
- (e) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 408(A)(2)(e)(i)(a) through (d) above (noting the exception provided for Site Control), before the close of Decision Point II, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (f) If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 408(A)(2)(e)(i)(a) through (d) above, then, at the close of the Decision Point II, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 408(A)(2)(e)(i)(a) through (d) above, as follows:
  - (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

- (g) For a New Service Request for a non-jurisdictional project that qualifies to accelerate to a final interconnection related agreement (from Tariff, Part IX) but which has not yet secured a fully executed state level interconnection agreement with the applicable entity before the close of Decision Point II to remain in the Cycle, Transmission Provider must receive from the Project Developer all of the following required elements, before the close of Decision Point III:
- (h) Security. Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase II System Impact Study Results.
- (i) Notification in writing that Project Developer elects to proceed to a final agreement with respect to its New Service Request
- (j) Evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:
  - (i) Generating Facility Site Control evidence is required to be maintained for an additional term beginning from last day of the relevant Cycle, Phase II that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
    - (1) Such Site Control evidence shall be identical to the Generating Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
  - (ii) Interconnection Facilities (to the Point of Interconnection) Site Control evidence is required to be maintained for a term beginning from last day of



the relevant Cycle, Phase II that extends through the full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.

- (1) Such Site Control evidence shall cover 100% percent of linear distance for the identified required Interconnection Facilities associated with a New Service Request.
- (iii) If applicable, Interconnection Switchyard Site Control evidence is required to be maintained for a term beginning from last day of the relevant Cycle, Phase II that extends through full execution date of the relevant state level interconnection agreement with the applicable entity, plus three years beyond such full execution date of the relevant state level interconnection agreement with the applicable entity.
  - (1) Such Site Control evidence shall cover 100 percent of acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
- (iv) PJM may request evidence of the required Site Control at any point beginning from last day of the relevant Cycle, Phase II through a date that extends three years beyond the full execution date of the relevant state level interconnection agreement with the applicable entity
- (v) If Project Developer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(j)(i), (ii) and (iii) above, then Project Developer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(j)(i), (ii) and (iii) above.

- (1) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 408(A)(2)(j)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
    - (1.a) Such condition precedent shall not be extended under any circumstances for any reason.
- (k) For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid corresponding interconnection request with any required adjacent Control Area(s) in which it is interconnecting or is required to interconnect with as part of such Transmission Interconnection Request. Project Developer shall maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its interconnection request positions with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn, and will be removed from the Cycle
- (l) Evidence of a fully executed state level Interconnection Agreement with the applicable entity

- (m) Project Developer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment.
- (n) If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 408(A)(2)(a) through (m) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.
- (o) When Project Developer or Eligible Customer meets all of the requirements above, then, at the point at which the last required piece of evidence as set forth in Tariff, Part VIII, Subpart C, section 408(A)(2)(a) through (m) above was submitted, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 408(A)(2)(a) through (m) above, as follows:
  - (i) Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point I.
  - (ii) Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
  - (iii) Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to a final interconnection related agreement (from Tariff, Part IX). The final interconnection related agreement shall be negotiated and issued in accordance with the rules set forth in Tariff, Part VIII, Subpart D, section 411.

B. New Service Request Withdraw or Termination at Decision Point II

1. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point II. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point II, the Transmission Provider must receive before the close of the Decision Point II Phase written notification from the Project Developer or Eligible Customer of Project Developer's or Eligible Customer's decision to withdraw its New Service Request.
2. Transmission Provider may deem a New Service Request terminated and withdrawn for failing to meet any of the Decision Point II requirements, as set forth in this Tariff, Part VIII, Subpart C, section 408.
3. If a New Service Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the relevant Cycle, and Readiness Deposits and Study Deposits will be disbursed as follows:
  - a. For Readiness Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to Project Developer or Eligible Customer 100 percent of Readiness Deposit No. 2 paid by the Project Developer or Eligible Customer during Decision Point I;
    - ii. At the conclusion of the Cycle, refund to Project Developer or Eligible Customer up to 100 percent of Readiness Deposit No. 1 pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).
  - b. For Study Deposits:
    - i. At the conclusion of Transmission Provider's deficiency review for Decision Point II, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
    - ii. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VIII, Subpart C, section 408(B)(3)(a) and (b)(i), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer at the Application Phase and at the Decision Point I Phase if the Project Developer's Network Upgrade cost from Phase I to Phase II:
      - (a) increases overall by 25 percent or more; and

(b) increases by more than \$10,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

4. New Service Request Modification Requests at Decision Point II

- a. Project Developer or Eligible Customer may not request a modification that is not expressly allowed. To the extent Project Developer or Eligible Customer desires a modification that is not expressly allowed, Project Developer or Eligible Customer must withdraw its New Service Request and resubmit the New Service Request with the proposed modification in a subsequent Cycle.
- b. Reductions in Maximum Facility Output and/or Capacity Interconnection Rights. Project Developer may reduce the previously requested New Service Request Maximum Facility Output and/or Capacity Interconnection Rights values, up to 10 percent of the values studied in Phase II.
- c. Fuel Changes. The fuel type specified in the New Service Request may not be changed or modified in any way for any reason, except that for New Service Requests that involve multiple fuel types, removal of a fuel type through these reduction rules will not constitute a fuel type change.
- d. Point of Interconnection. The Point of Interconnection may not be changed or modified in any way for any reason at this point in the Cycle process.
- e. Generating Facility or Merchant Transmission Facility Site Changes. Project Developer may specify a change to the project Site only if the Project Developer satisfied the requirements for Site Control for both (i) the initial Site proposed in the New Service Request Application and the newly proposed Site; and (ii) the initial Site and the proposed Site are adjacent parcels. Such Site Control is subject to the verification procedures set forth in Tariff, Part VIII, Subpart C, section 410(A)(1)(c).
- f. Equipment Changes

During Decision Point II, Project Developer is limited to modifying its New Service Request to Permissible Technological Advancement changes only. Project Developer shall submit machine modeling data as specified in the PJM Manuals associated with the Permissible Technological Advancement before the close of Decision Point II.

**Tariff, Part VIII, Subpart C, section 409**  
**Phase III**

**A. Phase III Rules**

1. This Tariff, Part VIII, Subpart C, section 409 sets forth the procedures and other terms governing the Transmission Provider's administration of Phase III of the Cycle process. After Decision Point II of a Cycle is completed and a group of valid New Service Requests is established therein, Phase III of a Cycle will commence. During Phase III of a Cycle, the Transmission Provider shall conduct a Phase III System Impact Study. Only New Service Requests meeting the requirements of Tariff, Part VIII, Subpart C, section 408, Decision Point II, will be included in the Phase III System Impact Study.
  - a. The Phase III System Impact Study analysis will retool load flow, short circuit, and stability results based on decisions made in Decision Point II.
  - b. The Phase III System Impact Study will include a final Affected System study, if applicable.
  - c. Phase III System Impact Study results will be publicly available on Transmission Provider's website; Project Developers and Eligible Customers must obtain the results from the website.
  - d. Facilities Study. During the Phase III System Impact Study, a Facilities Study shall also be conducted pursuant to Tariff, Part VIII, Subpart C, section 404(A)(7).
  - e. Start and Duration of Phase III
    - i. Phase III shall start on the first Business Day immediately following the end of Decision Point II unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open. In no event shall Phase III of a Cycle commence before the conclusion of the Final Agreement Negotiation Phase of the immediately preceding Cycle.
    - ii. The Transmission Provider shall use Reasonable Efforts to complete Phase III within 180 days from the date such Phase III commenced. If the 180th day does not fall on a Business Day, Phase III shall be extended to end on the next Business Day. If the Transmission Provider is unable to complete Phase III within 180 days, the Transmission Provider shall notify all impacted Project Developers or Eligible Customers simultaneously by posting on Transmission Provider's website a revised estimated completion date along with

an explanation of the reasons why additional time is required to complete Phase III.

f. Draft Agreement

Prior to the Final Agreement Negotiation Phase, Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX, as applicable to the Project Developer's or Eligible Customer's New Service Request, along with any applicable draft schedules, to the parties to such interconnection related agreement.

**Tariff, Part VIII, Subpart C, section 410**  
**Decision Point III**

- A. Decision Point III shall commence on the first Business Day immediately following the end of Phase II, and shall run concurrently with the Final Agreement Negotiation Phase. New Service Requests that are studied in Phase II will enter Decision Point III. Before the close of Decision Point III, Project Developer or Eligible Customer shall choose either to remain in the Cycle subject to the terms set forth below, or to withdraw its New Service Request.
1. Transmission Provider must receive from the Project Developer or Eligible Customer all of the following required elements before the close of Decision Point III for a New Service Request to remain in the Cycle and proceed through the Final Agreement Negotiation Phase as set forth below:
    - a. Security
      - i. Security shall be calculated for New Service Requests based upon based upon Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results.
    - b. Notification in writing that Project Developer or Eligible Customer elects to proceed to a final agreement with respect to its New Service Request
    - c. Project Developers must present evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VIII, Subpart A, section 402, and is also in accordance with the following additional specifications:
      - i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional three-year term beginning from last day of the relevant Cycle, Phase III.
        - (a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).
      - ii. Interconnection Facilities (to the Point of Interconnection) Site Control evidence for an additional three-year term beginning from the last day of the relevant Cycle, Phase III.



- (a) Such Site Control evidence shall cover 100 percent of the linear distance for the identified required Interconnection Facilities associated with a New Service Request.
  - iii. Interconnection Switchyard, if applicable, Site Control evidence for an additional three-year term beginning from the last day of the relevant Cycle, Phase III.
    - (a) Such Site Control evidence shall cover 100 percent of the acreage required for the identified required Interconnection Switchyard associated with a New Service Request.
  - iv. If Project Developer or Eligible Customer fails to produce all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 410(A)(1)(c)(i), (ii) and (iii) above, then Project Developer or Eligible Customer must provide evidence acceptable to Transmission Provider demonstrating that Project Developer or Eligible Customer is in negotiations with appropriate entities to meet the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402 and in accordance with Tariff, Part VIII, Subpart C, section 410(A)(1)(c)(i), (ii) and (iii) above.
    - (a) If Transmission Provider determines that the evidence of such negotiations is acceptable, then Transmission Provider shall add a condition precedent in the New Service Request final interconnection related agreement (from Tariff, Part IX) requiring that within 180 days from the effective date of such final agreement, all required Site Control evidence in accordance with the Site Control rules set forth in Tariff, Part VIII, Subpart A, section 402, and in accordance with Tariff, Part VIII, Subpart C, section 410(A)(1)(c)(i), (ii) and (iii) above, shall be met or, otherwise, such agreement shall automatically be deemed terminated and cancelled, and the related New Service Request shall automatically be deemed terminated and withdrawn from the Cycle.
      - (i) Such condition precedent shall not be extended under any circumstances for any reason.
- d. For a Project Developer that has submitted a Transmission Interconnection Request, Project Developer shall provide evidence acceptable to the Transmission Provider that Project Developer has submitted and maintained a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Project Developer shall maintain its queue position(s)

with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request. If Project Developer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

- e. Project Developer or Eligible Customer must provide evidence that it has: (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; (ii) obtained any necessary local, county, and state site permits; and (iii) signed a memorandum of understanding for the acquisition of major equipment. If Project Developer or Eligible Customer does not satisfy these requirements, these requirements can be addressed through a milestone in the applicable interconnection-related service agreement entered into pursuant to Tariff, Part IX.
- f. For state-level, non-jurisdictional interconnection projects, evidence of a fully executed Interconnection Agreement with the applicable entity.
- g. If Project Developer or Eligible Customer fails to submit all of the criteria in Tariff, Part VIII, Subpart C, section 410(A)(1)(d)(a) through (f) above (noting the exception provided for Site Control), before the close of the Decision Point III Phase, Project Developer's or Eligible Customer's New Service Request shall be deemed terminated and withdrawn.

B. If Project Developer or Eligible Customer submits all elements in Tariff, Part VIII, Subpart C, section 410(A)(1)(d)(a) through (f) above, then, at the close of the Decision Point III, Transmission Provider will begin the deficiency review of the elements set forth in Tariff, Part VIII, Subpart C, section 410(A)(1)(d)(a) through (e) above, as follows:

- 1. Transmission Provider will exercise Reasonable Efforts to inform Project Developer or Eligible Customer of deficiencies within 10 Business Days after the close of Decision Point III.
- 2. Project Developer or Eligible Customer then has five Business Days to respond to Transmission Provider's deficiency determination.
- 3. Transmission Provider then will exercise Reasonable Efforts to review Project Developer's or Eligible Customer's response within 10 Business Days, and then will either terminate and withdraw the New Service Request, or proceed to the Final Agreement Negotiation Phase.

Transmission Provider's review of the above required elements may run co-extensively with the Final Agreement Negotiation Phase.

4. If the New Service Request is deemed terminated and withdrawn by the Transmission Provider, then Transmission Provider shall:
  - a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;
  - b. Readiness Deposits will be treated pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).
  - c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
5. A Project Developer or Eligible Customer may withdraw its New Service Request during Decision Point III. If the Project Developer or Eligible Customer elects to withdraw its New Service Request during Decision Point III, the Transmission Provider must receive before the close of Decision Point III written notification from the Project Developer or Eligible Customer of its decision to withdraw its New Service Request. Following receipt of such written notification from the Project Developer or Eligible Customer, the Transmission Provider shall:
  - a. remove the withdrawn New Service Request from the Cycle and terminate the New Service Request;
  - b. Readiness Deposits will be treated pursuant to Tariff, Part VIII, Subpart A, section 401(D)(2)(c).
  - c. At the conclusion of Transmission Provider's deficiency review for Decision Point III, refund to the Project Developer or Eligible Customer up to 90 percent of its Study Deposit submitted with its New Service Request during the Application Phase, less any actual costs.
  - d. Adverse Study Impact Calculation. Notwithstanding the refund provisions in Tariff, Part VIII, Subpart C, section 410(B)(4)(b) and (c), and 410(B)(5)(b), Transmission Provider shall refund to Project Developer or Eligible Customer the cumulative Readiness Deposit amounts paid by Project Developer or Eligible Customer if the Project Developer's or Eligible Customer's Network Upgrade cost from Phase II to Phase III:
    - i. increases overall by 35 percent or more; and
    - ii. increased by more than \$25,000 per MW.

Network Upgrade costs shall include costs identified in Affected System studies in their respective phases.

C. New Service Request Modification Requests at Decision Point III

New Service Requests may not be changed or modified in any way for any reason during Decision Point III. A New Service Request must be withdrawn and resubmitted in a subsequent Cycle to the extent a Project Developer or Eligible Customer wants to make any changes to such New Service Request at this point in the Cycle process.

**Tariff, Part VIII, Subpart D**  
**FINAL AGREEMENT NEGOTIATION PHASE**

**Tariff, Part VIII, Subpart D, section 411**  
**Final Agreement Negotiation Phase**

- A. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the end of Phase III, and shall run concurrently with Decision Point III. New Service Requests that enter Decision Point III will also enter the Final Agreement Negotiation Phase. The purpose of the Final Agreement Phase is to negotiate, execute and enter into a final interconnection related service agreement found in Tariff, Part IX, as applicable to a New Service Request; adjust the Security obligation based on New Service Requests withdrawn during Decision Point III and/or during the Final Agreement Negotiation Phase; and conduct any remaining analyses or updated analyses based on New Service Requests withdrawn during Decision Point III. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
1. If a New Service Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the New Service Request from the Cycle, and adjust the Security obligations of other New Service Requests based on the withdrawal.
- B. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:
1. Transmission Provider shall provide in electronic form a draft interconnection related agreement from Tariff, Part IX (as applicable to the Project Developer's or Eligible Customer's New Service Request), along with any applicable draft schedules, to the parties to such interconnection related agreement prior to the start of the Final Agreement Negotiation Phase.
- a. Subject to any withdrawn New Service Requests during Decision Point III that require Transmission Provider to update study results, the draft interconnection related agreement shall be prepared using the study results available from Phase III or the most-recently completed studies conducted during the Final Agreement Negotiation Phase.
- i. If a different New Service Request is withdrawn during Decision Point III after a draft agreement has been tendered to Project Developer or Eligible Customer, and that withdrawn New Service Request impacts the Project Developer's or Eligible Customer tendered draft, Transmission Provider shall use Reasonable Efforts to update and reissue the tendered draft within 15 Business Days.

2. Negotiation

Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60th day is not a Business Day, negotiations shall conclude on the next Business Day. Upon receipt of the draft agreements, Project Developer or Eligible Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.

3. Impasse

If the Project Developer or Eligible Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

4. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final interconnection related agreement, along with any applicable schedules, to the parties in electronic form.

- a. Not later than 15 Business Days after receipt of the final interconnection related agreement, Project Developer or Eligible Customer shall either:
  - i. execute the final interconnection related service agreement in electronic form and return it to Transmission Provider electronically;
  - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
  - iii. request in writing that Transmission Provider file with FERC the final interconnection related service agreement in unexecuted form

- (a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.
    - iv. and provide any required adjustments to Security.
  - b. If Project Developer or Eligible Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:
    - i. execute the final interconnection related agreement in electronic form and return it to Transmission Provider electronically;
    - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
    - iii. request in writing that Transmission Provider file with FERC the final interconnection related serviced agreement in unexecuted form.
      - (a) The unexecuted interconnection related service agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the New Service Request.
5. Parties may not proceed under such interconnection related service agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.



**Tariff, Part VIII, Subpart E**  
**MISCELLANEOUS**

**Tariff, Part VIII, Subpart E, section 412**  
**Assignment of Project Identifier**

- A. When an Application from a Project Developer or an Eligible Customer results in a valid New Service Request, in accordance with Tariff, Part VIII, Subpart B, section 403, Transmission Provider shall confirm the assigned Project Identifier to such request. For Project Developers and Eligible Customers, the Project Identifier will indicate the applicable Cycle, and will denote a number that represents the project within the Cycle. The Project Identifier is strictly for identification purposes, and does not indicate priority within a Cycle.
- B. When an Application from an Upgrade Customer results in a valid Upgrade Request, in accordance with Tariff, Part VIII, Subpart H, section 435, Transmission Provider shall confirm the assigned Request Number to such request. The Request Number will indicate the serial position and priority.
- C. When an Application from a Surplus Interconnection Service Customer results in a valid Surplus Interconnection Service Request, in accordance with Tariff, Part VIII, Subpart E, section 414, Transmission Provider shall confirm the assigned Surplus Service Request Number to such request. The Request Number will indicate the serial position and priority.

**Tariff, Part VIII, Subpart E, section 413**  
**Service Below Generating Capability**

The Transmission Provider shall consider requests for Interconnection Service below the full electrical generating capability of the Generating Facility. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of determining Interconnection Facilities, Network Upgrades, and associated costs, but may be subject to other studies at the full electrical generating capability of the Generating Facility to ensure the safety and reliability of the system, with the study costs borne by the Project Developer. If after additional studies are complete, Transmission Provider determines that additional Network Upgrades are necessary, then Transmission Provider must: (i) specify which additional Network Upgrade costs are based on which studies; and (ii) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrades costs required for safety and reliability also will be borne by the Project Developer. Project Developers may be subject to additional control technologies as well as testing and validation of these technologies as set forth in the GIA. The necessary control technologies and protection systems shall be established in Tariff, Part IX, Subpart B, Schedule K (Requirements for Interconnection Service Below Full Electrical Generating Capability) of the executed, or requested to be filed unexecuted, GIA.

**Tariff, Part VIII, Subpart E, section 414**  
**Surplus Interconnection Service**

**A Surplus Interconnection Service Request**

Requests for Surplus Interconnection Service may be made by the existing Project Developer whose Generating Facility is already interconnected, or one of its affiliates, or by an unaffiliated Project Developer. The existing Project Developer or one of its affiliates has priority to use this service; however, if they do not exercise this priority, Surplus Interconnection Requests also may be made available to an unaffiliated Surplus Project Developer. Surplus Interconnection Service is limited to utilizing or transferring an existing Generating Facility's Surplus Interconnection Service at the pre-existing Point of Interconnection of the existing Generating Facility and cannot exceed the existing Generating Facility's total amount of Interconnection Service, i.e., the total amount of Interconnection Service used by the Generating Facility requesting Surplus Interconnection Service and the existing Generating Facility shall not exceed the lesser of the Maximum Facility Output stated in the existing Generating Facility's Interconnection Service Agreement or Generator Interconnection Agreement, or the total "as-built capability" of the existing Generating Facility. If the Generating Facility requests Surplus Interconnection Service associated with an existing Generating Facility that is an Energy Resource, the Generating Facility requesting the Surplus Interconnection Service shall be an Energy Resource; and if the existing Generating Facility is a Capacity Resource, the Generating Facility requesting Surplus Interconnection Service associated with the Generating Facility may be an Energy Resource or a Capacity Resource (but only up to the amount of Capacity Interconnection Rights granted the existing Generating Facility). Surplus Interconnection Service cannot be granted if doing so would require new Network Upgrades or would have additional impacts affecting the determination of what Network Upgrades would be necessary to New Service Customers already in the New Services Queue or that have a material impact on short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response.

1. Surplus Interconnection Request Requirements. A Surplus Project Developer seeking Surplus Interconnection Service must submit a complete and fully executed Surplus Interconnection Study Agreement, which form is located at Tariff, Part IX. To be considered complete at the time of submission, the Surplus Project Developer's Surplus Interconnection Study Agreement must include, at a minimum, each of the following:
  - a. Specification of the location of the proposed surplus generating unit Site or existing surplus generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit Site); and
  - b. Evidence of an ownership interest in, or right to acquire or control the surplus generating unit Site for a minimum of three years, such as a deed, option agreement, lease or other similar document acceptable to the Transmission Provider; and

- c. The MW size of the proposed surplus generating unit or the amount of increase in MW capability of an existing surplus generating unit; and
- d. Identification of the fuel type of the proposed surplus generating unit or upgrade thereto; and
- e. Identification of the fuel type of the proposed surplus generating unit or upgrade thereto; and
- f. A description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the surplus generating unit is wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator; and
- g. The planned date the proposed surplus generating unit or increase in MW capability of an existing surplus generating unit will be in service; and
- h. Any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; and
- i. A description of the circumstances under which Surplus Interconnection Service will be available at the existing Generating Facility's Point of Interconnection; and
- j. A deposit in the amount of \$10,000 plus \$100 for each MW requested provided that the maximum total deposit amount for a Surplus Interconnection Request shall not exceed \$110,000. If any deposit monies remain after the Surplus Interconnection Study is complete and any outstanding monies owed by the Surplus Project Developer in connection with outstanding invoices related to prior New Service Requests and/or Surplus Interconnection Requests by the Surplus Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Surplus Project Developer; and
- k. Identification of the specific, existing Generating Facility already interconnected to the PJM Transmission System providing Surplus Interconnection Service, including whether the Surplus Project Developer requesting Surplus Interconnection Service is the owner or affiliate of the existing Generating Facility; and
- l. If the Surplus Project Developer is an unaffiliated third party, the Surplus Project Developer must submit with its Surplus Interconnection Study Agreement the following information and documentation acceptable to the Transmission Provider:

- i. Written evidence from the owner of the existing Generating Facility granting Surplus Project Developer permission to utilize the existing Generating Facility's unused portion of Interconnection Service established in the existing Generating Facility's Interconnection Service Agreement or Generation Interconnection Agreement; and
  - ii. Written documentation stating that the owner of the surplus generating unit and the owner of the existing Generating Facility will have entered into, prior to the owner of the existing Generating Facility executing a revised Interconnection Service Agreement or Generation Interconnection Agreement, a shared facilities agreement between the owner of the existing Generating Facility and the owner of the surplus generating unit detailing their respective roles and responsibilities relative to the Surplus Interconnection Service.
- m. If an Energy Storage Resource, Surplus Project Developer must submit primary frequency response operating range for the surplus generating unit.
- 2. Deficiency Review. Following the receipt of the Surplus Interconnection Study Agreement and requisite information and/or monies listed above, Transmission Provider shall determine whether the listed requirements were submitted as valid or deficient. If deemed deficient by Transmission Provider, Surplus Project Developer must submit the requisite information and/or monies acceptable to the Transmission Provider within 10 Business Days of receipt of the Transmission Provider's notice of deficiency. Failure of the Project Developer to timely provide information and/or monies identified in the deficiency notice shall result in the Surplus Interconnection Request being terminated and withdrawn. The Surplus Interconnection Service Request shall be considered valid as of the date and time the Transmission Provider receives from the Project Developer the last piece of required information and/or monies deemed acceptable by the Transmission Provider to clear such deficiency notice.

## B Surplus Interconnection Study

After receiving a valid Surplus Interconnection Study Agreement seeking Surplus Interconnection Service and the requisite deposit set forth in Tariff, Part VIII, Subpart E, section 414(A)(1)(j) from the Surplus Project Developer, the Transmission Provider shall conduct a Surplus Interconnection Study.

- 1. Scope of Surplus Interconnection Study. A Surplus Interconnection Study shall consist of reactive power, short circuit/fault duty, stability analysis and any other appropriate analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection

Service. The Transmission Provider shall use Reasonable Efforts to complete the Surplus Interconnection Study within one hundred eighty (180) days of determination of a valid Surplus Interconnection Service Request. If the Transmission Provider is unable to complete the Surplus Interconnection Study within such time period, Transmission Provider shall notify the Surplus Project Developer and provide an estimated completion date and an explanation of the reasons why the additional time is required.

2. Once the Surplus Interconnection Study is completed and Transmission Provider confirms that (i) no new Network Upgrades are required, (ii) there are no impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, and (iii) there are no material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, the Transmission Provider shall issue the Surplus Interconnection Study to the Surplus Project Developer. If the Surplus Project Developer is an unaffiliated third party, PJM shall issue a Surplus Interconnection Study to the owner of the existing Generating Facility. A revised Interconnection Service Agreement or Generation Interconnection Agreement will be prepared and issued to the owner of the existing Generating Facility within sixty days of issuance of the Surplus Interconnection Study including the terms and conditions for Surplus Interconnection Service. Within sixty days of receipt by the owner of the existing Generating Facility of the revised Interconnection Service Agreement or Generation Interconnection Agreement, the owner of the existing Generating Facility will execute the revised Interconnection Service Agreement or Generation Interconnection Agreement, request dispute resolution or request that the Interconnection Service Agreement or Generator Interconnection Agreement be filed unexecuted in accordance.
3. If the Transmission Provider determines from the Surplus Interconnection Study that Network Upgrades may be required or there may be impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, or there may be material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.
4. Deactivation of Existing Generating Facility
  - a. Surplus Interconnection Service cannot be offered if the existing Generating Facility from which Surplus Interconnection is provided is deactivated or has submitted a Notice to Deactivate to Transmission Provider consistent with Tariff, Part V, before the surplus generating unit has commenced commercial operation.
  - b. Limited Operation. A Generating Facility receiving Surplus Interconnection Service may continue to receive Surplus Interconnection

Service for a period not to exceed one year after the existing Generating Facility's Deactivation Date under the following conditions:

- i. The surplus generating unit must have been studied by the Transmission Provider for the sole operation at the Point of Interconnection; and
  - ii. The owner of the existing Generating Facility must agree in writing that the Surplus Project Developer may continue to operate at either its limited share of the existing Generating Facility's capability under its Interconnection Service Agreement or Generator Interconnection Agreement, or any level below such capability upon the deactivation of the existing Generating Facility.
- c. If the Surplus Project Developer cannot satisfy the conditions of this Tariff, Part VIII, Subpart E, section 414(B)(4)(b) above, the revised Interconnection Service Agreement or Generator Interconnection Agreement for the existing Generating Facility shall terminate consistent with the Interconnection Service Agreement or Generator Interconnection Agreement terms of termination for a deactivated Generating Facility.



**Tariff, Part VIII, Subpart E, section 415**  
**Behind The Meter Generation**

The following provisions shall apply with respect to Behind The Meter Generation:

A. New Service Requests

A Project Developer that desires to designate any Behind The Meter Generation, in whole or in part, as a Capacity Resource or Energy Resource must submit a New Service Request Application, a form of which is located in Tariff, Part IX, Subpart A.

B. Information Required in New Service Requests

The Project Developer must provide the information set forth in Tariff, Part VIII, Subpart B, section 403.

C. Transmission Provider Determination

During the Application Review Phase of a Cycle, Transmission Provider shall determine, based on the information included in the New Service Request Application, whether the proposed project meets the definition in Tariff, Part VIII, Subpart A, section 400 for Behind The Meter Generation. In the event that Transmission Provider finds that the subject project does not meet the definition of Behind The Meter Generation, it shall so notify the Project Developer during the deficiency review process pursuant to Tariff, Part VIII, Subpart B, section 403(B).

D. Treatment as Energy Resource

Any portion of the capacity of Behind The Meter Generation that a Project Developer identifies in its Application as capacity that it seeks to utilize, directly or indirectly, in Wholesale Transactions, but for which the customer does not seek Capacity Resource status, shall be deemed to be an Energy Resource.

E. Operation as Capacity Resource

To the extent that a Project Developer that owns or operates generation facilities that otherwise would be classified as Behind The Meter Generation elects to operate such facilities as a Capacity Resource, the provisions of the Tariff regarding Behind The Meter Generation shall not apply to such generation facilities for the period such election is in effect.

F. Other Requirements

Behind The Meter Generation for which a New Service Request is not required under Tariff, Part VIII may be subject to other interconnection-related requirements of a Transmission Owner or Electric Distributor with which the generation facility will be interconnected.

**Tariff, Part VIII, Subpart E, section 416**  
**Base Case Data**

Transmission Provider shall maintain base case power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on a password-protected website, subject to the confidentiality provisions of Tariff, Part VIII, Subpart E, section 425. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent Cycle. Transmission Provider may require Project Developers or Eligible Customers and password-protected website users to sign any required confidentiality agreement(s) before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

**Tariff, Part VIII, Subpart E, section 417**  
**Service on Merchant Transmission Facilities**

- A. A Transmission Project Developer that will be a Merchant Transmission Provider shall:
1. At least 90 days prior to the anticipated date of commencement of Interconnection Service under its Generator Interconnection Agreement, provide the Transmission Provider with terms and conditions for reservation, interruption and curtailment priorities for firm and non-firm transmission service on the Merchant Transmission Provider's Merchant Transmission Facilities. Such terms and conditions shall be non-discriminatory and shall be consistent with the terms of the Commission's approval of the Merchant Transmission Provider's right to charge negotiated (market-based) rates for service on its Merchant Transmission Facilities. Transmission Provider shall post such terms and conditions applicable to service on the Merchant Transmission Facilities on its OASIS and shall file them with the Commission as a separate service schedule under the Tariff, with a proposed effective date on or before the anticipated date of commencement of Interconnection Service for the affected Transmission Project Developer; and (2) at least 15 days prior to the anticipated date of commencement of Interconnection Service for Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, provide the Transmission Provider with the results of a Commission-approved process for allocation of Transmission Injection Rights and Transmission Withdrawal Rights associated with such Merchant Transmission Provider's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, and with a listing of any Transmission Injection Rights and/or Transmission Withdrawal Rights not allocated in such process. Transmission Provider shall post such information on its OASIS.
  2. Should the Merchant Transmission Provider fail to provide the Transmission Provider with the terms and conditions for service on the Merchant Transmission Provider's Merchant Transmission Facilities required under subsection (A)(1) of this section, firm and non-firm transmission service on such Merchant Transmission Facilities shall be subject to the terms and conditions regarding reservation, interruption and curtailment priorities applicable to Firm or Non-Firm Point-to-Point Transmission Service on the Transmission System.
  3. Except as otherwise provided under this Tariff, Part VIII, Subpart E, section 417, transmission service on, and operation of, Merchant Transmission Facilities shall be subject to the terms and conditions (including in particular, but not limited to, those relating to Transmission Provider's authority in the event of an emergency) applicable to Transmission Service under the Tariff and the Operating Agreement.

**Tariff, Part VIII, Subpart E, section 418**  
**Local Furnishing Bonds**

A. Transmission Owners That Own Facilities Financed by Local Furnishing Bonds

This provision is applicable only to a Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in section 142(f) of the Internal Revenue Code (“local furnishing bonds”). Notwithstanding any other provision of Part IV or Part VI, Transmission Provider shall not be required to provide Interconnection Service to Project Developer pursuant to Part IV or Part VI if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner’s facilities that would be used in providing such Interconnection Service.

B. Alternative Procedures for Requesting Interconnection Service

A Transmission Owner that believes the provision of Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Owner’s facilities that would be used in providing such Interconnection Service, it shall so notify Transmission Provider within 30 days after the Transmission Owner receives a copy of the Project Developer’s Interconnection Request. If Transmission Provider determines that the provision of Interconnection Service requested by Project Developer would jeopardize the tax-exempt status of the Transmission Owner’s local furnishing bonds, it shall so advise the Project Developer within 30 days after receipt of notice of such jeopardy from the affected Transmission Owner. Project Developer thereafter may renew its request for interconnection using the process specified in Tariff, Part I, section 5.2(ii).

**Tariff, Part VIII, Subpart E, section 419**  
**Internal Dispute Resolution Procedures**

Any dispute between a Transmission Customer or New Service Customer, an affected Transmission Owner, or the Transmission Provider involving transmission or interconnection service under the Tariff (excluding applications for rate changes or other changes to the Tariff which shall be presented directly to the Commission for resolution) shall be referred to a designated senior representative of each of the parties to the dispute for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within 30 days (or such other period as the parties to the dispute may agree upon) by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

A. To the extent these Internal Dispute Resolution Procedures are invoked with regard to an unpaid invoice, any additional related subsequent unpaid invoices shall be considered to be a part of the initial internal dispute invoked under this section in order to avoid multiple internal dispute claims involving the same matter.

1. If the additional related subsequent unpaid invoices arise after the determination of the initial internal dispute but no new material claims are raised, then these Internal Dispute Resolution Procedures shall not be available with regard to such additional related subsequent unpaid invoices, and the matter shall either be submitted directly to arbitration and resolved in accordance with the arbitration procedures set forth below.
2. To the extent a party repeatedly fails to pay invoices related to the same matter and subsequently invokes these Internal Dispute Resolution Procedures multiple times concerning the same matter, the Transmission Provider may refer the matter to the Federal Energy Regulatory Commission Office of Enforcement.

B. Non-Binding Dispute Resolution Procedures

If a party has submitted a notice of dispute pursuant to Tariff, Part I, section 8.1 and the parties are unable to resolve the dispute through unassisted or assisted negotiation within the 30 days (or such other period as the parties to the dispute may agree upon) provided in that section, and the parties cannot reach mutual agreement to pursue Tariff, Part I, section 8.2 arbitration process, a party may request that Transmission Provider engage in non-binding dispute resolution pursuant to this Tariff, Part VIII, Subpart E, section 419 by providing written notice to Transmission Provider. Conversely, either party may file a request for non-binding dispute resolution pursuant to this section without first seeking mutual agreement to pursue Tariff, Part I, section 8.2 arbitration process. The process in this section shall serve as an alternative to, and not a replacement of, the Tariff, Part I, section 12.2 arbitration process. Pursuant to this process, the Transmission Provider must within 30 days of receipt of the request for this non-binding dispute resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with either party. Unless otherwise

agreed to by the parties, the decision-maker shall render a decision within sixty days of appointment and shall notify the parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of the Tariff and relevant service agreement and shall have no power to modify or change any provision of the Tariff or relevant service agreement in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Tariff, Part I, section 12.2 arbitration, or in a Federal Power Act, section 206 complaint. Each party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each party to the dispute.

**Tariff, Part VIII, Subpart E, section 420**  
**Responsibilities of Transmission Provider and Transmission Owners**

Transmission Provider shall be responsible for the preparation of all studies required by the Tariff. Transmission Provider may contract with consultants, including the affected Transmission Owner(s), to obtain services or expertise with respect to any such study, including but not limited to (1) the need for Interconnection Facilities, Network Upgrades, and Merchant Transmission Upgrades, (2) estimates of costs and construction times required by all such studies, and (3) information regarding distribution facilities. Transmission Owner(s) shall supply such information and data reasonably required by Transmission Provider to perform its obligations under this Part VIII.

**Tariff, Part VIII, Subpart E, section 421**  
**Additional Upgrades**

In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a New Service Request or Upgrade Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the New Service Request or Upgrade Request, a New Service Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its New Service Request or Upgrade Request. The remaining costs shall be borne by the Transmission Owners in accordance with Operating Agreement, Schedule 6 and, subject to FERC approval, may be included in the revenue requirements of the Transmission Owners.



**Tariff, Part VIII, Subpart E, section 422**  
**IDR Transfer Agreement**

A. Effect of IDR Transfer Agreement

A Project Developer may modify its cost responsibility for Network Upgrades and/or Distribution Upgrades as determined under this Tariff, Part VIII, Subpart C, section 404(A)(5) by submitting an IDR Transfer Agreement in accordance with Tariff, Part VIII, Subpart E, section 422(B) that transfers to the Project Developer Incremental Deliverability Rights associated with Merchant Transmission Facilities. As provided in Tariff, Part VIII, Subpart E, section 422(B), the Project Developer's cost responsibility shall be modified only if it elects to terminate, and Transmission Provider confirms termination of, its participation in and cost responsibility for any Network Upgrade or Distribution Upgrade.

B. IDR Transfer Agreements

1. Purpose

A Project Developer (hereafter in this Tariff, Part VIII, Subpart E, section 422(B) the "Buyer Customer") may acquire Incremental Deliverability Rights assigned to another Project Developer (hereafter in this Tariff, Part VIII, Subpart E, section 422(B), the "Seller Customer") by entering into an IDR Transfer Agreement with the Seller Customer. Subject to the terms of this Tariff, Part VIII, Subpart E, section 422(B), the Buyer Customer may rely upon such Incremental Deliverability Rights to satisfy, in whole or in part, its responsibility for Network Upgrades and/or Distribution Upgrades otherwise necessary to accommodate the Buyer Customer's Interconnection Request.

2. Requirements

A Buyer Customer may rely upon Incremental Deliverability Rights to satisfy, in whole or in part, the deliverability requirements applicable to its Interconnection Request only if it submits to Transmission Provider an IDR Transfer Agreement executed by both the Buyer Customer and the Seller Customer and only if such agreement meets all of the following requirements:

a. Required Elements

Any IDR Transfer Agreement submitted to Transmission Provider under this section:

- i. shall identify the Buyer Customer and the Seller Customer by full legal name, including the name of a contact person, with address and telephone number, for each party;

- ii. shall identify the System Impact Study in which the Transmission Provider determined and assigned the Incremental Deliverability Rights transferred under the agreement;
- iii. if the Seller Customer acquired the Incremental Deliverability Rights to be transferred under the proffered agreement from another party, shall describe the chain of title of such Incremental Deliverability Rights from their original holder to the Seller Customer;
- iv. shall provide for the unconditional and irrevocable transfer of the subject Incremental Deliverability Rights to the Buyer Customer;
- v. shall include a warranty of the Seller Customer to the Buyer Customer and to the Transmission Provider that the Seller Customer holds, or has a legal right to acquire, the Incremental Deliverability Rights to be transferred under the proffered agreement;
- vi. shall identify the location and shall state unequivocally the quantity of Incremental Deliverability Rights transferred under the agreement, provided that the transferred quantity may not exceed the total quantity of Incremental Deliverability Rights that the Seller Customer holds or has legal rights to acquire at the relevant location; and
- vii. shall identify any IDR Transfer Agreement under which the Seller Customer previously transferred any Incremental Deliverability Rights associated with the same location.

b. Optional Election

When it submits the IDR Transfer Agreement to Transmission Provider, the Buyer Customer also (a) may identify any Network Upgrade or Distribution Upgrade for which the Buyer Customer has been assigned cost responsibility in association with a then-pending Interconnection Request submitted by it and for which it believes the Incremental Deliverability Rights transferred to it under the proffered IDR Transfer Agreement would satisfy the deliverability requirement applicable to such Interconnection Request; and (b) shall state whether it chooses to terminate its participation in (and cost responsibility for) any such Network Upgrade or Distribution Upgrade.

3. Subsequent Election

A Buyer Customer that has submitted a valid IDR Transfer Agreement may elect to terminate its participation in any Network Upgrade or Distribution Upgrade for

which it has not previously made such an election, at any time prior to its execution of a Generation Interconnection Agreement related to the Interconnection Request with respect to which it was assigned responsibility for the affected facility or upgrade. The Buyer Customer must notify Transmission Provider in writing of such an election and its election shall be subject to Transmission Provider's determination and confirmation under Tariff, Part VIII, Subpart E, section 422(B)(4).

4. Confirmation by Transmission Provider

- a. Transmission Provider shall determine whether and to what extent the Incremental Deliverability Rights transferred under an IDR Transfer Agreement would satisfy the deliverability requirements applicable to the Buyer Customer's Interconnection Request. Transmission Provider shall notify the parties to the IDR Transfer Agreement of its determination within 30 days after receipt of the agreement. If the Transmission Provider determines that the IDRs transferred under the proffered agreement would not satisfy, in whole or in part, the deliverability requirement applicable to the Buyer Customer's Interconnection Request, its notice to the parties shall explain the reasons for its determination and, to the extent of Transmission Provider's negative determination, the parties' IDR Transfer Agreement shall not be queued as an Interconnection Request pursuant to Tariff, Part VIII, Subpart E, section 422(B)(6). Any dispute regarding Transmission Provider's determination may be submitted to dispute resolution under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5.
- b. To the extent that an election of the Buyer Customer under Tariff, Part VIII, Subpart E, section 422(B)(2)(b) or section 422(B)(3) to terminate participation in any Network Upgrade or Distribution Upgrade is consistent with Transmission Provider's determination, Transmission Provider shall confirm Buyer's termination election and shall recalculate accordingly the Buyer Customer's cost responsibility under Tariff, Part VIII, Subpart C, section 404(A)(5), as applicable. Transmission Provider shall provide its confirmation, along with any recalculation of cost responsibility, under this section in writing to the Buyer Customer within 30 days after receipt of notice of the Buyer Customer's election to terminate participation.

5. Effect of Election on Interconnection Request

In the event that the Buyer Customer, pursuant to a confirmed election under this Tariff, Part VIII, Subpart E, section 422(B), terminates its participation in any Network Upgrade or Distribution Upgrade and the Interconnection Request underlying the Incremental Deliverability Rights acquired by the Buyer Customer under its IDR Transfer Agreement subsequently is terminated and withdrawn, or

deemed to be so, then the Buyer Customer's New Service Request also shall be deemed to be concurrently terminated and withdrawn.

6. Effect on Interconnection Studies

Each IDR Transfer Agreement shall be deemed to be a New Service Request and shall be queued, and shall be reflected as appropriate in subsequent System Impact Studies, with other New Service Requests received under the Tariff. The Buyer Customer shall be the Project Developer for purposes of application of the provisions of Tariff, Part VIII, including, in the event that Transmission Provider determines that further analysis of the relevant IDRs is necessary, provisions relating to responsibility for the costs of Interconnection Studies.

**Tariff, Part VIII, Subpart E, section 423**  
**Regional Transmission Expansion Plan**

- A. Any Interconnection Facilities, Direct Assignment Facilities, Distribution Upgrades, or Network Upgrades constructed to accommodate a New Service Request or an Affected System facility shall be included in the Regional Transmission Expansion Plan upon their identification in an interconnection-related agreement in the form set forth in Tariff, Part IX. For purposes of this Part VIII, Subpart E, section 423, an Affected System facility is a facility, that in the event that interconnection of a new or expanded generation or transmission facility with an Affected System, requires Distribution Upgrades or Network Upgrades to the Transmission Provider's Transmission System.
- B. In the event that termination of a New Service Customer's participation in a previously identified Network Upgrade or Distribution Upgrade pursuant to Tariff, Part VIII, Subpart E, section 422, eliminates the need for such upgrade, Transmission Provider shall offer all New Service Customers whose New Service Requests preceded the IDR Transfer Agreement that facilitated such termination an opportunity to pursue and pay for (in whole or in part) such upgrade.
- C. Transmission Provider shall remove from the Regional Transmission Expansion Plan any Network Upgrade or Distribution Upgrade in the event that the need for such upgrade is eliminated due to termination of a New Service Customer's participation in such upgrade and other New Service Customers do not pursue and pay for the upgrade pursuant to Tariff, Part VIII, Subpart E, section 422.

**Tariff, Part VIII, Subpart E, section 424**  
**Transmission Owner Construction Obligation for Necessary Facilities and Upgrades**

**A. Construction Obligation**

The determination of the Transmission Owners' obligations to build the necessary facilities and upgrades to accommodate New Service Requests, or interconnections with Affected Systems in accordance with Tariff, Part VIII, Subpart G, section 434, shall be made in the same manner as such responsibilities are determined under Operating Agreement, Schedule 6. Except to the extent otherwise provided in a Generation Interconnection Agreement or Construction Service Agreement entered into pursuant to this Part VIII, the Transmission Owners shall own all Interconnection Facilities and Network Upgrades constructed to accommodate New Service Requests.

**B. Alternative Facilities and Upgrades**

Upon completion of the studies of a New Service Request or Upgrade Request prescribed in the Tariff, the Transmission Provider shall recommend the necessary facilities and upgrades to accommodate the New Service Request or Upgrade Request, and the Transmission Owner's construction obligation to build such facilities and upgrades. The Transmission Owner(s), or the Project Developer, Eligible Customer or Upgrade Customer, may offer alternatives to the Transmission Provider's recommendation. If, based upon its review of the relative costs and benefits, the ability of the alternative(s) to accommodate the New Service Request or Upgrade Request, and the alternative's(s') impact on the reliability of the Transmission System, the Transmission Provider does not adopt such alternative(s), the Transmission Owner(s), or the Project Developer, Eligible Customer, or Upgrade Customer, may require that the alternative(s) be submitted to Dispute Resolution in accordance with Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. The affected Project Developer, Eligible Customer, Upgrade Customer may participate in any such Dispute Resolution process.

**Tariff, Part VIII, Subpart E, section 425**  
**Confidentiality**

Except as otherwise provided in this Tariff, Part VIII, Subpart E, section 425, all information provided to Transmission Provider by Project Developers, Eligible Customers, or Upgrade Customers relating to any study of a New Service Request or Upgrade Request, required under the Tariff shall be deemed Confidential Information under Tariff, Part VIII, Subpart E, section 425. Upon completion of each study, the study will be listed on Transmission Provider's website and, to the extent required by Commission regulations, will be made publicly available upon request. To the extent that Transmission Provider contracts with consultants or with one or more Transmission Owner(s) for services or expertise in the preparation of any of the studies required under the Tariff, the consultants and/or Transmission Owner(s) shall keep all information provided by Project Developers confidential, and shall use such information solely for the purpose of the study for which it was provided and for no other purpose.

**A. Confidential Information**

For purposes of this Tariff, Part VIII, Subpart E, section 425, the term "party" refers to Project Developer, Eligible Customer, Upgrade Customer, Transmission Provider, or a Transmission Owner, as applicable, and the term "parties" refers to all such entities collectively, or to any two or more of them, as the context indicates. Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the party providing the information orally informs the party receiving the information that the information is confidential. If requested by any party, the disclosing party shall provide in writing the basis for asserting that the information referred to in this section warrants confidential treatment, and the requesting party may disclose such writing to an appropriate Governmental Authority. Any party shall be responsible for the costs associated with affording confidential treatment to its information.

**1. Term**

During the longest of the terms of (as and to the extent applicable) interconnection-related service agreement set forth in Tariff, Part IX and for a period of three years after the expiration or termination thereof, and except as otherwise provided in this Tariff, Part VIII, Subpart E, section 425, each party shall hold in confidence, and shall not disclose to any person, Confidential Information provided to it by any other party.

**2. Scope**

Confidential Information shall not include information that the receiving party can demonstrate: (i) is generally available to the public other than as a result of a disclosure by the receiving party; (ii) was in the lawful possession of the receiving party on a non-confidential basis before receiving it from the disclosing party; (iii) was supplied to the receiving party without restriction by a third party, who, to the

knowledge of the receiving party, after due inquiry, was under no obligation to the disclosing party to keep such information confidential; (iv) was independently developed by the receiving party without reference to Confidential Information of the disclosing party; (v) is, or becomes, publicly known, through no wrongful act or omission of the receiving party or breach of the requirements of this Tariff, Part VIII, Subpart E, section 425; or (vi) is required, in accordance with Tariff, Part VIII, Subpart E, section 425(A)(7) below, to be disclosed to any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Tariff or any agreement entered into pursuant thereto. Information designated as Confidential Information shall no longer be deemed confidential if the party that designated the information as confidential notifies the other parties that it no longer is confidential.

3. Release of Confidential Information

No party shall disclose Confidential Information to any other person, except to its Affiliates (limited by the Commission's Standards of Conduct requirements), subcontractors, employees, consultants or to parties who may be, or may be considering, providing financing to or equity participation in Project Developer, Eligible Customer, or Upgrade Customer, or to potential purchasers or assignees of Project Developer, Eligible Customer, or Upgrade Customer, on a need-to-know basis in connection with the interconnected-related service agreement, unless such person has first been advised of the confidentiality provisions of this Tariff, Part VIII, Subpart E, section 425(A) and has agreed to comply with such provisions. Notwithstanding the foregoing, a party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Tariff, Part VIII, Subpart E, section 425(A).

4. Rights

Each party retains all rights, title, and interest in the Confidential Information that it discloses to any other party. A party's disclosure to another party of Confidential Information shall not be deemed a waiver by any party or any other person or entity of the right to protect the Confidential Information from public disclosure.

5. No Warranties

By providing Confidential Information, no party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no party obligates itself to provide any particular information or Confidential Information to any other party nor to enter into any further agreements or proceed with any other relationship or joint venture.

6. Standard of Care



Each party shall use at least the same standard of care to protect Confidential Information it receives as the party uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each party may use Confidential Information solely to fulfill its obligations to the other parties under this Tariff, Part VIII or any agreement entered into pursuant to this Tariff, Part VIII.

7. Order of Disclosure

If a Governmental Authority with the right, power, and apparent authority to do so requests or requires a party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that party shall provide the party that provided the information with prompt prior notice of such request(s) or requirement(s) so that the providing party may seek an appropriate protective order or waive compliance with the terms of this Tariff, Part VIII or any applicable agreement entered into pursuant to this Tariff, Part VIII. Notwithstanding the absence of a protective order or agreement, or waiver, the party that is subjected to the request or order may disclose such Confidential Information which, in the opinion of its counsel, the party is legally compelled to disclose. Each party shall use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

8. Termination of Agreement(s)

Upon termination of any agreement entered into pursuant to this Tariff, Part VIII for any reason, each party shall, within 10 calendar days of receipt of a written request from another party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting party) or to return to the other party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting party.

9. Disclosure to FERC or its Staff

Notwithstanding anything in this Tariff, Part VIII, Subpart E, section 425(A) to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the parties that is otherwise required to be maintained in confidence pursuant to this Tariff, Part VIII or any agreement entered into pursuant to this Tariff, Part VIII, the party receiving such request shall provide the requested information to FERC or its staff within the time provided for in the request for information.

In providing the information to FERC or its staff, the party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other parties prior to the release of the Confidential Information to the Commission or its staff. A party shall

notify the other party(ies) to any agreement entered into pursuant to this Tariff, Part VIII when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112.

10. Other Disclosures

Subject to the exception in Tariff, Part VIII, Subpart E, section 425(A)(9), no party shall disclose Confidential Information of another party to any person not employed or retained by the disclosing party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing party to be required in connection with a dispute between or among the parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the party that provided such Confidential Information, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Tariff, Part VIII or any agreement entered into pursuant to this Tariff, Part VIII, or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. Prior to any disclosures of another party's Confidential Information under this Tariff, Part VIII, Subpart E, section 425(A)(10), the disclosing party shall promptly notify the other parties in writing and shall assert confidentiality and cooperate with the other parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order, or other reasonable measures.

11. Information in Public Domain:

This confidentiality provision shall not apply to any information that was or is hereafter in the public domain, except as a result of a breach of this confidentiality provision.

12. Return or Destruction of Confidential Information

If a party provides any Confidential Information to another party in the course of an audit or inspection, the providing party may request the other party to return or destroy such Confidential Information after the termination of the audit period and the resolution of all matters relating to that audit. Each party shall make Reasonable Efforts to comply with any such requests for return or destruction within 10 days of receiving the request and shall certify in writing to the other party that it has complied with such request.

**Tariff, Part VIII, Subpart E, section 426**  
**Capacity Interconnection Rights**

**A. Purpose**

Capacity Interconnection Rights shall entitle the holder to deliver the output of a Generation Capacity Resource at the bus where the Generation Capacity Resource interconnects to the Transmission System. The Transmission Provider shall plan the enhancement and expansion of the Transmission System in accordance with Operating Agreement, Schedule 6 such that the holder of Capacity Interconnection Rights can integrate its Capacity Resources in a manner comparable to that in which each Transmission Owner integrates its Capacity Resources to serve its Native Load Customers.

**B. Receipt of Capacity Interconnection Rights**

Generation accredited under the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA") as a Generation Capacity Resource prior to the original effective date of Tariff, Part IV shall have Capacity Interconnection Rights commensurate with the size in megawatts of the accredited generation. When a Generation Project Developer's generation is accredited as deliverable through the applicable procedures of the Tariff, the Generation Project Developer also shall receive Capacity Interconnection Rights commensurate with the size in megawatts of the generation as identified in the Generation Interconnection Agreement. Pursuant to the applicable terms of RAA, Schedule 10, a Transmission Project Developer may combine Incremental Deliverability Rights associated with Merchant Transmission Facilities with generation capacity that is not otherwise accredited as a Generation Capacity Resource for the purposes of obtaining accreditation of such generation as a Generation Capacity Resource and associated Capacity Interconnection Rights.

**C. Loss of Capacity Interconnection Rights**

**1. Operational Standards**

To retain Capacity Interconnection Rights, the Generation Capacity Resource associated with the rights must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with RAA, Schedule 9 and the PJM Manuals. Generation Capacity Resources that meet these operational standards shall retain their Capacity Interconnection Rights regardless of whether they are available as a Generation Capacity Resource or are making sales outside the PJM Region.

**2. Failure to Meet Operational Standards**

This Tariff, Part VIII, Subpart E, section 426(C)(2) shall apply only in circumstances other than Deactivation of a Generation Capacity Resource. In the event a Generation Capacity Resource fails to meet the operational standards set forth in Tariff, Part VIII, Subpart E, section 426(C)(1) for any consecutive three-

year period (with the first such period commencing on the date Generation Project Developer must demonstrate commercial operation of the generating unit(s) as specified in the Generation Interconnection Agreement), the holder of the Capacity Interconnection Rights associated with such Generation Capacity Resource will lose its Capacity Interconnection Rights in an amount commensurate with the loss of generating capability. Any period during which the Generation Capacity Resource fails to meet the standards set forth in Tariff, Part VIII, Subpart E, section 426(C)(1) as a result of an event that meets the standards of a Force Majeure event as defined in Tariff, Part I, section 1 shall be excluded from such consecutive three-year period, provided that the holder of the Capacity Interconnection Rights exercises due diligence to remedy the event. A Generation Capacity Resource that loses Capacity Interconnection Rights pursuant to this section may continue Interconnection Service, to the extent of such lost rights, as an Energy Resource in accordance with (and for the remaining term of) its Generation Interconnection Agreement and/or applicable terms of the Tariff.

### 3. Replacement of Generation

In the event of the Deactivation of a Generation Capacity Resource (in accordance with Tariff, Part V and any Applicable Standards), or removal of Capacity Resource status (in accordance with Tariff, Attachment DD, section 6.6 or Tariff, Attachment DD, section 6.6A), any Capacity Interconnection Rights associated with such Generating Facility shall terminate one year from the Deactivation Date, or one year from the date the Capacity Resource status change takes effect, unless the holder of such rights (including any holder that acquired the rights after Deactivation or removal of Capacity Resource status) has submitted a completed Generation Interconnection Request up to one year after the Deactivation Date, or up to one year from the date the Capacity Resource status changes take effect, which claims the same Capacity Interconnection Rights in accordance with Tariff, Part VIII, Subpart B, section 403(D). A Generation Project Developer must submit any claim for Capacity Interconnection Rights from deactivating units concurrently with its Application for Interconnection Service, and the claim must be received by Transmission Provider prior to the Application Deadline, or Transmission Provider will not process the claim. Such new Generation Interconnection Request may include a request to increase Capacity Interconnection Rights in addition to the replacement of the previously deactivated amount, or amount removed from Capacity Resource status, as a single Generation Interconnection Request. Transmission Provider may perform thermal, short circuit, and/or stability studies, as necessary and in accordance with the PJM Manuals, due to any changes in the electrical characteristics of any newly proposed equipment, or where there is a change in Point of Interconnection, which may result in the loss of a portion or all of the Capacity Interconnection Rights as determined by such studies.

Upon execution of a Generation Interconnection Agreement reflecting its new Generation Interconnection Request, the holder of the Capacity Interconnection Rights will retain only such rights that are commensurate with the size in megawatts

of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights associated with the facility upon Deactivation or removal of Capacity Resource status. Any desired increase in Capacity Interconnection Rights must be reflected in the new Generation Interconnection Request and be accredited through the applicable procedures in Tariff, Part IV and Tariff, Part VI. In the event the new Generation Interconnection Request to which this section refers is, or is deemed to be, terminated and/or withdrawn for any reason at any time, the pertinent Capacity Interconnection Rights shall not terminate until the end of the one-year period from the Deactivation Date, or the end of the one year period from the date the Capacity Resource status change takes effect.

4. Transfer of Capacity Interconnection Rights

Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by Transmission Provider regarding such transfer and notice to Transmission Provider of any Generating Facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in Tariff, Part VIII, Subpart E, section 426(C)(2) regarding loss of Capacity Interconnection Rights.

**Tariff, Part VIII, Subpart E, section 427**  
**Incremental Rights**

A. Incremental Auction Revenue Rights

1. Right of Transmission Project Developer or Upgrade Customer to Incremental Auction Revenue Rights

A Transmission Project Developer or Upgrade Customer that (a) pursuant to this Tariff, Part VIII reimburses Transmission Provider for the costs of constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Network Upgrades required to accommodate its New Service Request or Upgrade Request, shall be entitled to receive the Incremental Auction Revenue Rights as determined in accordance with this Tariff, Part VIII, Subpart E, section 427(A). However, a Transmission Project Developer that interconnects Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System shall be entitled to Incremental Auction Revenue Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Transmission Project Developer has elected, pursuant to Tariff, Part VIII, Subpart E, section 428, to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

2. Procedures for Assigning Incremental Auction Revenue Rights

No less than 45 days prior to the in-service date, as determined by the Office of the Interconnection, of the applicable transmission facility or upgrade related to a New Service Request or Upgrade Request, the Office of the Interconnection shall notify the Transmission Project Developer or Upgrade Customer that has responsibility to reimburse the costs of, or responsibility for, constructing or completing the transmission facility or upgrade, that initial requests for Incremental Auction Revenue Rights associated with the transmission facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with Tariff, Part VIII, Subpart E, section 427(A)(3).

In round two, two-thirds of the Incremental Auction Revenue Rights available for each requested point-to-point combination in that round will be assigned in accordance with Tariff, Part VIII, Subpart E, section 427(A)(3). In round three, all

available Incremental Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with Tariff, Part VIII, Subpart E, section 427(A)(3). In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental Auction Revenue Rights assignment in rounds one and two will result in the Incremental Auction Revenue Rights being available for the next round. The Incremental Auction Revenue Rights assignments made in round three will be final and binding. For each round, a request for Incremental Auction Revenue Rights shall specify a single point-to-point combination for which the Transmission Project Developer or Upgrade Customer desires Incremental Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the upgrade.

3. Determination of Incremental Auction Revenue Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Auction Revenue Rights to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VIII, Subpart E, section 427(A)(2) using the tools described in Tariff, Attachment K, including an assessment of the simultaneous feasibility of any Incremental Auction Revenue Rights and all other outstanding Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system Auction Revenue Rights capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate New Service Requests or Upgrade Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the Auction Revenue Rights capability, including the impact of any new transmission facilities or upgrades. For each point-to-point combination, the Incremental Auction Revenue Rights capability shall be the difference between the Auction Revenue Rights capability in the base system analysis and the Auction Revenue Rights capability in the analysis including the impact of the new transmission facilities and upgrades. When multiple Transmission Project Developers or Upgrade Customers have cost responsibility for the same new transmission facility or upgrade, Incremental Auction Revenue Rights shall be assigned to each Transmission Project Developer or Upgrade Customer in proportion to the Transmission Project Developer's or Upgrade Customer's relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or

interfaces of the point-to-point combinations selected by the Transmission Project Developer or Upgrade Customer.

4. Duration of Incremental Auction Revenue Rights

Incremental Auction Revenue Rights received by a Transmission Project Developer or Upgrade Customer pursuant to this Tariff, Part VIII, Subpart E, section 427(A) shall be available as of the first day of the first month that the Network Upgrades required to accommodate its New Service Request or Upgrade Request that are associated with the Incremental Auction Revenue Rights are included in the transmission system model for the monthly FTR auction and shall continue to be available for 30 years or for the life of the associated facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all Auction Revenue Rights (including Incremental Auction Revenue Rights) in accordance with Tariff, Attachment K - Appendix. At any time during this 30-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this 30-year Auction Revenue Right, the Transmission Project Developer, or Upgrade Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the Transmission Project Developer or Upgrade Customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to Tariff, Attachment K – Appendix, section 7.4.2) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to Tariff, Attachment K – Appendix, section 7.5. A Transmission Project Developer or Upgrade Customer may return Incremental Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding Auction Revenue Rights following the return of such Auction Revenue Rights. In the event a Transmission Project Developer or Upgrade Customer returns Incremental Auction Revenue Rights, the Transmission Project Developer or Upgrade Customer shall have no further rights regarding such Incremental Auction Revenue Rights.

5. Value of Incremental Auction Revenue Rights

The value of Incremental Auction Revenue Right(s) to be provided to a Transmission Project Developer or Upgrade Customer associated with a particular transmission facility or upgrade pursuant to Tariff, Part VIII, Subpart E, section 427(A)(2) that become effective at the beginning of a Planning Period shall be determined in the same manner as annually allocated Auction Revenue Right(s) based on the nodal prices resulting from the annual Financial Transmission Rights auction. The value of such Incremental Auction Revenue Rights that become effective after the commencement of a Planning Period shall be determined on a monthly basis for each month in the Planning Period beginning with the month the Incremental Auction Revenue Right(s) becomes effective. The value of such Incremental Auction Revenue Right shall be equal to the megawatt amount of the Incremental Auction Revenue Rights multiplied by the LMP differential between



the source and sink nodes of the corresponding FTR obligations in each prompt-month FTR auction that occurs from the effective date of the Incremental Auction Revenue Rights through the end of the relevant Planning Period. For each Planning Period thereafter, the value of such Incremental Auction Revenue Rights shall be determined in the same manner as Incremental Auction Revenue Rights that became effective at the beginning of a Planning Period.

6. Rate-based Facilities

No Incremental Auction Revenue Rights shall be received by a Transmission Project Developer or Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

B. Incremental Capacity Transfer Rights

1. Right of Transmission Project Developer or Upgrade Customer to Incremental Capacity Transfer Rights

A Transmission Project Developer that interconnects Merchant Transmission Facilities with the Transmission System shall be entitled to receive any Incremental Capacity Transfer Rights that are associated with the interconnection of such Merchant Transmission Facilities as determined in accordance with this Tariff, Part VIII, Subpart E, section 427(B). In addition, an Upgrade Customer that (a) reimburses Transmission Provider for the costs of constructing or completing Customer-Funded Upgrades, or (b) pursuant to its Construction Service Agreement undertakes responsibility for constructing or completing Customer-Funded Upgrades shall be entitled to receive any Incremental Capacity Transfer Rights associated with such required facilities and upgrades as determined in accordance with this Tariff, Part VIII, Subpart E, section 427(B).

a. Certain Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities

A Transmission Project Developer (a) that interconnects Merchant D.C. transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System, one terminus of which is located outside the PJM Region and the other terminus of which is located within the PJM Region, and (b) that will be a Merchant Transmission Provider, shall not receive any Incremental Capacity Transfer Rights with respect to its Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities. Transmission Provider shall not include available transfer capability at the interface(s) associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities in its calculations of Available Transfer Capability under Tariff, Attachment C.

2. Procedures for Assigning Incremental Capacity Transfer Rights

After execution of a Study Agreement but prior to the issuance of an Interconnection Agreement or Upgrade Construction Service Agreement, a Transmission Project Developer or Upgrade Customer may request the Office of the Interconnection to determine the Incremental Capacity Transfer Rights as measured by the increase in Capacity Emergency Transfer Limit resulting from the interconnection or addition of Merchant Transmission Facilities or a Customer-Funded Upgrade identified in the System Impact Study for the related New Service Request. At the time of such request, the Transmission Project Developer or Upgrade Customer must also specify no more than three Locational Deliverability Areas in which to determine the Incremental Capacity Transfer Rights. Subject to the limitation of Tariff, Part VIII, Subpart E, section 427(B)(1)(a), the Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with Merchant Transmission Facilities to the Transmission Project Developer that is interconnecting such facilities. The Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with a Customer-Funded Upgrade to the Upgrade Customer(s) bearing cost responsibility for such facility or upgrade in proportion to each Upgrade Customer's cost responsibility for the facility or upgrade.

3. Determination of Incremental Capacity Transfer Rights to be Provided to Transmission Project Developer or Upgrade Customer

The Office of the Interconnection shall determine the Incremental Capacity Transfer Rights to be provided to Transmission Project Developers or Upgrade Customers in accordance with the applicable terms of the Reliability Pricing Model, in Tariff, Attachment DD, and pursuant to the procedures specified in the PJM Manuals.

4. Duration of Incremental Capacity Transfer Rights

Incremental Capacity Transfer Rights received by a Transmission Project Developer or Upgrade Customer shall be effective for 30 years from, as applicable, commencement of Interconnection Service, Transmission Service, or Network Service for the affected Transmission Project Developer or Upgrade Customer or the life of the pertinent facility or upgrade, whichever is shorter, subject to any subsequent pro-rata reallocations of all Capacity Transfer Rights (including Incremental Capacity Transfer Rights) in accordance with the PJM Manuals.

5. Rate-based Facilities

No Incremental Capacity Transfer Rights shall be received by a Transmission Project Developer or Upgrade Customer with respect to transmission investment

that is included in the rate base of a public utility and on which a regulated return is earned.

C. Incremental Deliverability Rights

1. Right of Transmission Interconnection Customer to Incremental Deliverability Rights

A Transmission Project Developer shall be entitled to receive the Incremental Deliverability Rights associated with its Merchant Transmission Facilities as determined in accordance with this section, provided, however, that a Transmission Project Developer that proposes to interconnect Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area shall be entitled to Incremental Deliverability Rights associated with such Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities only if the Interconnection Customer has elected, pursuant to Tariff, Part VIII, Subpart E, section 428, to receive Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Deliverability Rights in lieu of Transmission Injection Rights and/or Transmission Withdrawal Rights.

2. Procedures for Assigning Incremental Deliverability Rights

Transmission Provider shall include in the System Impact Study a determination of the Incremental Deliverability Rights associated with the Transmission Project Developer's Merchant Transmission Facilities. Transmission Provider shall post on its OASIS the Incremental Deliverability Rights that it assigns to the Transmission Project Developer under this section 427(C)(2).

3. Determination of Incremental Deliverability Rights to be Provided to Transmission Project Developer

Transmission Provider shall determine the Incremental Deliverability Rights to be provided to a Transmission Project Developer associated with proposed Merchant Transmission Facilities under Tariff, Part VIII, Subpart E, section 427(C)(2) pursuant to procedures specified in the PJM Manuals.

4. Duration of Incremental Deliverability Rights

Incremental Deliverability Rights assigned to a Transmission Project Developer shall be effective until the earlier of the date that is one year after the commencement of Interconnection Service for such customer or the date that such Transmission Project Developer's New Service Request is withdrawn and terminated, or deemed to be so, in accordance with the Tariff. Notwithstanding the preceding sentence, Incremental Deliverability Rights that are transferred pursuant to an IDR Transfer Agreement under the Tariff shall be deemed to be Capacity

Interconnection Rights of the generation owner that acquires them under such agreement upon commencement of Interconnection Service related to the generation owner's Generating Facility and shall remain effective for the life of such Generating Facility, or for the life of the Merchant Transmission Facilities associated with the transferred IDRs, whichever is shorter. The deemed conversion of IDRs to Capacity Interconnection Rights under this Tariff, Part VIII, Subpart E, section 427(C)(4) shall not affect application to such IDRs of the other provisions of this Tariff, Part VIII, Subpart E, section 427(C). A Transmission Project Developer may return Incremental Deliverability Rights that it no longer desires at any time. In the event that a Transmission Project developer returns Incremental Deliverability Rights, it shall have no further rights regarding such Incremental Deliverability Rights.

5. Transfer of Incremental Deliverability Rights

Incremental Deliverability Rights may be sold or otherwise transferred at any time after they are assigned pursuant to Tariff, Part VIII, Subpart E, section 427(C)(2), subject to execution and submission of an IDR Transfer Agreement in accordance with the Tariff. The transfer of Incremental Deliverability Rights shall not itself extend the periods set forth in Tariff, Part VIII, Subpart E, section 427(C)(7) regarding loss of Incremental Deliverability Rights.

6. Effectiveness of Incremental Deliverability Rights

Incremental Deliverability Rights shall not entitle the holder thereof to use the capability associated with such rights unless and until Transmission Provider commences Interconnection Service related to the Merchant Transmission Facilities associated with such rights.

7. Loss of Incremental Deliverability Rights

Incremental Deliverability Rights shall be extinguished (a) in the event that the New Service Request of the Transmission Project Developer to which the rights were assigned is withdrawn and terminated, or deemed to be so, as provided in the Tariff, without regard for whether the rights have been transferred pursuant to an IDR Transfer Agreement, or (b) such rights are not transferred pursuant to an IDR Transfer Agreement on or before the date that is one year after the commencement of Interconnection Service related to the Merchant Transmission Facilities with which the rights are associated.

8. Rate-based Facilities

No Incremental Deliverability Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

**Tariff, Part VIII, Subpart E, section 428**  
**Rights for Transmission Interconnections**

A. Transmission Injection Rights and Transmission Withdrawal Rights

1. Purpose

Transmission Injection Rights shall entitle the holder, as provided in this Tariff, Part VIII, Subpart E, section 428, to schedule energy transmitted on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities for injection into the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System. Transmission Withdrawal Rights shall entitle the holder, as provided in this Tariff, Part VIII, Subpart E, section 428, to schedule for transmission on the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities energy to be withdrawn from the Transmission System, at a Point of Interconnection of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities with the Transmission System.

2. Receipt of Transmission Injection Rights and Transmission Withdrawal Rights

Subject to the terms of this Tariff, Part VIII, Subpart E, section 428, a Transmission Project Developer that constructs Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with the Transmission System and with another control area outside the PJM Region shall be entitled to receive Transmission Injection Rights and/or Transmission Withdrawal Rights at each terminal where such Transmission Project Developer's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. A Transmission Project Developer that is granted Firm Transmission Withdrawal Rights and/or transmission service customers that have a Point of Delivery at the border of the PJM Region where the Transmission System interconnects with the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, may be responsible for a reasonable allocation of transmission upgrade costs added to the Regional Transmission Expansion Plan, in accordance with Tariff, Part I, section 3E and Tariff, Schedule 12. Notwithstanding the foregoing, any Transmission Injection Rights and Transmission Withdrawal Rights awarded to a Transmission Project Developer that interconnects Controllable A.C. Merchant Transmission Facilities shall be, throughout the duration of the Service Agreement applicable to such interconnection, conditioned on such Transmission Project Developer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

a. Total Capability

A Transmission Project Developer or other party may hold Transmission Injection Rights and Transmission Withdrawal Rights simultaneously at the same terminal on the Transmission System. However, neither the aggregate Transmission Injection Rights nor the aggregate Transmission Withdrawal Rights held at a terminal may exceed the Nominal Rated Capability of the interconnected Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, as stated in the associated Service Agreement(s).

3. Determination of Transmission Injection Rights and Transmission Withdrawal Rights to be Provided to Transmission Project Developer

The Office of the Interconnection shall determine the Transmission Injection Rights and the Transmission Withdrawal Rights associated with Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities to be provided to eligible Transmission Project Developer(s) pursuant to the procedures specified in the PJM Manuals. The Office of the Interconnection shall state in the System Impact Studies the Transmission Injection Rights and Transmission Withdrawal Rights (including the quantity of each type of such rights) to be made available to the Transmission Project Developer at the terminal(s) where the pertinent Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities interconnect with the Transmission System. Such rights shall become available to the Transmission Project Developer pursuant to the Interconnection Agreement and upon commencement of Interconnection Service thereunder.

4. Duration of Transmission Injection Rights and Transmission Withdrawal Rights

Subject to the terms of Tariff, Part VIII, Subpart E, section 428(A)(7), Transmission Injection Rights and/or Transmission Withdrawal Rights received by a Transmission Project Developer shall be effective for the life of the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities.

5. Rate-based Facilities

No Transmission Injection Rights or Transmission Withdrawal Rights shall be received by a Transmission Project Developer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

6. Transfer of Transmission Injection Rights and Transmission Withdrawal Rights

Transmission Injection Rights and/or Transmission Withdrawal Rights may be sold or otherwise transferred subject to compliance with such procedures as

Transmission Provider may establish, by publication in the PJM Manuals, regarding such transfer and required notice to Transmission Provider of use of such rights after the transfer. The transfer of Transmission Injection Rights or of Transmission Withdrawal Rights shall not itself extend the periods set forth in Tariff, Part VIII, Subpart E, section 428(A)(7) regarding loss of such rights.

7. Loss of Transmission Injection Rights and Transmission Withdrawal Rights

a. Operational Standards

To retain Transmission Injection Rights and Transmission Withdrawal Rights, the associated Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities must operate or be capable of operating at the capacity level associated with the rights. Operational capability shall be established consistent with applicable criteria stated in the PJM Manuals. Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that meet these operational standards shall retain their Transmission Injection Rights and Transmission Withdrawal Rights regardless of whether they are used to transmit energy within or to points outside the PJM Region.

b. Failure to Meet Operational Standards

In the event that any Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities fail to meet the operational standards set forth in this Tariff, Part VIII, Subpart E, section 428(A)(7) for any consecutive three-year period, the holder(s) of the associated Transmission Injection Rights and Transmission Withdrawal Rights will lose such rights in an amount reflecting the loss of first contingency transfer capability. Any period during which the transmission facility fails to meet the standards set forth in this Tariff, Part VIII, Subpart E, section 428(A)(7) as a result of an event that meets the standards of a Force Majeure event shall be excluded from such consecutive three-year period, provided that the owner of the Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities exercises due diligence to remedy the event.

B. Interconnection Rights for Certain Transmission Interconnections

1. Qualification to Receive Certain Rights

In order to obtain the rights associated with Merchant Transmission Facilities (other than Merchant Network Upgrades) provided under the Tariff, prior to the commencement of Interconnection Service associated with such facilities, a Transmission Interconnection Customer that interconnects or adds Merchant Transmission Facilities (other than Merchant Network Upgrades) to the

Transmission System must become and remain a signatory to the Consolidated Transmission Owners Agreement.

2. Upgrades to Merchant Transmission Facilities

In the event that Transmission Provider determines in accordance with the Regional Transmission Expansion Planning Protocol of Operating Agreement, Schedule 6 that an addition or upgrade to Merchant A.C. Transmission Facilities is necessary, the owner of such Merchant A.C. Transmission Facilities shall undertake such addition or upgrade and shall operate and maintain all facilities so constructed or installed in accordance with Good Utility Practice and with applicable terms of the Operating Agreement and the Consolidated Transmission Owners Agreement, as applicable. Cost responsibility for each such addition or upgrade shall be assigned in accordance with Operating Agreement, Schedule 6. Each Transmission Owner to whom cost responsibility for such an upgrade is assigned shall further be responsible for all costs of operating and maintaining the addition or upgrade in proportion to its respective assigned cost responsibilities.

3. Limited Duration of Rights in Certain Cases

Notwithstanding any other provision of this Tariff, Part VIII, Subpart E, section 428, in the case of any Merchant Transmission Facilities that solely involves advancing the construction of a transmission enhancement or expansion other than a Merchant Transmission Facility that is included in the Regional Transmission Expansion Plan, any rights available to such facility under this Tariff, Part VIII, Subpart E, section 428 shall be limited in duration to the period from the inception of Interconnection Service for the affected Merchant Transmission Facilities until the time when the Regional Transmission Expansion Plan originally provided for the pertinent transmission enhancement or expansion to be completed.



**Tariff, Part VIII, Subpart E, section 429**  
**Milestones**

- A. In order to proceed with Generation Interconnection Agreement, within 60 days after receipt of the Phase III System Impact Study (or, if no Phase III System Impact Study was required, then after the results of either the Phase I or Phase II System Impact Study were provided on Transmission Provider's website):
1. Project Developer must demonstrate that it has:
    - a. entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rights-of-way for fuel and water interconnections; and
    - b. obtained any necessary local, county, and state site permits; and
    - c. signed a memorandum of understanding for the acquisition of major equipment; and
    - d. if applicable, obtained any necessary local, county, and state siting permits or other required approvals for the construction of its proposed Merchant D.C. Transmission Facilities or Merchant Controllable A.C. Transmission Facilities.
- B. The Transmission Provider may include any additional related milestone dates beyond those included in the Generation Interconnection Agreement for the construction of the project Developer's generation project that, if not met, shall relieve the Transmission Provider and the Transmission Owner(s) from the requirement to construct the necessary facilities and upgrades.
1. If the milestone dates in the Generation Interconnection Agreement are not met, such Generation Interconnection Agreement may be deemed to be terminated and Transmission Provider may cancel such agreement with the Federal Energy Regulatory Commission, and the New Service Agreement may simultaneously be deemed to be terminated and withdrawn.
  2. Such milestones may include site acquisition, permitting, regulatory certifications (if required), acquisition of any necessary third-party financial commitments, commercial operation, and similar events.
  3. The Transmission Provider may reasonably extend any such milestone dates (including those required in order to proceed with an Generation Interconnection Agreement) in the event of delays not caused by the Project Developer, such as unforeseen regulatory or construction delays that could not be remedied by the Project Developer through the exercise of due diligence.

4. The Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B, provides Project Developer shall also have a one-time option to extend any milestone (other than any milestone related to Site Control) for a total period of one year regardless of cause. Other milestone dates stated in the Generation Interconnection Agreement shall be deemed to be extended coextensively with Project Developer's use this provision.
5. Termination and withdrawal of a New Service Request for failure to meet a milestone shall not relieve the Project Developer from reimbursing the Transmission Provider (for the benefit of the affected Transmission Owner(s)) for the costs incurred prior to such termination and withdrawal. Applicable provisions of the Generation Interconnection Agreement set forth in Tariff, Part IX, Subpart B will continue in effect after termination to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from events or acts that occurred while the CSA or the applicable Generation Interconnection Agreement was in effect.

**Tariff, Part VIII, Subpart E, section 430**  
**Winter Capacity Interconnection Rights**

By August 31 of each calendar year, PJM shall solicit requests from Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD. Such additional Capacity Interconnection Rights would be for a one-year period as specified by PJM in the solicitation. Responses to such solicitation must be submitted by such interested Generation Owners by October 31 prior to the upcoming Base Residual Auction. Such requests shall be studied for deliverability similar to any Generation Project Developer that seeks to submit a New Service Request; however, such requests shall not be required to submit a New Service Request. PJM shall study such requests in a manner so as to prevent infringement on available system capabilities of any resource which is already in service, or which has an executed service agreement from Tariff, Part IX, or that has a valid New Service Request in a Cycle.

**Tariff, Part VIII, Subpart E, section 431**  
**Interconnection Studies Processing Time and Metrics**

**A. Phase I System Impact Studies Processing Time**

1. Number of New Service Requests that had Phase I System Impact Studies completed within the six month reporting period,
2. Number of New Service Requests that had Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 120 days, as determined in conformance with Tariff, Part VIII, Subpart C, section 405(A)(1)(b)(i).
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase I System Impact Studies exceeding 120 days, as determined in conformance with Tariff, Part VIII, Subpart C, section 405(A)(1)(b)(i).
4. Mean time (in days), for Phase I System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period, from the date when Transmission Provider initiated the performance of the System Impact Studies to the date when Transmission Provider provided the completed Phase I System Impact Study to Project Developers.
5. Percentage of New Service Requests with Phase I System Impact Studies exceeding 120 days as determined in conformance with Tariff, Part VIII, Subpart C, section 405(A)(1)(b)(i) to complete this six month reporting period, calculated as the sum of section 431(A)(2) plus 431(A)(3) divided by the sum of section 431(A)(1) plus 431(A)(3).

**B. Phase II System Impact Studies Processing Time**

1. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period.
2. Number of New Service Requests that had Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more than 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 407(A)(1)(e)(i) after the date the end of Decision Point I.
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 407(A)(1)(e)(i) after the end of Decision Point I.

4. Mean time (in days), for Phase II System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period from the day after the end of Decision Point to the date when Transmission Provider provided the completed Phase II Interconnection System Impact Study to Project Developers.
5. Percentage of New Service Requests with Phase II System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 407(A)(1)(e)(i), to complete this six month reporting period, calculated as the sum of section 431(B)(2) plus 431(B)(3) divided by the sum of section 431(B)(1) plus 431(B)(3)).

C. Phase III System Impact Studies Processing Time

1. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period.
2. Number of New Service Requests that had Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period that were completed more 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 409(A)(1)(e)(i) after the end of Decision Point II.
3. At the end of the six month reporting period, the number of active valid New Service Requests with ongoing incomplete Phase III System Impact Studies exceeding 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 409(A)(1)(e)(i) after the end of Decision Point II.
4. Mean time (in days), for Phase III System Impact Studies completed within Transmission Provider's coordinated region during the six month reporting period, from the day after the end of Decision Point II to the date when Transmission Provider provided the completed Phase III Interconnection System Impact Study to the Project Developers.
5. Percentage of New Service Requests with Phase III System Impact Studies exceeding the sum of 180 days as determined in conformance with Tariff, Part VIII, Subpart C, section 409(A)(1)(e)(i) to complete this six month reporting period, calculated as the sum of section 431(C)(2) plus 431(C)(3) divided by the sum of section 431(C)(1) plus 431(C)(3)).

D. Withdrawn New Service Requests

1. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period.

2. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period before the start of Planning Phase I.
3. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period from start of Phase I, to at or before the end of Decision Point I.
4. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point I to at or before the end of Decision Point II.
5. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six month reporting period after the end of Decision Point II to before execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
6. Number of New Service Requests withdrawn from Transmission Provider's interconnection queue after execution of an interconnection-related service agreement or transmission service agreement, or Project Developer or Eligible Customer requests the filing of an unexecuted, new interconnection agreement.
7. Mean time (in days), for all withdrawn New Service Requests, from the date when the request was determined to be valid to when Transmission Provider received the request to withdraw from the Cycle.

E. Posting Requirements

Transmission Provider is required to post on its website the measures in Tariff, Part VIII, Subpart E, sections 431(A) through 431(D) for each six-month reporting period within 30 days of the end of the reporting period; however, if the 30th does not fall on a Business Day, this time period shall conclude on the next Business Day. Transmission Provider will keep the measures posted on its website for three calendar years with the first required reporting year to be 2020.

F. Additional Compliance Requirements

In the event that any of the values calculated in Tariff, Part VIII, Subpart E, section 431(A)(5); Tariff, Part VIII, Subpart E, section 431(B)(5); or Tariff, Part VIII, Subpart E, section 431(C)(5) exceeds 25 percent for two consecutive reporting periods, Transmission Provider will have to comply with the measures below for the next two six-month reporting periods and must continue reporting this information until Transmission Provider reports two consecutive six-month reporting periods without the values calculated in Tariff, Part VIII, Subpart E, section 431(A)(5); Tariff, Part VIII, Subpart E, section 431(B)(5); or Tariff, Part VIII, Subpart E, section 431(C)(5) exceeding 25 percent for two consecutive six-month reporting periods:

1. Transmission Provider must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an New Service Request that exceeded its deadline (i.e., 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the reporting period.
2. Transmission Provider shall aggregate the total number of employee hours and third party consultant hours expended towards interconnection studies within its coordinated region that reporting period and post on its website. This information is to be posted within 30 days of the end of the reporting period.

**Tariff, Part VIII, Subpart E, section 432**  
**Transmission Provider Website Postings**

Transmission Provider shall maintain, on Transmission Provider's website, with regard to Project Developers, Eligible Customers and Upgrade Customers, the following:

- A. the Project Identifier;
- B. the proposed or incremental Maximum Facility Output and Capacity Interconnection Rights;
- C. the location of the project by state;
- D. the station or transmission line or lines where the interconnection will be made;
- E. the project's projected in-service date;
- F. the project's status;
- G. the type of service requested;
- H. the availability of any related studies;
- I. the type of project to be constructed.



**Tariff, Part VIII, Subpart F**  
**WHOLESALE MARKET PARTICIPATION AGREEMENT/NON-JURISDICTIONAL**  
**AGREEMENTS**

**Tariff, Part VIII, Subpart F, section 433**  
**Wholesale Market Participation Agreement/Non-Jurisdictional Agreements**

- A. In some instances, Generation Project Developer may physically connect its Generating Facility to non-jurisdictional distribution or sub-transmission facilities in order to access the electrical Point of Interconnection on the Transmission System (the “POI”), for the purpose of engaging in FERC-jurisdictional Wholesale Transactions. In those instances, Generation Project Developer must enter into both a (1) non-jurisdictional interconnection agreement with the owner or operator of the non-jurisdictional distribution or sub-transmission facilities, which governs the physical connection of the Generating Facility to those non-jurisdictional facilities; and (2) a three-party Wholesale Market Participation Agreement (“WMPA”) with PJM and the affected Transmission Owner in order to effectuate Wholesale Transactions in PJM’s markets.
- B. Generation Project Developer shall follow the Application Rules of Tariff, Part VIII, Subpart C, section 403 that apply to a Generating Facility, and shall complete the Form of Application and System Impact Studies Agreement set forth in Tariff, Part IX, Subpart A (the “Application”). In the Application, Generation Project Developer shall indicate its intent to physically connect its Generating Facility to distribution or sub-transmission facilities that currently are not subject to FERC jurisdiction, for the purpose of injecting energy at the POI and engaging in FERC-jurisdictional Wholesale Transactions.
- C. Generation Project Developer shall provide with the Application a copy of the executed interconnection agreement that governs the physical connection of the Generating Facility to the non-jurisdictional distribution or sub-transmission facilities, if the interconnection agreement is available. If the interconnection agreement is not yet available, Generation Project Developer shall provide with the Application all available documentation demonstrating that Generation Project Developer has requested or applied for interconnection through the relevant non-jurisdictional process, and Generation Project Developer shall provide a status report.
- D. In order to proceed to the execution of a WMPA, Generation Project Developer must demonstrate that it has executed the non-jurisdictional interconnection agreement by no later than Decision Point III in the applicable Cycle.

**Tariff, Part VIII, Subpart G**  
**AFFECTED SYSTEM RULES**

**Tariff, Part VIII, Subpart G, section 434**  
**Affected System Rules**

- A. New Service Request Affected System Rules Where Affected System is an Electric System other than Transmission Provider's Transmission System
1. The Transmission Provider will coordinate with Affected System Operators the conduct of any studies required to determine the impact of a New Service Request on any Affected System and will include those results in the Phase II System Impact Study, if available from the Affected System.
    - a. The Transmission Provider will invite such Affected System Operators to participate in meetings held with the Project Developer as necessary, as determined by the Transmission Provider.
    - b. The Project Developer or Eligible Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate the New Service Request.
    - c. Transmission Provider shall contact any potential Affected System Operators and provide or otherwise coordinate information regarding each relevant New Service Request as required for the Affected System Operator's studies of the effects of such request.
    - d. If an affected system study agreement is required by the Affected System Operator, in order to remain in the relevant Cycle, Project Developer or Eligible Customer shall enter into an affected system study agreement with the Affected System Operator the later of: (i) the conclusion of Decision Point II of the relevant Cycle, or (ii) 60 days of Transmission Provider sending notification to Project Developer or Eligible Customer of the need to enter into such Affected System Study Agreement. If Project Developer or Eligible Customer fails to comply with these requirements, its New Service Request at issue shall be deemed terminated and withdrawn.
    - e. Affected System Study results will be provided by Phase II of the relevant Cycle, if available. To the extent Affected System results are included in the Phase II System Impact Study, the Project Developer shall be provided the opportunity to review such study results consistent with Tariff, Part VIII, Subpart C, section 407(A)(1)(c), as applicable
    - f.
      - i. The Project Developer or Eligible Customer shall be responsible for the costs of any identified facilities commensurate with the Affected System Operator's tariff's allocation of responsibility for such costs to such Project Developer or Eligible Customer if their project

request has been initiated pursuant to such Affected System Operator's tariff.

- ii. Neither the Transmission Provider, the relevant Transmission Owner(s) associated with such New Service Request, nor the Affected System Operator shall be responsible for making arrangements for any necessary engineering, permitting, and/or construction of transmission or distribution facilities on any Affected System or for obtaining any regulatory approval for such facilities.

- (a) The Transmission Provider and the relevant Transmission Owner(s) will undertake Reasonable Efforts to assist the Project Developer or Eligible Customer in obtaining such arrangements, including, without limitation, providing any information or data required by such other Affected System Operator pursuant to Good Utility Practice.

- 2. In no event shall the need for upgrades to an Affected System delay Initial Operation of a Project Developer's Generating Facility or Merchant Transmission Facility. Notwithstanding the start of Initial Operation, Transmission Provider reserves the right to limit Generating Facility injections in the event of potential Affected System impacts, in accordance with Good Utility Practice. Total injections may be limited pending coordination and completion of any necessary deliverability studies by the Affect System Operator.

B. Affected System Rules Where Transmission Provider's Transmission System is the Affected System

- 1. An Affected System Customer responsible for an Affected System Facility that requires Network Upgrades to Transmission Provider's Transmission System must contact Transmission Provider as set forth in the PJM Manuals. Upon contact by the Affected System Customer, Transmission Provider will provide Affected System Customer with an Affected System Customer Facility Study Agreement (a form of which is found in Tariff, Part IX). The Affected System Customer must electronically sign Affected System Customer Facility Study Agreement, and concurrently provide the required Study Deposit, by wire transfer, of \$100,000.
  - a. Affected System Customer shall include the project identification or reference number assigned to the Affected System Facility by the Affected System Operator and attach the relevant Affected System Operator Study that identified the need for such Facilities Study Agreement.
    - i. Transmission Provider shall assign to Affected System Customer's project the same project identification or reference number used by the Affected System Operator.

- b. Transmission Provider shall not start the review of the Affected System Customer Facility Study Agreement until such agreement is complete and the required Study Deposit is received by the Transmission Provider.
  - c. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
    - i. Affected System Customer is responsible for, and must pay, all actual study costs.
    - ii. If Transmission Provider sends Affected System Customer notification of additional study costs, then Affected System Customer must either: (i) pay all additional study costs within 20 Business Days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Affected System Customer Facility Study Agreement. If Affected System Customer fails to complete either (i) or (ii), then Transmission Provider shall deem the Affected System Customer Facility Study Agreement to be terminated and withdrawn.
- 2. Transmission Provider shall cooperate with the Affected System Operator in all matters related to the conduct of studies and the determination of modifications to Transmission Provider's Transmission System.
- 3. Upon receipt of the Affected System Customer Facility Study report, Transmission Provider and the Affected System Customer shall enter into a stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) for the construction of the upgrades with each Transmission Owner responsible for constructing such upgrades if a Construction Service Agreement is required, or for each set of Common Use Upgrades on the system of such Transmission Owner if a Network Upgrade Cost Responsibility Agreement is required. Transmission Provider shall provide in electronic form a draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form.
  - a. For purposes of applying the stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) to the construction of such upgrades, the developer of the Affected System Facility shall be deemed to be a Project Developer pursuant to Tariff, Part VIII.
  - b. Such stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX) shall be negotiated and executed within 60 days of the Transmission Provider's issuance of a draft version thereof. If the 60th day does not fall

on a Business Day, the phase shall be extended to end on the next Business Day. The 60 days shall run concurrently with the relevant Cycle process.

- i. Security is required within 30 days of the Transmission Provider's issuance of the draft stand-alone Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement (forms of which are found in Tariff, Part IX). The Security obligation may be adjusted based on additional factors, including, but not limited to, New Service Requests or Upgrade Requests being withdrawn in the relevant Cycle. If the 30th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.
  - ii. Parties may use not more than 60 days to conduct negotiations concerning the draft Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement. Upon receipt of the draft agreement(s), Affected System Customer and Transmission Owner(s), as applicable, shall have no more than 20 Business Days to return written comments on the draft agreement(s). Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised draft(s) of the agreement(s) in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.
- c. If the Affected System Customer or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted Construction Service Agreement with the FERC.
- d. Not later than 15 Business Days after receipt of the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement, Project Developer or Affected System Customer shall either:
  - i. execute the final Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement in electronic form and return it to Transmission Provider electronically;

- ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
  - iii. request in writing that Transmission Provider file with FERC the final Construction Service Agreement or Network Upgrade Cost Responsibility Agreement unexecuted, with the unexecuted Construction Service Agreement or Network Upgrade Cost Responsibility Agreement containing terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.
- e. If Affected System Customer executes the final interconnection related service agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:
  - i. execute the final Construction Service Agreement in electronic form and return it to Transmission Provider electronically;
  - ii. request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
  - iii. request in writing that Transmission Provider file with FERC the final Construction Service Agreement unexecuted, with the unexecuted Construction Service Agreement containing terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.
- f. Parties may not proceed under such Construction Service Agreement or a Network Upgrade Cost Responsibility Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.



**Tariff, Part VIII, Subpart H**  
**UPGRADE REQUESTS**

**Tariff, Part VIII, Subpart H, section 435**  
**Upgrade Requests**

**A. Applicability**

Tariff, Part VIII, Subpart H, section 435 applies to valid Upgrade Requests submitted on or after October 1, 2020, and sets forth the procedures and other terms governing the Transmission Provider's administration of Upgrade Requests for Upgrade Customers; procedures and other terms regarding studies and other processing of Upgrade Requests; the nature and timing of the agreements required in connection with the studies and construction of required facilities; and terms and conditions relating to the rights available to Upgrade Customers.

1. The Upgrade Request process applies to:
  - a. Incremental Auction Revenue Rights (IARRs) requested Pursuant to the Operating Agreement of the PJM Interconnection, L.L.C. (Operating Agreement), Schedule 1, section 7.8, and the parallel provisions of Tariff, Attachment K-Appendix, section 7.8; and
  - b. Merchant Network Upgrades that either upgrade facilities or advance existing Network Upgrades

**B. Overview**

1. Upgrade Requests are initiated by submission of a complete and executed Upgrade Application and Studies Agreement (a form of which is located in Tariff, Part IX, Subpart K).
  - a. Upgrade Requests are processed serially, in the order in which an Upgrade Request is received.
    - i. An Upgrade Request shall be assigned a Request Number.
    - ii. Priority for Upgrade Requests is determined by the Request Number assigned.
    - iii. If the Upgrade Request is withdrawn or deemed to be terminated, such Upgrade Request project shall concurrently lose its priority position and will not be included in any further studies.
  - b. Transmission Provider will use Reasonable Efforts to process an Upgrade Request within 15 months of receiving a valid Upgrade Request.

- i. A valid Upgrade Request that completes the Upgrade Request process shall ultimately enter into an Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E)
- ii. If the Transmission Provider is unable to process an Upgrade Request within 15 months of receiving a valid Upgrade Request, the Transmission Provider shall notify the impacted Upgrade Customer by posting on Transmission Provider's website a revised estimated completion date along with an explanation of the reasons why additional time is required to complete the Upgrade Request process.

2. Required Study Deposits and Readiness Deposits.

- a. Upgrade Customers must submit, by wire transfer, a \$150,000 Study Deposit together with a completed and fully executed Upgrade Request. Ten percent of the Study Deposit is non-refundable. Upgrade Customers are responsible for actual study costs, which may exceed the Study Deposit amount.
  - i. If a Study Deposit monies remain after the System Impact Study is completed and any outstanding monies owed by Upgrade Customer in connection with outstanding invoices related to the present or prior Upgrade Requests or other New Service Requests have been paid, such remaining deposit monies shall be either:
    - (a) If Upgrade Customer decides to remain in the Upgrade Request process, applied to the Facilities Study; or
    - (b) If Upgrade Customer decides to withdraw its Upgrade Request from the Upgrade Request process, such remaining monies shall be returned, less actual study costs incurred, to the Upgrade Customer at the conclusion of the required studies for the Upgrade Request.
  - ii. The Study Deposit is non-binding, and actual study costs may exceed the Study Deposit.
    - (a) Upgrade Customer is responsible for, and must pay, all actual study costs.
    - (b) If Transmission Provider sends Upgrade Customer notification of additional study costs, then Upgrade Customer must either: (i) pay all additional study costs within 20 days of Transmission Provider sending the notification of such additional study costs or (ii) withdraw its Upgrade Request. If Upgrade Customer fails to complete either (i) or (ii), then

Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn.

- b. If, after receiving the System Impact Study report, Upgrade Customer decides to remain in the Upgrade Request process, then Upgrade Customer must submit by wire transfer a Readiness Deposit within 30 days from the date that Transmission Provider provides the System Impact Study Report. The Readiness Deposit shall equal 20 percent of the cost of the Network Upgrades identified in the Upgrade Customer's System Impact Study. If the 30<sup>th</sup> day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.
    - i. Readiness Deposit refunds will be handled as follows:
      - (a) If the Upgrade Request is withdrawn or terminated after the Readiness Deposit has been provided, the Readiness Deposit refund amount will be determined by point at which the Upgrade Request was withdrawn or terminated, and the need for any additional subsequent restudies as a result of the withdraw or termination.
      - (b) If the project proceeds to a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), the Readiness Deposit will be refunded upon Upgrade Customer fully executing such agreement.
  - c. Study Deposits and Readiness Deposits are non-transferrable. Under no circumstances may refundable or non-refundable Study Deposit or Readiness Deposit monies for a specific Upgrade Request be applied in whole or in part to a different Upgrade Request, a New Service Request, or any other type of request.
- 3. Upgrade Request scope cannot include upgrades that are already included in the Regional Transmission Expansion Plan (with the exception of advancements) or subject to an existing, fully executed interconnection related agreement, such as a Generation Interconnection Agreement, stand-alone Construction Service Agreement, Network Upgrade Cost Responsibility Agreement or Upgrade Construction Service Agreement.
  - 4. No Incremental Auction Revenue Rights shall be received by an Upgrade Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.
  - 5. An Upgrade Customer cannot transfer, combine, swap or exchange all or part of an Upgrade Request with any other Upgrade Request or any other New Service Request within the same cycle.

6. Tariff, Part VIII, Subpart E, section 416, Base Case Data, requirements shall apply to Upgrade Requests. Transmission Provider will coordinate with Affected Systems as needed as set forth in the PJM Manuals.
7. Prior to entering into a final Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E), an Upgrade Customer may assign its Upgrade Request to another entity only if the acquiring entity accepts and acquires all rights and obligations as identified in the Upgrade Request for such project.
8. Cost Allocation: Each Upgrade Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its Upgrade Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such Upgrade Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the Upgrade Request; or the construction of Supplemental Projects.
9. Where the Upgrade Request calls for accelerating the construction of a Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the Upgrade Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Network Upgrade.

C. Initiating an Upgrade Request

An Upgrade Customer must submit to Transmission Provider, electronically through Transmission Provider's website, a completed and signed Upgrade Application and Studies Agreement ("Application"), a form of which is provided in Tariff, Part IX, Subpart K, including the required Study Deposit.

1. A Request Number shall be assigned based upon the date and time a completed and executed Upgrade Application and Studies Agreement and deposit is received by the Transmission Provider.

2. A valid Upgrade Request shall be established when the Transmission Provider receives the last required agreement element, including the required deposits, from the Upgrade Customer, and the deficiency review for such Upgrade Request is complete.

- a. Application Requirements for Upgrade Requests Pursuant to Operating Agreement, Schedule 1, section 7.8

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

- i. The MW amount of requested Incremental Auction Revenue Rights (IARRs), including the source and sink locations and desired commencement date, and;
- ii. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VIII, Subpart H, section 435(B) Overview, above.

- b. Application Requirements for Merchant Network Upgrade Requests

For Transmission Provider to consider an Application complete, the Upgrade Customer must include, at a minimum, each of the following, as further described in the Application and PJM Manuals:

- i. the MVA or MW amount by which the normal or emergency rating of the identified facility is to be increased, together with the desired in-service date; or the Regional Transmission Expansion Plan project number and planned and requested advancement dates;
- ii. the substation or transmission facility or facilities where the upgrade(s) will be made;
- iii. the increase in capability (in MW or MVA) of the proposed Merchant Network Upgrade;
- iv. if requesting Incremental Capacity Transfer Rights (ICTRs), identification of up to three Locational Deliverability Areas (LDAs) in which to determine the ICTRs;
- v. the planned date the proposed Merchant Network Upgrade will be in service, such date to be no more than seven years from the date the request is received by the Transmission Provider, unless the Upgrade Customer demonstrates that engineering, permitting, and

construction of the Merchant Network Upgrade will take more than seven years; and

- vi. A Study Deposit in the amount of \$150,000, in accordance with Tariff, Part VIII, Subpart H, section 435(B) Overview, above.

D. Deficiency Review

Upon receiving a completed and executed Application, together with the Study Deposit, Transmission Provider will review the Application and establish the validity of the request, beginning with a deficiency review, as follows:

1. Transmission Provider will exercise Reasonable Efforts to inform Upgrade Customer of Application deficiencies within 15 Business Days after Transmission Provider's receipt of the completed Application.
2. Upgrade Customer then has 10 Business Days to respond to Transmission Provider's deficiency determination.
3. Transmission Provider then will exercise Reasonable Efforts to review Upgrade Customer's response within 15 Business Days, and then will either validate or reject the Application.

E. System Impact Study

After receiving a valid Upgrade Request, the Transmission Provider, in collaboration with the Transmission Owner, shall conduct a System Impact Study. Prior to the commencement of the System Impact Study, the Transmission Provider may have a scoping meeting with the Upgrade Customer to discuss the Upgrade Request.

1. System Impact Study Requirements

The System Impact Study shall identify the system constraints, identified with specificity by transmission element or flowgate, relating to the Upgrade Request included therein and any resulting Network Upgrades or Contingent Facilities required to accommodate such Upgrade Request.

The System Impact Study shall also include:

- a. the list and facility loading of all reliability criteria violations specific to the Upgrade Request.
- b. estimates of cost responsibility and construction lead times for new facilities and system upgrades.

- c. include the amount of incremental rights available, as applicable

## 2. Contingent Facilities.

Transmission Provider shall identify the Contingent Facilities in the System Impact Studies by reviewing unbuilt Network Upgrades, upon which the Upgrade Customer's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the Upgrade Request or reassessment of the unbuilt Network Upgrades. The method for identifying Contingent Facilities shall be sufficiently transparent to determine why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study(ies), including why a specific Contingent Facility was identified and how it relates to the Upgrade Request. Transmission Provider shall also provide, upon request of the Upgrade Customer, the Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

### a. Minimum Thresholds to Identify Contingent Facilities

#### i. Load Flow Violations

Load flow violations will be identified based on an impact on an overload of at least five percent distribution factor (DFAX) or contributing at least five percent of the facility rating in the applicable model.

#### ii. Short Circuit Violations

Short circuit violations will be identified based on the following criteria: any contribution to an overloaded facility where the New Service Request increases the fault current impact by at least one percent or greater of the rating in the applicable model.

#### iii. Stability and Dynamic Criteria Violations

Stability and dynamic criteria violations will be identified based on any contribution to a stability violation.

## 3. System Impact Study Results

Transmission Provider shall conduct a System Impact Study, and provide the Upgrade Customer a System Impact report on Transmission Provider's website.

To proceed with the Upgrade Request process, within 30 days of Transmission Provider issuing the System Impact Study report, Transmission Provider must receive from the Upgrade Customer:



- a. a Readiness Deposit, by wire transfer, equal to 20 percent of the cost allocation for the Network Upgrades as calculated in the System Impact Study report.
- b. Notification in writing that Upgrade Customer elects to exercise the Option to Build for Stand Alone Network Upgrades identified with respect to its Upgrade Request.

If the 30th day does not fall on a Business Day, then the Readiness Deposit shall be due on the next Business Day thereafter.

- c. If Transmission Provider does not receive the Readiness Deposit equal to 20 percent from the Upgrade Customer within 30 days of Transmission Provider issuing the System Impact Study report, then Transmission Provider shall deem the Upgrade Request to be terminated and withdrawn, and the Upgrade Request will be removed from all studies and will lose its priority position.
  - d. No modifications of any type for any reason are permitted to the Upgrade Request at this point in the Upgrade Request process.
  - e. Upgrade Customer may not elect Option to Build after such date.
4. If the Readiness Deposit is received by the Transmission Provider within 30 days of the Transmission Provider issuing the System Impact Study report, Transmission Provider will proceed with the Facilities Study for the Upgrade Request.

#### F. Facilities Study

The Facilities Study will provide the final details regarding the type, scope and construction schedule of Network Upgrades and any other facilities that may be required to accommodate the Upgrade Request, and will provide the Upgrade Customer with a final estimate of the Upgrade Customer's cost responsibility for the Upgrade Request. Upon completion of the Facilities Study the Transmission Provider will provide the Facilities Study report on Transmission Provider's website, and provide a draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E).

#### G. Upgrade Customer Final Agreement Negotiation Phase

1. Transmission Provider shall use Reasonable Efforts to complete the Final Agreement Negotiation Phase within 60 days of the start of such Phase. The Final Agreement Negotiation Phase shall commence on the first Business Day immediately following the tendering of the Facilities Study. The purpose of the Final Agreement Negotiation Phase is to negotiate and enter into a final Upgrade Construction Service Agreement found in Tariff, Part IX, Subpart E; conduct any remaining analyses or updated analyses and adjust the Security obligation based on

higher priority Upgrade Request(s) withdrawn during the Final Agreement Negotiation Phase. If the 60th day does not fall on a Business Day, the phase shall be extended to end on the next Business Day.

- a. If an Upgrade Request is withdrawn during the Final Agreement Negotiation Phase, the Transmission Provider shall remove the Upgrade Request from the Cycle, and adjust the Security obligations of other Upgrade Requests based on the withdrawal.

2. Final Agreement Negotiation Phase Procedures. The Final Agreement Negotiation Phase shall consist of the following terms and procedures:

Transmission Provider shall provide in electronic form a draft Upgrade Construction Service Agreement to the parties to such agreement prior to the start of the Final Agreement Negotiation Phase.

- a. Security is required within 30 days of the Transmission Provider's issuance of the draft Upgrade Construction Service Agreement (a form of which is located in Tariff, Part IX, Subpart E). If the 30th day does not fall on a Business Day, the security due date shall be extended to end on the next Business Day.
- b. Negotiation  
Parties may use not more than 60 days following the start of the Final Agreement Negotiation Phase to conduct negotiations concerning the draft agreements. If the 60<sup>th</sup> day is not a Business Day, negotiations shall conclude on the next Business Day. Upon receipt of the draft agreements, Upgrade Customer, and Transmission Owner, as applicable, shall have no more than 20 Business Days to return written comments on the draft agreements. Transmission Provider shall have no more than 10 Business Days to respond and, if appropriate, provide revised drafts of the agreements in electronic form. Transmission Provider, in its sole discretion, may allow more than 60 days for the Final Agreement Negotiation Phase.
- c. Impasse  
If the Upgrade Customer, or Transmission Owner, as applicable, determines that final agreement negotiations are at an impasse, such party shall notify the other parties of the impasse, and such party may request Transmission Provider to file the unexecuted agreement with FERC or request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5. If Transmission Provider, in its sole discretion, determines that the negotiations are at an impasse, Transmission Provider shall notify the other parties of the impasse, and may file the unexecuted agreement with the FERC.

d. Execution and Filing

Not later than five Business Days following the end of negotiations within the Final Agreement Negotiation Phase, Transmission Provider shall provide the final Upgrade Construction Service Agreement, to the parties in electronic form.

i. Not later than 15 Business Days after receipt of the final interconnection related agreement, Upgrade Customer shall either:

- (a) execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;
- (b) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
- (c) request in writing that Transmission Provider file with FERC the final interconnection related service agreement unexecuted, with the final interconnection related service agreement containing terms and conditions deemed appropriate by Transmission Provider, and provide any required adjustments to Security.

ii. If an Upgrade Customer executes the final Upgrade Construction Service Agreement, then, not later than 15 Business Days after PJM sends notification to the relevant Transmission Owner, the relevant Transmission Owner shall either:

- (a) execute the final Upgrade Construction Service Agreement in electronic form and return it to Transmission Provider electronically;
- (b) request in writing dispute resolution as allowed under Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5; or
- (c) request in writing that Transmission Provider file with FERC the final Upgrade Construction Service Agreement in unexecuted form.

The unexecuted Upgrade Construction Service Agreement shall contain terms and conditions deemed appropriate by Transmission Provider for the Upgrade Request.

- iii. Parties may not proceed under such Upgrade Construction Service Agreement until: (i) 30 days after such agreement, if executed and nonconforming, has been filed with the Commission; (ii) such agreement, if unexecuted, has been filed with and accepted by the Commission; or (iii) the earlier of 30 days after such agreement, if conforming, has been executed or has been reported in Transmission Provider's Electronic Quarterly Reports.

## H. Upgrade Construction Service Agreement

In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Upgrade Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system.

### 1. Cost Reimbursement

Pursuant to the Upgrade Construction Service Agreement, a Upgrade Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owners) for the Costs, determined in accordance with Tariff, Part VIII, Subpart C, section 404(A)(5) of constructing Distribution Upgrades, and/or Network Upgrades necessary to accommodate its New Service Request to the extent that the Transmission Owner is responsible for building such facilities pursuant to Tariff, Part VIII and the applicable Upgrade Construction Service Agreement. The Upgrade Construction Service Agreement shall obligate the Upgrade Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the Transmission Owner's expenditures for the design, engineering, and construction of the facilities that it is responsible for building pursuant to the Upgrade Construction Service Agreement are made. The Transmission Provider shall distribute the revenues received under this Tariff, Part VIII, Subpart H, section 435 to the affected Transmission Owner(s).

### 2. Upgrade-Related Rights

The Upgrade Construction Service Agreement shall specify Upgrade-Related Rights to which the Upgrade Customer is entitled pursuant to Tariff, Part VIII, Subpart E, sections 426, 427, 428, and 430, except to the extent the applicable terms of Tariff, Part VIII, Subpart E, sections 426, 427, 428, and 430 provide otherwise.

### 3. Specification of Transmission Owners Responsible for Facilities and Upgrades

The Facilities Study (or the System Impact Study, if a Facilities Study is not required) shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Upgrade Construction Service Agreement, for the

construction of facilities and upgrades, determined in a manner consistent with Operating Agreement, Schedule 6.

I. Withdraw or Termination

1. If an Upgrade Customer decides to withdraw its Upgrade Request, Transmission Provider must receive written notification from the Upgrade Customer of Upgrade Customer's decision to withdraw its Upgrade Request.
2. Transmission Provider may deem an Upgrade Request terminated and withdrawn for failing to meet any of the requirements, as set forth in this Tariff, Part VIII, Subpart H.
3. If an Upgrade Request is either withdrawn or deemed terminated and withdrawn, it will be removed from the Upgrade Request process and all relevant models, and, as applicable, the Readiness Deposits and Study Deposits will be disbursed as follows:
  - a. For Readiness Deposits: At the conclusion of Transmission Provider's Facility Study, refund to the Upgrade Customer 100 percent of Readiness Deposit paid by the Upgrade Customer.
  - b. For Study Deposits: At the point at which the Upgrade Customer requested to withdraw the Upgrade Request or the Transmission Provider terminated the Upgrade Request, refund to the Upgrade Customer up to 90 percent of its Study Deposit submitted with its Upgrade Request during the Application less any actual costs for studies conducted up to and including the point of withdraw or termination of such Upgrade Request.
  - c. Up to and including the point of withdraw or termination of such Upgrade Request.

J. Transmission Provider Website Postings

The Transmission Provider shall maintain on the Transmission Provider's website a list of all Upgrade Requests. The list will identify, as applicable:

1. the increase in capability in megawatts (MW) or megavolt-amperes (MVA);
2. the megawatt amount of requested Incremental Auction Revenue Rights (IARRs);
3. the station or transmission line or lines where the upgrade(s) will be made;
4. the requested source and sink locations
5. the proposed in-service or commencement date;

6. the status of the Upgrade Request, including its Request Number;
7. the availability of any studies related to the Upgrade Request;
8. the date of the Upgrade Request; and
9. for each Upgrade Request that has not resulted in a completed upgrade, an explanation of why it was not completed.

**Tariff, Part VIII, sections 436 – 499**  
**[Reserved]**

# Attachment C

Affidavit of  
Jason P. Connell

On Behalf of  
PJM Interconnection, L.L.C.



PJM Interconnection, L.L.C. ) Docket No. ER22-\_\_\_\_\_

3. My affidavit supports PJM’s filing of comprehensive reforms to its interconnection process in order to process New Service Requests more efficiently and on a more timely basis. PJM proposes to do so by moving from a serial “first-come, first-served” queue approach to a “first-ready, first-served” Cycle approach utilized by

other regional transmission organizations (“RTOs”) and stand-alone transmission providers. I describe the increasing volume of Interconnection Requests PJM has been receiving and the weaknesses in the current serial approach that, combined with the overwhelming volume of requests, have resulted in study backlogs and delays. I also describe the stakeholder proceedings PJM has convened over the past eighteen months to address these issues and develop the reforms PJM is filing.

4. The affidavits of Jason R. Shoemaker (“Shoemaker Affidavit”) and Mark Sims (“Sims Affidavit”) also support PJM’s filing. Mr. Shoemaker describes the specific revisions to the PJM Open Access Transmission Tariff (“Tariff”) PJM proposes to make and their purpose. Mr. Sims describes the analyses PJM will perform under the proposed new interconnection process and during the transition period from the existing process to the new process.

#### PJM and Its Existing Interconnection Process

5. PJM, as an RTO, ensures the reliability of the high-voltage electric power system serving 65 million people in all or parts of 13 states and the District of Columbia. PJM coordinates and directs the operation of the region’s transmission grid, which includes over 85,103 miles of transmission lines, administers a competitive wholesale electricity market, and plans regional transmission expansion improvements to maintain grid reliability and relieve congestion.
6. Under the terms of its Tariff, PJM has the responsibility for planning the expansion and enhancement of the PJM Transmission System on a regional basis.<sup>1</sup> This includes administering the connection of generators, interconnection of Merchant

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<sup>1</sup> Terms not defined herein have the meaning set forth in the Tariff.

Transmission Facilities, requests for Transmission Service, and upgrades to existing Transmission Owner facilities in the PJM Transmission System through the New Service Requests process. PJM coordinates the planning process, performs reliability studies, and oversees the construction of the required Interconnection Facilities, Merchant Transmission Facilities, and any associated Network Upgrades.

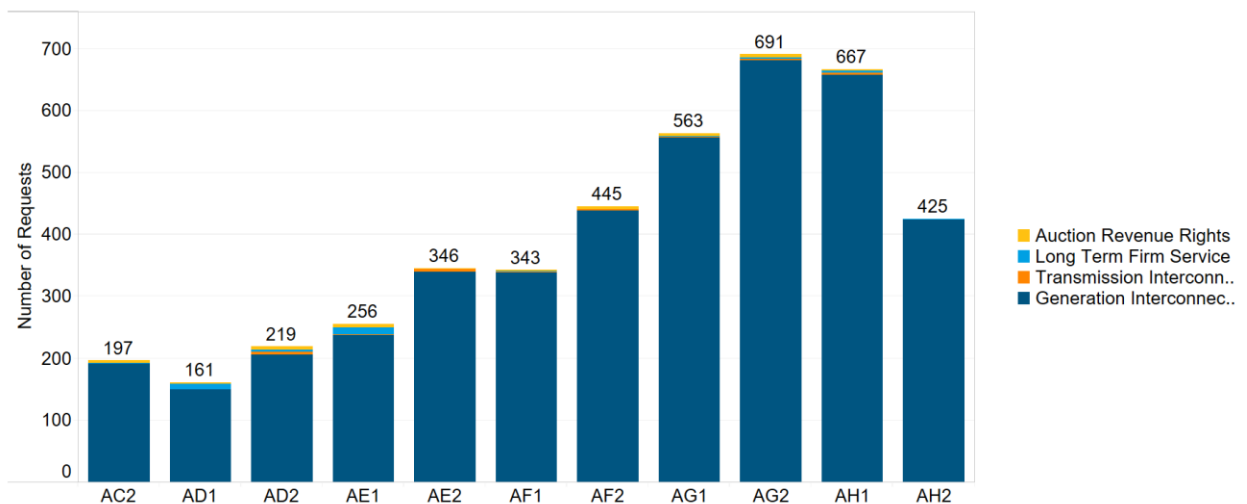
7. Under the existing Tariff rules, PJM processes New Service Requests through two New Services Queue “windows” each year, one starting April 1 of each year and ending September 30 of each year, and the second starting October 1 of each year and ending March 31 of the next year. In the existing interconnection process, PJM orders New Service Requests serially for purposes of both interconnection studies and allocation of costs of Network Upgrades necessary to accommodate New Service Requests. PJM also provides individual study reports and cost allocation for each project. Interconnection Customers are required to provide evidence of Site Control only for their generator sites and only once, at the time they submit their New Service Request.

The Number of New Service Requests Submitted to PJM Has Risen Steeply in the Last Several Years

8. PJM has experienced an exponential increase in the number of New Services Requests received in each queue window in the last four calendar years (2018 through 2021). Figure 1 below illustrates the increasing total number of New Service Requests submitted in each queue window in recent years, starting with the AC2 queue window that extended from October 1, 2016, through March 31, 2017, and ending with the AH2 queue window that extended from October 1, 2021,

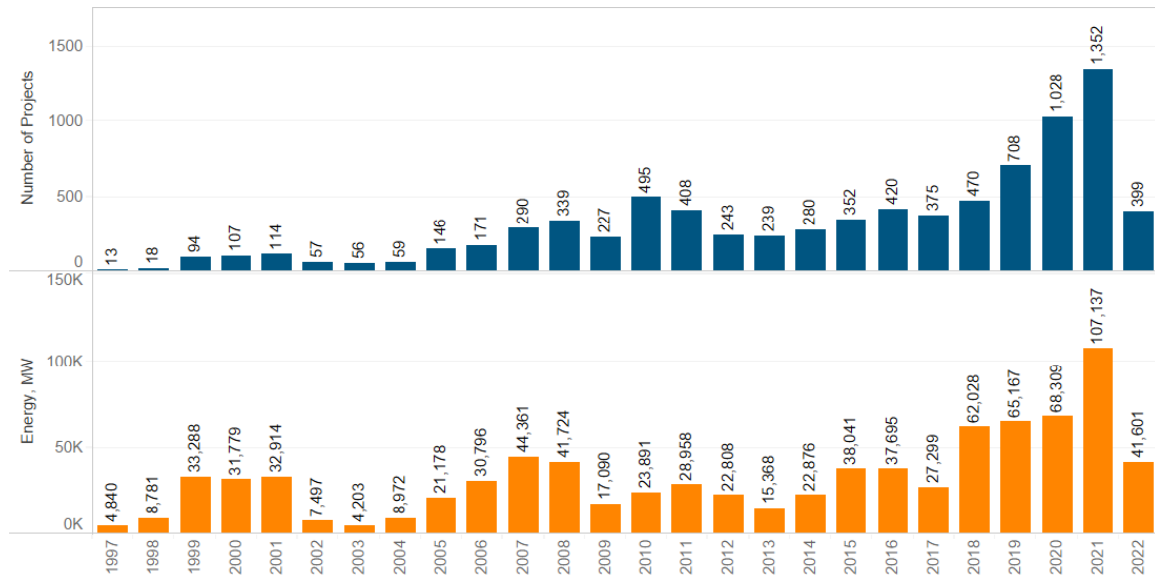
through March 31, 2022 (the AH1 and AH2 queue windows reflect a decrease in the number of New Service Requests submitted, likely because by the end of the AG2 queue window on March 31, 2021, all interested parties were on notice that PJM had commenced an interconnection reform initiative). Figure 2 below illustrates the annual increase in the total number of New Service Requests from 1997 to present,<sup>2</sup> and demonstrates the dramatic increase that started in 2018 (queue windows AE1 and AE2).

**FIGURE 1: TOTAL NEW SERVICES REQUESTS BY APPLICATION TYPE**



<sup>2</sup> The information for 2022 is for the period January 1, 2022, through March 31, 2022, the close of the AH2 queue window.

**FIGURE 2: TOTAL NEW SERVICES REQUESTS BY YEAR**



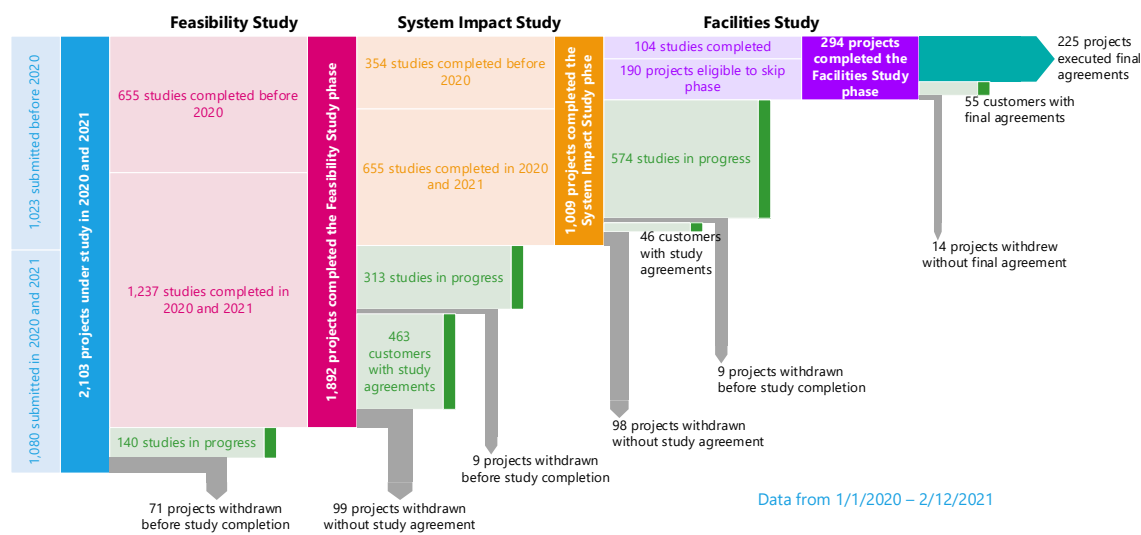
9. As illustrated by Figure 1 and Figure 2, the volume of New Service Requests has increased drastically over the past four full calendar years, with the number of 2018 requests representing a 25 percent increase over the 2017 amount, and the number of 2019 requests representing a 50 percent increase over the 2018 amount. Additionally, the number of 2020 requests is more than double the 2018 amount, and the number of 2021 requests are almost triple the 2018 amount. These increases have caused the number of queued projects PJM is actively studying to increase to 2,700.

The Existing Serial Interconnection Process Is Not Well Suited for Processing the Number of New Service Requests PJM Now Receives

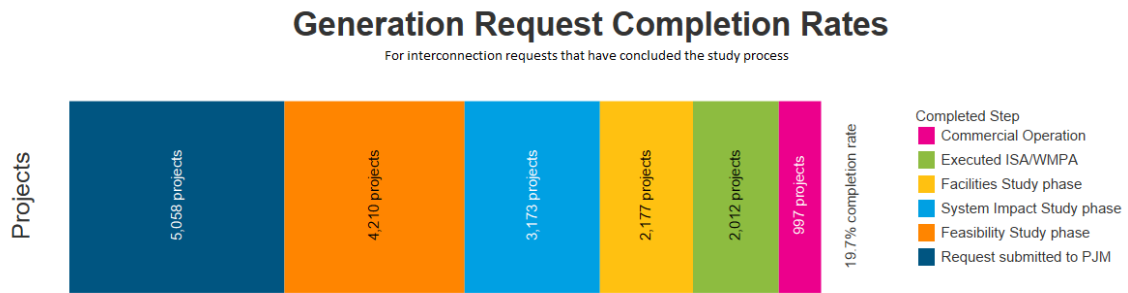
10. PJM's existing interconnection process was designed at a time when the number of Interconnection Requests was significantly lower and many more projects withdrew from the queue at an early stage. Under the existing process, PJM undertakes an initial Feasibility Study, to be followed by a System Impact Study and then, if necessary, a Facilities Study. Historically, as many as 33 percent of

projects that submitted Interconnection Requests withdrew from the queue after the Feasibility Study, the first step, while at present only about 5 percent of projects that have submitted New Service Requests withdraw that early in the process. At present, another 10 percent of projects that have submitted New Service Requests drop out later in the process, after the System Impact Study (based on PJM’s analysis of New Service Requests from January 1, 2020, through February 12, 2021), and the withdrawals continue to accumulate as the process goes on, as shown in Figures 3 and 4, below, resulting in projects dropping out at a rate that totals 80 percent of the total number of initial queue applications, as shown in Figure 4, below. These late-stage withdrawals from a serial process often result in a cascade of adverse impacts on projects that have later queue positions.

**FIGURE 3: PROJECT WITHDRAWALS BY STUDY PHASE**



**FIGURE 4**



11. PJM's experience has been that projects that withdraw from the interconnection queue at a late stage often are speculative in nature. The project developer has submitted the New Service Request, or sometimes multiple New Service Requests in the same queue window, because the initial application costs are not that high. New Service Customers maintain their New Service Requests because the requirements to remain in the queue are not very strict. In other words, the New Service Customers maintain a New Service Request, even though the project may be unlikely to be financed, have its output contracted for, or be constructed. When one of these speculative projects finally encounters a requirement it cannot meet and withdraws, it may upset the expectations of many or all of the projects that are behind the withdrawing project in the queue, i.e., lower-queued projects.
12. Expectations are upset because almost every project that withdraws from the interconnection queue after the System Impact Study causes PJM to have to restudy lower-queued projects without the higher-queued project in the model. The restudies not only take more time, thereby delaying the processing of the lower-queued New Service Requests, but also create significant cost uncertainty for lower-queued projects. The withdrawal of a higher-queued project may mean that

one (or more) of the lower-queued projects becomes the first to cause the need for a Network Upgrade or becomes subject to some amount of cost allocation, such that the Network Upgrade costs are assigned to the lower-queued project. Additional Network Upgrade costs at a late stage of project development, which can be significant, may adversely affect the economics of the lower-queued project, turning a viable project into a non-viable project. These additional costs may cause the lower-queued project, in turn, to withdraw from the queue, with ensuing adverse impacts on projects lower in the queue.

13. Further, the cascading withdrawal situation that is inherent in a serial process is exacerbated by the increasing volume of New Service Requests PJM receives. With that many projects in the queue, the number of higher-queued projects withdrawing increases, as does the likelihood of a withdrawing higher-queued project causing cost responsibility for Network Upgrades to be reassigned.

Issues with the Serial Process and the Increasing Number of New Service Requests Has Led to a Mounting Backlog of Studies and Delays in the Interconnection Process

14. The combination of the increasingly large numbers of New Service Requests and the numerous restudies necessitated by late stage withdrawals of projects has resulted in an enormous and ever growing workload for the PJM Interconnection departments. Although many stakeholders and interested parties have suggested that PJM simply hire more engineers or engage more consultants to process the enormous number of New Service Requests it receives and the required studies and restudies, the market for these highly skilled individuals is tight. PJM also faces extraordinary competition for such individuals, including from the New Services Customers submitting New Service Requests. Finally, the significant learning



curve and training time for new employees, as well as the increased PJM staff oversight needed for additional contractors, means that even adding 100 new employees and/or contractors, if such a thing were possible, would not immediately solve the problem of an enormous workload.

15. PJM has been making improvements to its study process in order to continue meeting Order No. 845 performance metrics requirements, including hiring additional personnel in the Interconnection Projects and Interconnection Analysis departments, and has reprioritized its study workload to focus on its Facilities Study process. The benefits of these improvements are beginning to be realized, as new staff has been trained, significant retool work has been accomplished, and the number of Facilities Studies tendered in 2022 is roughly double the amount tendered during the same period in 2021. However, the overall throughput of the New Service Request processing has declined as PJM expends more resources to accommodate the increasing volume of New Service Requests and the growing backlog of studies.
16. Further, the backlog of studies means New Service Customers are waiting longer for the information they need to determine whether to pursue their projects. These delays slow down the construction of needed new Generating Facilities.

PJM Convened Stakeholder Proceedings to Develop Reforms to Its Interconnection Process

17. Due to the growing backlog of studies and difficulty in processing the rapidly increasing volume of New Service Requests, in October 2020, PJM commenced a series of workshops with stakeholders to provide education, document stakeholders concerns and issues, and determine a clear set of objectives to be addressed through

the stakeholder process. As a result of these workshops, the stakeholders identified 69 unique concerns and made 135 unique suggestions; these unique concerns and suggestions were grouped into 12 categories including transparency, queue window scheduling, application process, base case, studies, affected system, cost responsibility, agreements, interim operation, construction, disputes, and staffing.

18. Starting with the list of unique concerns and suggestions, PJM convened the Interconnection Process Reform Task Force (“IPRTF”) and held the first meeting of the new task force in April 2021. Material related to the IPRTF is posted on the PJM website at <https://pjm.com/committees-and-groups/task-forces/iprtf>. The IPRTF held over 20 meetings, comprising approximately 99 hours, between April 2021 and April 2022. My team and I also spoke frequently outside of the IPRTF meetings with stakeholders about their proposals, questions on PJM’s proposals, and potential compromises.
19. One of the issues that emerged as being of particular concern to many stakeholders was how PJM would transition from the existing process to a new process. Many stakeholders desire to have their projects, which are close to the end of the existing process, remain under the existing process, particularly the existing cost allocation rules. While sympathetic to this desire, PJM’s interest is in moving to the new process quickly, in order to begin studying projects in a more efficient manner so as to clear the study backlog more expeditiously. As explained in the Shoemaker Affidavit, the compromise solution balances the competing interests by having projects in certain queue windows processed in an Expedited Process that will utilize the existing serial process and cost allocation rules, while projects in more recent queue windows will be placed in transition cycles, and projects in the most

recent queue windows, which began after the queue reform initiative commenced, will be placed in the first Cycle under the “New Rules.”

20. During the IPRTF process, PJM conducted non-binding polling on competing proposed packages of rules for a new interconnection process (“New Rules”) and rules for the transition from the existing interconnection process to the New Rules (“Transition Period Rules”) in November and December 2021. The level of stakeholder engagement in the IPRTF process is evidenced by the number of PJM Member Companies—290—and total companies—545—that participated in the December 2021 polling alone.
21. The New Rules and the Transition Period Rules advanced to the Planning Committee in December 2021. The first read (i.e., the initial submission) of the New Rules at the Planning Committee took place on December 14, 2021, and the first read of the Transition Period Rules at the Planning Committee took place on January 11, 2022. The Planning Committee endorsed the New Rules on January 11, 2022, with nearly 100 percent support (there were 275 Yes votes, 1 No vote, and 0 Abstained). The Planning Committee endorsed the Transition Period Rules on February 8, 2022, with approximately 91 percent support (there were 218 Yes votes, 22 No votes, and 14 Abstained).
22. With this substantial support from the Planning Committee, the New Rules and Transition Period Rules were consolidated into a single package and advanced. In March and April 2022, the IPRTF reviewed and commented on draft Tariff language to implement the New Rules and the Transition Period Rules endorsed by the Planning Committee. The package had its first read at the Markets & Reliability Committee on March 23, 2022.

23. On April 27, 2022, the New Rules and Transition Period Rules were voted on by both the Markets & Reliability Committee and the Members Committee and were overwhelmingly endorsed by both committees. The New Rules and Transition Period Rules were endorsed by the Markets & Reliability Committee in a sector weighted vote of 4.368 out of a total of 5.00, and by the Members Committee by a sector weighted vote of 4.518 out of a total of 5.00. Both votes exceed the two-third weighted sector threshold of 3.33 by a considerable margin.
24. On May 17, 2022, the Members Committee evaluated and voted on three proposed amendments to the New Rules and Transition Period Rules. The Members Committee endorsed two of the three proposed amendments: (1) removing a Transmission Owner as a party to the Network Upgrade Cost Responsibility Agreement (a new form of agreement developed for purposes of the New Rules and Transition Period Rules); and (2) revisions to the Site Control requirements to address “non-standard” sites, such as bodies of water and submerged land (i.e., sites for offshore wind projects) and their unique permitting challenges. The first amendment, concerning the Network Upgrade Cost Responsibility Agreement, passed with approximately 68 percent support (there were 42 Yes votes, 20 No votes, and 33 Abstained). The amendments to the Site Control requirements passed with approximately 71 percent support (there were 65 Yes votes, 27 No votes, and 7 Abstained). PJM revised the draft Tariff sheets based on the proposal approved at the April 27, 2022 Members Committee and Markets & Reliability Committee meetings and as amended during the May 17, 2022 Members Committee meeting, to implement these changes.

The Proposed Reforms Address Weaknesses in the Existing Serial Approach by Clustering New Service Requests for Studies and Cost Allocation and Enhancing Requirements to Reduce the Number of Speculative Projects Clogging the Process

25. As described in more detail in the Shoemaker Affidavit, the New Rules make two essential changes to remedy the flaws in the existing overcrowded serial interconnection process that I have identified. First, rather than being studied and having costs allocated serially, as in the existing interconnection process, under the New Rules, New Service Requests will be studied and allocated costs as a group, or cluster. Specifically, all the New Service Requests in a Cycle will be grouped together for study purposes, with a single Cycle-based study report. This change alone will significantly reduce study workload and time. It also will enable PJM to provide Project Developers with actionable information on which to base their investment decisions sooner than they receive such information in the existing process. Most important, because all the projects in a Cycle are studied together and project modifications and withdrawals are limited to specific periods during the Cycle, the iterative studies to determine the project that is first to cause the need for Network Upgrades once higher-queued projects have withdrawn will be eliminated. This, coupled with the fact that retools are scheduled at specific points within the Cycle, will eliminate the cascading withdrawal and restudy phenomenon.
26. Second, the New Rules provide enhanced requirements projects must meet to enter and remain in the interconnection process. These more stringent requirements will help to eliminate speculative projects, which should reduce the overcrowding in the interconnection process. Only projects that can satisfy the enhanced Site Control requirements and provide Readiness Deposits, in addition to other requirements, can remain in the interconnection process.

27. The changes described above also apply to the Transition Period Rules, which similarly adopt a Cycle approach. The primary difference between the New Rules and the Transition Period Rules is that the latter include a sorting process that allows certain mature projects to follow an Expedited Process that utilizes PJM's existing cost allocation procedures. I discuss this process below, and it is addressed more fully in the Shoemaker Affidavit.

The Proposed Transition Process Protects Mature Projects in the Existing Queue While Enabling a Timely Transition to the New Rules

28. As I have already noted, many New Services Customers would like to have their projects in the existing interconnection queue remain under the existing interconnection rules. PJM currently has almost four years' worth of projects (in queue windows AE1, which commenced April 1, 2018, through AH1, which commenced April 1, 2021) that are still being processed under the existing interconnection rules. These projects will need to be addressed and processed using the Transition Period Rules before PJM can begin applying the New Rules to projects submitted in the AH2 queue window and beyond.
29. PJM has been working, and continues to work to process, study, and tender service agreements to as many of the projects already in the existing interconnection process as possible before the Transition Period Rules and New Rules become effective. The more PJM can reduce the backlog under the existing interconnection process, the more quickly PJM can begin implementing the Transition Period Rules and New Rules, thereby working more efficiently than is possible under the existing interconnection process rules.

30. However, on the date the Transition Period Rules and New Rules become effective, there still will be a number of projects that have been in the existing interconnection process. Working with stakeholders, PJM has developed a proposal for existing projects to demonstrate their readiness to proceed, including paying a Readiness Deposit and demonstrating Site Control. Existing projects that can meet these requirements will be reprioritized into either an Expedited Process or one of two Transition Cycles, depending on which queue window they submitted their New Service Requests in as well as on their meeting other requirements. The use of the sorting process to place projects into the Expedited Process, one of the two Transition Cycles, or the New Rules process, provides priority to older backlogged projects by studying them in Cycle groupings. This sorting process, which splits the AE1-AH1 projects into three groups, also avoids creating a single, unmanageably large Cycle to start the New Rules process, which might occur if there was no Transition Period.
31. Certain earlier-queued projects, from queue window AD2 or prior queue windows, will remain subject to PJM's existing interconnection process. There are fewer than 80 such projects at present.

PJM Proposes to Remove Certain Reporting and Penalty Provisions from the Long-Term Firm Transmission Service Provisions of the Tariff Because They Are Unnecessary and Duplicative of Order No. 845 Metrics and Reporting Requirements

32. Requests submitted by Eligible Customers seeking long-term firm transmission service are governed by provisions in Tariff, Parts II and III. These requests must be studied to determine their impact on the PJM Transmission System and whether any system reinforcements are required in connection with them, just as Interconnection Requests must be studied. As a result, PJM's Interconnection

Projects and Interconnection Analysis departments are responsible for such studies, though these departments are not otherwise involved in transmission operations. However, because the Interconnection Projects and Interconnection Analysis departments are responsible for these studies, they are included in Order No. 845 metrics and reporting requirements. I note, however, that the PJM metrics reports have not broken the transmission request-related studies out from all other New Service Requests.

33. Tariff, Part II, section 19.8 currently requires PJM to use due diligence in studying requests for long-term firm transmission service, sets forth metrics for reporting study delays to the Federal Energy Regulatory Commission (“Commission”), and provides for penalties applicable to PJM if its Interconnection Projects and Interconnection Analysis departments fail to complete a certain percentage of studies in a certain time frame. Tariff, Part III, section 32.5 incorporates those same diligence, reporting, and penalty provisions to service under Part III of the Tariff. PJM proposes to remove both sections because they are obsolete.
34. As an initial matter, I note that the reporting provisions of sections 19.8 and 32.5 have been triggered less than a handful of times, and the penalty provisions of sections 19.8 and 32.5 have not been triggered even once since they were added to the Tariff.
35. Moreover, because studies of long-term firm transmission service requests are subject to Order No. 845 metrics and reporting requirements that the Interconnection Projects and Interconnection Analysis departments must follow, any future failure to meet the long-term firm transmission service study deadlines would result in a report to the Commission that would be publicly available. Either



the Commission or an interested party could initiate a proceeding under section 206 of the Federal Power Act if it were to believe PJM is not exercising due diligence in performing these studies, based on its reporting.

#### Additional Changes

36. In addition, in the proposed new process, PJM has consolidated the interconnection processes for small generators and large generators into a single process. PJM also will be providing a new prescreening portal, described in the Sims Affidavit, that Project Developers can consult before submitting a New Services Request for a preliminary view of the system impacts a potential project could have on an individual basis, based on inputs provided by the users.
37. Finally, PJM proposes to add a requirement that, in order to enter into a Wholesale Market Participation Agreement, a Project Developer must demonstrate no later than Decision Point III that it has entered into a two-party interconnection agreement with the relevant Transmission Owner. PJM is adding this requirement because in its experience, over two-thirds of wholesale market participant projects do not complete construction and instead are withdrawn. While PJM initially proposed to require a two-party interconnection agreement as part of a wholesale market participant's initial Application, PJM agreed to move this requirement to no later than Decision Point III as part of the compromises reached during the stakeholder process.

#### Conclusion

38. This completes my affidavit.

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

PJM Interconnection, L.L.C.                    )       Docket No. ER22-\_\_\_\_\_

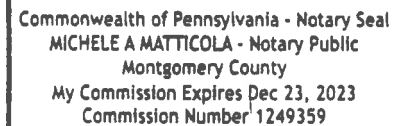
**VERIFICATION**

Jason P. Connell deposes and states that he is the Jason P. Connell referred to in the foregoing "Affidavit of Jason P. Connell on Behalf of PJM Interconnection, L.L.C.," that he has read the same and is familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of his knowledge, information, and belief.

  
\_\_\_\_\_  
Jason P. Connell

Subscribed and sworn to before me, the undersigned notary public, this 9<sup>th</sup> day of June 2022.

  
\_\_\_\_\_  
Notary Public



# Attachment D

Affidavit of  
Jason R. Shoemaker

On Behalf of  
PJM Interconnection, L.L.C.

PJM Interconnection, L.L.C. ) Docket No. ER22-\_\_\_\_\_

1. My name is Jason R. Shoemaker. I am the Manager of Interconnection Projects at PJM Interconnection, L.L.C. (“PJM”) and have been in that position since March 2021. My duties and responsibilities include oversight and guidance of the Interconnection Projects department. The department oversees the project management and interconnection process administration associated with all New Service Requests from application through to execution of final service agreements.
2. Prior to becoming the Manager of Interconnection Projects, I was a team lead supervising a sub-group within the department responsible for approximately half of PJM’s interconnection queue. That role began in March of 2019. I joined the Infrastructure Coordination department in February 2012 as an engineer responsible for interconnection project management implementing final service agreements. Prior to joining PJM, I held engineering positions at PECO and Unisys Corporation. I received a Bachelor of Science in Computer Engineering from The Pennsylvania State University in 1999 and a Master of Business Administration from Villanova University in 2010.
3. The purpose of this affidavit is to support PJM’s filing being submitted today to comprehensively reform to its interconnection procedures. This filing includes both Transition Period Rules and New Rules components, which allow for the staged implementation of these proposed reforms. The Transition Period Rules are

set forth in the new Part VII to the PJM Open Access Transmission Tariff (“Tariff”). They apply to any project with an Interconnection Request submitted during AE1 through AH1 queue windows (April 1, 2018, through September 30, 2021), that as of the Transition Date,<sup>1</sup> has not been tendered or executed an Interconnection Service Agreement (“ISA”) or a wholesale market participation agreement. The New Rules component adopts permanent “new rules” that will apply to valid New Service Requests and Upgrade Requests submitted on or after October 1, 2021, which is the start date of the AH2 queue window. The New Rules provisions include new Tariff, Part VIII. PJM’s filing being submitted today also includes new Tariff, Part IX, which contains the forms of interconnection-related service agreements that apply to Parts VII and VIII. PJM is also filing changes to its existing Parts II, III, and VI Tariff sections, and updating the Tariff Table of Contents.

4. I was an active participant in the stakeholder process that resulted in this filing. My affidavit first addresses the Transition Period Rules and then addresses the New Rules. My affidavit also discusses the various interconnection-related service agreements found in the new Tariff, Part IX that apply to both the Transition Period Rules and the New Rules. In addition to my affidavit, PJM’s filing is being supported by the affidavits of Mr. Jason P. Connell and Mr. Mark Sims.

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<sup>1</sup> The Transition Date is the later of: (i) the effective date of the Part VII Tariff provisions, or (ii) the date by which all AD2 and prior queue ISAs or wholesale market participation agreements have been executed or filed unexecuted. Part VII, Definitions. All cites to Part VII, Part VIII and Part IX are to Part VII, Part VIII and Part IX of the proposed Tariff sections being filed today.

## **I. THE TRANSITION PERIOD PROCESS**

### **A. Overview of the Transition Period and the Initial Sorting Process**

5. The Transition Period rules will apply to projects in the AE1, AE2, AF1, AF2, AG1, AG2, and AH1 queues that have not yet been tendered an ISA or wholesale market participant agreement as of the Transition Date.<sup>2</sup> Figure 1, set forth in paragraph 14 below, shows the sequence and timing of various Transition Period stages.
6. Within 60 days of the Transition Date, a Project Developer that has submitted a valid Interconnection Request during the AE1, AE2, AF1, AF2, and AG1 queue windows and has not been tendered or executed an ISA or wholesale market participation agreement, is required to provide a Readiness Deposit of \$4,000 per megawatt (“MW”).<sup>3</sup> The Project Developer must demonstrate Site Control over one or more Sites for the purpose of constructing a Generating Facility or Merchant Transmission Facility through a deed, lease, or option for at least a one-year term beginning from the Transition Date.<sup>4</sup> A Project Developer’s New Service Request will be deemed terminated and withdrawn if it fails to meet these requirements.<sup>5</sup>

#### **1. Expedited Process**

7. Valid Interconnection Requests in the AE1, AE2, AF1, AF2, and AG1 queue windows that have not been tendered or executed an ISA or wholesale market participant agreement and meet certain requirements, are eligible to proceed under

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<sup>2</sup> Part VII, section 301(A)(2).

<sup>3</sup> Part VII, section 303(A)(1). This deposit is not at risk prior to the end of Decision Point I. *Id.*

<sup>4</sup> Part VII, section 303(A)(2).

<sup>5</sup> Part VII, section 303(A)(3).

expedited process rules. Specifically, Project Developers who have met the transition eligibility requirements (i.e., payment of the \$4,000 per MW Readiness Deposit and the provision of Site Control evidence) will be subject to an additional restudy to determine shared Network Upgrades impacts.<sup>6</sup> Such projects will be studied on the base case model that was used for their System Impact Study analysis prior to the effective date of Part VII.<sup>7</sup> A project is not eligible for the expedited process if it has cost allocation eligibility or is identified as the first to cause for a Network Upgrade which has a total estimated cost of greater than \$5 million, and will be reprioritized to Transition Cycle #1.<sup>8</sup> Projects subject to the expedited process do not have to provide any additional Readiness Deposits and are not subject to other readiness requirements.<sup>9</sup> Projects that enter the expedited process will have their Facilities Studies completed, and will be tendered an interconnection-related service agreement pursuant to Part IX, and must pay all actual study costs.<sup>10</sup> With regard to cost allocation, the Project Developer would be obliged to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such

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<sup>6</sup> Part VII, section 304(A)(1).

<sup>7</sup> *Id.*

*Id.* Additionally, if a project that is otherwise eligible and which is an uprate whose base project does not qualify for the expedited process, the uprate also will not qualify for the expedited process, regardless of analysis results, and if a stability analysis or a sag study is completed during the expedited process, and it is determined that a project has an estimated Network Upgrade cost greater than \$5 million, it is not subject to the expedited process. Part VII, section 304(B). Uprates associated with New Service Requests submitted in the AD2 or later queue windows or Cycles are not eligible for the expedited process.

<sup>9</sup> Part VII, section 304(B).

<sup>10</sup> *Id.*

New Service Request, net of benefits resulting from the construction of the upgrades.<sup>11</sup>

## **2. Transition Period Rules**

8. Projects from the AE1, AE2, AF1, AF2, and AG1 queue windows that have not been tendered a type of interconnection agreement and that are not eligible for the expedited process will enter Transition Cycle #1. Transition Cycle #1 will begin after PJM completes the eligibility review for the expedited process and no later than one year from the Transition Date, with Transition Cycle #1 to run simultaneously with the expedited process. However, Phase III of Transition Cycle #1 will not begin until all expedited process projects have been completed.<sup>12</sup> Transition Cycle #1 will include three phases, each with a System Impact Study and Decision Point, and the Applicant must pay the actual study costs.<sup>13</sup> Unlike Transition Cycle #2, there is no Application Review Phase in Transition Cycle #1.<sup>14</sup>
9. Transition Cycle #2 applies to valid projects submitted in the AG2 through AH1 queue windows. To move forward in Transition Cycle #2, the Project Developer or Eligible Customer must submit the detailed Application and Studies Agreement set forth in Part IX, and provide the required Study and Readiness Deposits.<sup>15</sup> Notably, PJM has adopted a more streamlined and focused application process that should benefit PJM and stakeholders. Rather than multiple applications based on

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<sup>11</sup> Part VII, section 304(B)(1)(a).

<sup>12</sup> Part VII, section 304(C)(2)(a).

<sup>13</sup> Part VII, sections 304(C)(2)(b)-(c).

<sup>14</sup> Part VII, sections 304(C)(2)(b).

<sup>15</sup> Part VII, section 305(A)(2).



project size, PJM will now use a single application form for all New Service Requests, the form of which is set forth in Part A of Tariff, Part IX. All applications and required information must be submitted electronically, and all deposits are to be made by wire transfer, or for Readiness Deposits, by wire transfer or letter of credit. This should facilitate the processing of applications and any required information and deposits, and make it easier for Project Developers and Eligible Customers to submit required materials within the required deadlines. While the Project Developer cannot change its fuel type from that which it previously submitted and cannot increase its requested Maximum Facility Output or Capacity Interconnection Rights, a Project Developer can reduce Maximum Facility Output or Capacity Interconnection Rights by up to 100 percent, and also must choose between its previously identified primary and secondary Points of Interconnection.<sup>16</sup> Eligible Customers can also reduce their requested transmission service by up to 100 percent, but cannot increase it.<sup>17</sup>

10. As I mentioned above, there will be three phases in Transition Cycle #2. Phase I of AG2-AH1 Transition Cycle #2 will only start after: (a) all Application Review period activities have been completed for that Cycle; (b) the Phase I Base Case data has been made available for a 30-day review during the Application Phase of that Cycle; and (c) Decision Point II of Transition Cycle #1 has concluded.<sup>18</sup> Phase II of AG2-AH1 Transition Cycle #2 will only start after all Decision Point III determinations have concluded in Transition Cycle #1, and Phase III of AG2-AH1

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<sup>16</sup> Part VII, sections 305(A)(2)(a)-(c).

<sup>17</sup> Part VII, section 305(A)(2)(d).

<sup>18</sup> Part VII, section 305(A)(2)(d)(i).

Transition Cycle #2 will only start after the Final Agreement Negotiation Phase of Transition Cycle #1 has concluded.<sup>19</sup>

11. Applicants must provide a Study Deposit, which will range from \$75,000 to \$400,000 depending on the MW size of the project, with the Applicant responsible for paying the actual study costs.<sup>20</sup> Ten percent of the Study Deposit is to be non-refundable, with such portion to be used to fund the costs of any necessary restudies or pay amounts owed if the Applicant withdraws or its New Service Request is terminated at any point.<sup>21</sup> The remaining 90 percent is refundable, subject to the Applicant paying the actual costs of its studies and the applicable reviews. The Applicant is also responsible for paying any amounts that exceed its Study Deposit, as well as necessary restudies if the New Service Request is deemed terminated or withdrawn.<sup>22</sup> The Applicant must also provide a Readiness Deposit equal to \$4,000 per MW of energy (e.g., Maximum Facility Output) or capacity (e.g., Capacity Interconnection Rights), whichever is greater, with the Applicant required to provide additional Readiness Deposits at Decision Points I and II if they wish to proceed through the Cycle.<sup>23</sup> Similar Study and Readiness Deposits requirements apply under the Part VIII New Rules. I explain and provide more detail about the Readiness Deposits later.

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<sup>19</sup> *Id.*

<sup>20</sup> Part VII, sections 306(A)(5)(iii)-(iv).

<sup>21</sup> Part VII, section 306(A)(5)(a)(i).

<sup>22</sup> Part VII, section 306(A)(5)(a)(i).

<sup>23</sup> Part VII, sections 301(A)(3) and 306(A)(5)(b).

12. In support of this Study Deposit amount, I note that while under its existing procedures, PJM requires the payment of separate deposits for each stage of its interconnection studies,<sup>24</sup> the Study Deposit amount required under Parts VII and VIII is a single deposit that applies to all studies required to accommodate a New Service Request. Based on PJM's experience, this single Study Deposit represents a reasonable proxy for the cost of all three studies, and approximates the total amount that would be required for similar projects under PJM's existing procedures. Furthermore, a Project Developer or Eligible Customer will be protected from overpayment because it will ultimately pay only the actual study costs, further showing these Study Deposit amounts are just and reasonable.

**B. Application Review, Study Process, and Cost Allocation**

13. The Application Rules and study process under the Transition Period Rules are substantially similar to the three-phase approach used in Part VIII New Rules. Each phase will include a System Impact Study and Decision Point, which serves as either an off-ramp where a Project Developer or Eligible Customer can elect to withdraw and, potentially, lose some portion of its Readiness Deposits, or a stepping stone along the way to the next phase.<sup>25</sup> Each of the System Impact Studies will be a regional analysis of the effect of adding to the Transmission System the new facilities and services proposed by valid New Service Requests and an evaluation of their impacts on deliverability to the aggregate of PJM Network Load. Finally, the System Impact Studies will provide cost responsibility and

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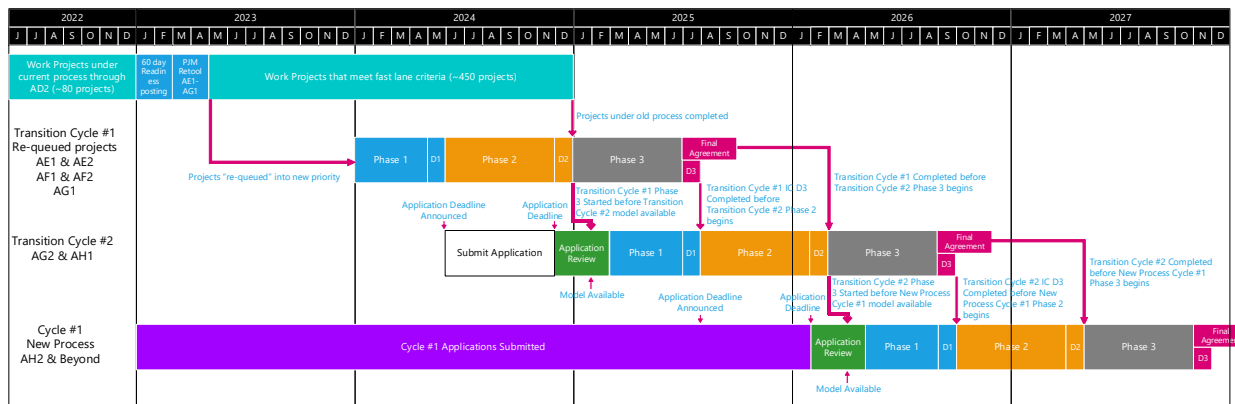
<sup>24</sup> See, e.g., Tariff, Part IV, sections 36.1.01(1)(i) and 36.1.03(1)(h); Part IV, section 110.1(1)(a)(ix); Part VI, sections 204.3A and 206.3.

<sup>25</sup> Part VII, section 307(A)(1).

construction lead time estimates.<sup>26</sup>

14. As shown in Figure 1, each Cycle is effectively gated from earlier Cycles such that the start of each new Cycle may not occur until certain steps in the prior Cycle have been completed.

**FIGURE 1**



For example, Transition Cycle #1 will start after PJM completes the eligibility review for the expedited process and no later than one year from the Transition Date.<sup>27</sup> Transition Cycle #1 will run simultaneously with the expedited process; however, Phase III of Transition Cycle #1 will not begin until the expedited process is complete.<sup>28</sup> Phase I of Transition Cycle #2 will not start until all Application Review period activities have been completed for that Cycle, the Phase I Base Case data has been made available for a 30-day review during the Application Phase of that Cycle, and Decision Point II of Transition Cycle #1 has concluded.<sup>29</sup> Phase II of Transition Cycle #2 will not start until all Decision Point III determinations have

<sup>26</sup> Part VII, section 307(A)(2).

<sup>27</sup> Part VII, section 304(C)(2)(a).

<sup>28</sup> *Id.*

<sup>29</sup> Part VII, section 305(A)(2)(d)(i).

concluded in Transition Cycle #1, and Phase III of Transition Cycle #2 will only start after the Final Agreement Negotiation Phase of Transition Cycle #1 has concluded.<sup>30</sup> This gating, along a similar gating mechanism under Tariff, Part VIII, will treat each Cycle as a discrete review, and will avoid PJM having to address a large number of requests in one Cycle while still undertaking the studies required for a prior Cycle. It should simplify cost allocation and reduce uncertainty as to which facilities are needed for a specific Cycle. This should further reduce the need for restudies and the backlog associated with such restudies.

15. Phase I of Transition Cycle #1 and Transition Cycle # 2 will start on the first Business Day immediately following the end of the Application Review Phase, but no earlier than 30 days following the distribution of the Phase I Base Case data, with PJM to use Reasonable Efforts to complete Phase I within 120 calendar days.<sup>31</sup> PJM will post during Phase I, and at least 30 days prior to initiating a Cycle's Decision Point I, an estimated start date for Decision Point I in order for Project Developers and Eligible Customers to prepare to meet their Decision Point I requirements.<sup>32</sup>
16. Decision Point I will commence on the first Business Day following the end of Phase I and will end 30 calendar days thereafter.<sup>33</sup> The Project Developer or Eligible Customer must decide during Decision Point I whether to choose to remain

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<sup>30</sup> *Id.*

<sup>31</sup> Part VII, section 308(A)(1)(b)(i).

<sup>32</sup> Part VII, section 308(A)(1)(b)(ii).

<sup>33</sup> Part VII, section 309(A)(1) and Part VIII, section 406(A)(1).

in the Cycle or withdraw.<sup>34</sup> If the Project Developer or Eligible Customer wishes to proceed, it must provide Readiness Deposit No. 2.<sup>35</sup> A Project Developer must make an additional Site Control showing.<sup>36</sup> The Project Developer or Eligible Customer must also present evidence of having obtained air and water permits (if applicable), and satisfy other criteria. If it fails to demonstrate Site Control or satisfy the other applicable requirements, its New Service Request will be deemed withdrawn.<sup>37</sup>

17. Subject to the gating procedures described above, Phase II commences after the end of Decision Point I, with the Phase II System Impact Study analysis to retool load flow results based on decisions made during Decision Point I, perform short circuit and stability analyses as required, and identify potential Affected Systems.<sup>38</sup> PJM will use Reasonable Efforts to complete Phase II within 180 days.<sup>39</sup>
18. Similar to Decision Point I, Decision Point II commences on the first Business Day following the end of Phase II and will end 30 calendar days thereafter, with the Project Developer or Eligible Customer to decide whether to continue to Phase III or withdraw its project.<sup>40</sup> If the Project Developer or Eligible Customer elects to

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<sup>34</sup> Part VII, section 309(A).

<sup>35</sup> Part VII, section 309(A)(1)(a)(i).

<sup>36</sup> Part VII, section 309(A)(1)(b).

<sup>37</sup> Part VII, sections 309(A)(1)(d)-(g).

<sup>38</sup> Part VII, sections 310(A)(1)(a)-(b).

<sup>39</sup> Part VII, section 310(A)(1)(e).

<sup>40</sup> Part VII, section 311(A)(1). The New Service Request may accelerate to a final interconnection-related service agreement if no additional studies are required. Part VII, section 311(A)(2)(d).

proceed, it must provide Readiness Deposit No. 3,<sup>41</sup> and is subject to additional informational requirements and a deficiency review.<sup>42</sup>

19. Subject to the gating procedures described above, Phase III commences on the first Business Day immediately following the end of Decision Point II, with PJM to use Reasonable Efforts to complete Phase III within 180 days of commencement.<sup>43</sup> The Phase III System Impact Study analysis will retool load flow, short circuit, and stability results based on decisions made in Decision Point II, include any required final Affected System studies, and provide final cost estimates.<sup>44</sup> PJM will also provide the interconnection-related service agreement or agreements to the relevant parties during Phase III.<sup>45</sup>
20. Decision Point III will commence on the first Business Day immediately following the end of Phase II, and run concurrently with the Final Agreement Negotiation Phase.<sup>46</sup> In order to remain in the Cycle, a Project Developer or Eligible Customer must provide the required Security for its project (based upon the Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results), notify PJM of its intent to proceed, and comply with the additional applicable Site Control and other requirements, or its New Service Request shall be deemed terminated and withdrawn.<sup>47</sup>

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<sup>41</sup> Part VII, section 311(a)(1)(b).

<sup>42</sup> Part VII, section 311(A)(2).

<sup>43</sup> Part VII, section 312(A)(1)(e).

<sup>44</sup> Part VII, sections 312(A)(1)(a)-(b).

<sup>45</sup> Part VII, section 312 (A)(1)(f).

<sup>46</sup> Part VII, section 313(A).

<sup>47</sup> Part VII, section 313 (A)(1) and Part VIII, section 410(B).

21. Readiness Deposits must be provided at each of the Decision Points. As mentioned earlier, an Applicant must also provide a Readiness Deposit equal to \$4,000 per MW of energy or capacity, whichever is greater, as part of its Application.<sup>48</sup> For projects subject to the Transition Cycles, a Project Developer or Eligible Customer that wishes to move forward must provide Readiness Deposit No. 2 at Decision Point I, which will be the amount equal to: the greater of 10 percent of the cost allocation for the Network Upgrades as calculated in Phase I or the Readiness Deposit No. 1 that was previously provided, minus Readiness Deposit No. 1.<sup>49</sup> If the Project Developer or Eligible Customer decides to move forward at Decision Point II, it must provide Readiness Deposit No. 3, which is equal to: 20 percent of the cost allocation for the Network Upgrades as calculated in Phase II or the total of Readiness Deposit No. 1 and Readiness Deposit No. 2, minus the total of Readiness Deposit No. 1 and Readiness Deposit No. 2.<sup>50</sup> Readiness Deposits at Decision Points I and II can be zero, but cannot be less than zero.
22. The Readiness Deposit amounts are based on those accepted by the Federal Energy Regulatory Commission (“Commission”) for the Midcontinent Independent System Operator, Inc. (“MISO”) and the Southwest Power Pool, Inc. (“SPP”). Readiness Deposit No. 1 is a fixed per MW rate based on project size that does not unfairly burden small generators but will discourage non-ready projects from entering the queue, and make sure there are some funds available to protect other Project Developers or Eligible Customers if a project withdraws. It also allows a

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<sup>48</sup> Part VII, section 306(A)(5)(b).

<sup>49</sup> Part VII, section 309(A)(1)(a)(i)(b).

<sup>50</sup> Part VII, section 311(A)(1)(b)(ii).



Project Developer or Eligible Customer to know in advance what its initial Readiness Deposit will be. Readiness Deposits Nos. 2 and 3 are based on the projected cost of the required Network Upgrades, and also will provide a pool of dollars that will help protect Project Developers and Eligible Customers that move forward from the cost impact of underfunded Network Upgrades resulting from withdrawn New Service Requests. These Readiness Deposits should discourage non-ready projects from remaining in the Cycle, while at the same time not being overly burdensome to Project Developers or Eligible Customers that elect to remain in the Cycle.

23. A Project Developer's or Eligible Customer's Readiness Deposits are partially or wholly at risk if a project is withdrawn or deemed terminated, with the at-risk portion of the Readiness Deposit to be used to offset the costs of any underfunded Network Upgrades resulting from such withdrawal or termination.<sup>51</sup> If a New Service Request in a given Cycle is withdrawn or deemed withdrawn at Decision Point I, PJM will refund 50 percent of the Project Developer's or Eligible Customer's Readiness Deposit No. 1, with PJM to retain the remaining amounts until the end of that Cycle and final agreements entered into. The amount to be refunded is reduced by the costs of underfunded Network Upgrades associated with the withdrawal.<sup>52</sup> If a New Service Request in a given Cycle is withdrawn or deemed terminated at Decision Point II, the Project Developer or Eligible Customer may be able to receive up to 100 percent of its Readiness Deposit No. 1 at the end

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<sup>51</sup> Part VII, section 301(A)(3)(b)(iii).

<sup>52</sup> Part VII, section 309(A)(4)(c).

of that Cycle, with the amount to be refunded to be reduced, potentially down to zero, by the costs of underfunded Network Upgrades associated with the withdrawal.<sup>53</sup> If a New Service Request is withdrawn or deemed terminated at Decision Point III, the cumulative Readiness Deposits are at risk, with any refund amounts to be reduced by the costs of any underfunded Network Upgrades in accordance with the procedures described below.<sup>54</sup>

24. The following process describes how the Readiness Deposit refunds will be determined and disbursed. When all Cycle New Service Requests have either entered into final agreements and the Decision Point III Site Control requirements have been met, or have been withdrawn, PJM will (i) undertake a retool to provide a final determination of the Network Upgrades that are required for the Cycle; and (ii) address Readiness Deposits. Once Cycle New Service Requests have either entered into final agreements and met the Decision Point III Site Control requirements, or have withdrawn, Readiness Deposits will be handled as follows: underfunded Network Upgrades will be identified as those where one or more withdrawn New Service Requests that were identified as having a cost allocation in the Phase III analysis results, with all Readiness Deposits either to be refunded if there are no underfunded Network Upgrades, or to be refunded on a pro rata basis after the underfunded Network Upgrades are made whole relative to the withdrawn New Service Requests.<sup>55</sup> A Project Developer or Eligible Customer that is ready to move forward at Decision Point III must provide Security for its project (based

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<sup>53</sup> Part VII, section 311(B)(3)(a).

<sup>54</sup> Part VII, section 313(B)(5).

<sup>55</sup> Part VII, section 301(A)(3)(b)(iii).

upon the Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results).<sup>56</sup> A Project Developer or Eligible Customer that successfully enters into final service agreements and meets the Decision Point III Site Control requirements will receive a refund of its Readiness Deposits and any unspent portion of its Study Deposit.

25. Under the cost allocation rules, each Project Developer or Eligible Customer will be obliged to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, with such costs not to be less than zero.<sup>57</sup> All New Service Requests that contribute to the need for a Network Upgrade will receive cost allocation for that upgrade pursuant to each New Service Request's contribution to the reliability violation identified on the Transmission System in accordance with PJM Manuals.<sup>58</sup> There will be no inter-Cycle cost allocation; instead, all such costs will be allocated to New Service Requests in that Cycle.<sup>59</sup> A Project Developer will be obliged to pay 100 percent of the costs of the Interconnection Facilities required to accommodate its New Service Request.<sup>60</sup>

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<sup>56</sup> Part VII, section 301(A)(3)(b)(ii).

<sup>57</sup> Part VII, section 307(A)(5)(a). There are also separate provisions that apply when a New Service Request requires accelerating the construction of Network Upgrades that are included in the Regional Transmission Expansion Plan. Part VII, section 307(A)(5)(b).

<sup>58</sup> Part VII, section 307(A)(5)(c). This includes Common Use Upgrades that are subject to a Network Upgrade Cost Responsibility Agreement.

<sup>59</sup> Part VII, section 307(A)(5)(c).

<sup>60</sup> Part VII, section 307(A)(6).

26. Part VII also implements enhanced Site Control procedures, which build and expand upon PJM's existing requirements, and are intended to ensure that a Project Developer has made sufficient investments and commitments to acquire the land necessary for its project. Site Control is required for a project to have a valid position within a Cycle. Proof of Site Control can be in the form of one of the following documents: (1) deed; (2) lease; (3) option to lease or purchase; or (4) as deemed acceptable by PJM, any other contractual or legal right to possess, occupy, and control the Site. Memorandums, letters of intent, and other "agreements to agree" are not sufficient.<sup>61</sup> The Site Control rules also provide that for New Service Requests requiring the use of a Site that is owned or control by a state or federal government entity acceptable evidence of Site Control can be in any form the governmental entity issues.<sup>62</sup> The Project Developer must also show it has sufficient acreage for its project, and is prohibited from submitting evidence of Site Control that utilizes the same land for multiple New Service Requests, unless the total acreage amount of such land is adequate to support all such New Service Requests.<sup>63</sup> I note that the Site Control requirements only apply to Project Developers and not Eligible Customers, because an Eligible Customer does not have or require a Site as defined under Parts VII and VIII.

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<sup>61</sup> Part VII, sections 302(A)(1)-(2).

<sup>62</sup> Part VII, section 302(A)(2)(d) and Part VIII, section 402(A)(2)(d). This provision also states that in such instances the Project Developer must provide at Decision Points I and II evidence that it is taking steps acceptable to PJM to obtain such authorization. As explained in Mr. Connell's affidavit, these provision were added to Part VII and Part VIII at the May 17, 2022 Members Committee to address "non-standard" Sites, such as bodies of water and submerged land, including Sites for off-shore wind projects.

<sup>63</sup> Part VII, sections 302(A)(3) and 302(A)(5).

27. A Site Control showing must include evidence of the following: (a) term—the minimum term over which Site Control must be maintained, which differs depending on which Phase in the Cycle the Site Control demonstration is being made; (b) exclusivity, evidenced by written acknowledgement from the land owner that, for the term, the land owner cannot make the land on which the Site Control showing is based available for a purchase or lease to any other person or entity other than the Project Developer that will interfere with the rights granted to the Project Developer; and (c) conveyance—that the subject land is conveyed to the Project Developer through a document, such as a deed or an option to purchase or lease, or that the Project Developer is guaranteed a right to future conveyance at Project Developer’s sole discretion through a document, such as a deed or an option to purchase or lease.<sup>64</sup>
28. Site Control must be demonstrated at different points in the Cycle. A Project Developer must demonstrate Site Control for 100 percent of the Merchant Transmission Facility or Generating Facility Site, including the location of the high-voltage side of the Generating Facility’s main power transformers, within 60 days of the Transition Date in order to be eligible to move forward under the expedited process or under Transition Cycle #1.<sup>65</sup> Evidence of Site Control must also be provided as part of a submitted Application and Studies Agreement.<sup>66</sup> At each point at which Site Control must be provided, the Project Developer must also provide a certification signed by a company officer or other authorized

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<sup>64</sup> Part VII, section 302(A)(8).

<sup>65</sup> Part VII, section 303(A)(2).

<sup>66</sup> Part VII, sections 306(A)(1)(f), 306 (A)(4)(j), and 306(B)(5)-(6).

representative verifying that the Site Control requirements have been met.<sup>67</sup> PJM can also request that the Project Developer provide copies of landowner attestations, county recordings, or other similar documentation acceptable to PJM to validate such Site Control certifications.<sup>68</sup>

29. The Project Developer must provide similar evidence of 100 percent Site Control at Decision Point I for an additional one-year term beginning from the last day of the relevant Cycle, Phase I for the Generating Facility or Merchant Transmission Facility, in addition to providing evidence for a similar one-year term of 50 percent Site Control for any required Interconnection Facilities and the Interconnection Switchyard.<sup>69</sup> While there is no requirement to demonstrate Site Control at Decision Point II, the Project Developer must supply at Decision Point III Site Control evidence of 100 percent Site Control for the Generating Facility or Merchant Transmission Facility, including 100 percent of the linear distance for the identified required Interconnection Facilities and 100 percent of the acreage required for the identified required Interconnection Switchyard, with the proviso that the Project Developer can provide this Site Control within 180 days of execution of the final interconnection-related service agreement if certain conditions are met.<sup>70</sup>
30. Figure 2 below illustrates the Site Control requirements pursuant to the New Rules. PJM is imposing detailed Site Control requirements because in PJM's experience,

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<sup>67</sup> Part VII, section 302(A)(9). A form of this certification will be set forth in PJM Manual 14G.

<sup>68</sup> *Id.*

<sup>69</sup> Part VII, section 309(A)(1)(b).

<sup>70</sup> Part VII, section 313(A)(1)(c).

the ability to demonstrate Site Control is a key indicator of whether a project is ready to move forward. These Site Control requirements were vetted through the stakeholder process, and while they may be stricter than certain developers may prefer, they are a critical element of the PJM interconnection process rules reform.

**FIGURE 2**

<b>Site Control Term (Transition Phases)</b>	
<b>SUBMISSION #1 – APPLICATION PHASE<sup>1</sup></b>	
<b>Full Site Control:</b> <ul style="list-style-type: none"> <li>100% Generating facility: deed/lease/option</li> </ul>	<b>Term Requirement:</b> <ul style="list-style-type: none"> <li>1 Year from Application Deadline</li> </ul>
<b>SUBMISSION #2 – DECISION POINT 1<sup>2</sup></b>	
<b>Partial Site Control:</b> <ul style="list-style-type: none"> <li>100% Generating facility: deed/lease/option</li> <li>50% Interconnection Facilities: deed/lease/option/ROW</li> <li>50% Interconnection Switchyard: deed/lease/option</li> </ul>	<b>Term Requirement:</b> <ul style="list-style-type: none"> <li>Additional 1 Year from last day of Phase 1</li> <li>1 Year from last day of Phase 1</li> <li>1 Year from last day of Phase 1</li> </ul>
<b>SUBMISSION #3 – DECISION POINT 3<sup>3</sup></b>	

<sup>1</sup> Developers in Transition Cycle #1 will have already fulfilled this initial site control Submission #1 as a requirement to become eligible for the transition. The first open Application Phase for the process reform will be in Transition Cycle #2.

<sup>2</sup> Projects that are eligible for an accelerated process to receive their final GIA at DP1 or DP2 will be required to provide full site control for an additional 3 years from the last day of Phase 1 or Phase 2, respectively.

<sup>3</sup> If 100% of site control is not obtained by Decision Point 3, then Developer must show concrete evidence acceptable to PJM they are in negotiations to achieve 100% of all site control for a period of at least 3 years from the last day of Phase 3. PJM will add a condition precedent in the GIA tariff template requiring that within 180 days of the effective date of the GIA, 100% site control be acquired for at least 3 years from the last day of Phase 3. If 100% of site control is not obtained within 180 days of the effective date of the GIA, then the project will automatically be deemed terminated and will be withdrawn from the cycle.

## **II. THE NEW RULES PROCESS**

### **A. Overview of the Cycle Process**

31. Similar to the Transition Period Rules, PJM under the New Rules will use a single application and study process for all New Service Requests that includes Phase I, Phase II, and Phase III, as well as Decision Points I, II and III, an initial Study Deposit and Readiness Deposit required upfront; and Readiness Deposits required during each Decision Point. The Study Deposit and Readiness Deposit amounts under Part VIII are the same as in the comparable requirements under Part VII. There is a Decision Point at the end of each Phase, which serves as an off-ramp

where a Project Developer or Eligible Customer can elect to withdraw, and potentially lose some portion of its Readiness Deposits, or move forward to the next Phase, and be subject to an additional Readiness Deposit or, at Decision Point III, a Security requirement. There are also accelerated procedures whereby a New Service Request that does not have any network impacts can exit the study process and move to a final interconnection-related service agreement.<sup>71</sup> The New Rules will apply to New Service Requests submitted during the October 1, 2021, through March 31, 2022 queue window and all subsequent queue windows and Cycles. Parties that submitted New Service Requests in those queue windows will need to re-submit their requests under the New Rules.

32. The October 1, 2021 date provides a clear demarcation of which requests are subject to the New Rules, and is part of the negotiated solution that resulted in the filing being submitted today. Use of a later date would increase the amount of time it takes PJM to address and fix the delays in its queue. While such an outcome might benefit a limited number of projects, this would not provide an overall benefit to affected stakeholders, and would be contrary to the compromises reached in the stakeholder process.
33. Each phase has its own start date and completion time, and PJM anticipates that it will take approximately 710 days to move from the application to the execution of the final interconnection-related service agreement. PJM will perform System Impact Studies in each phase to evaluate New Service Requests on a unified Cycle basis, and certain phases also have specific Site Control requirements. While PJM

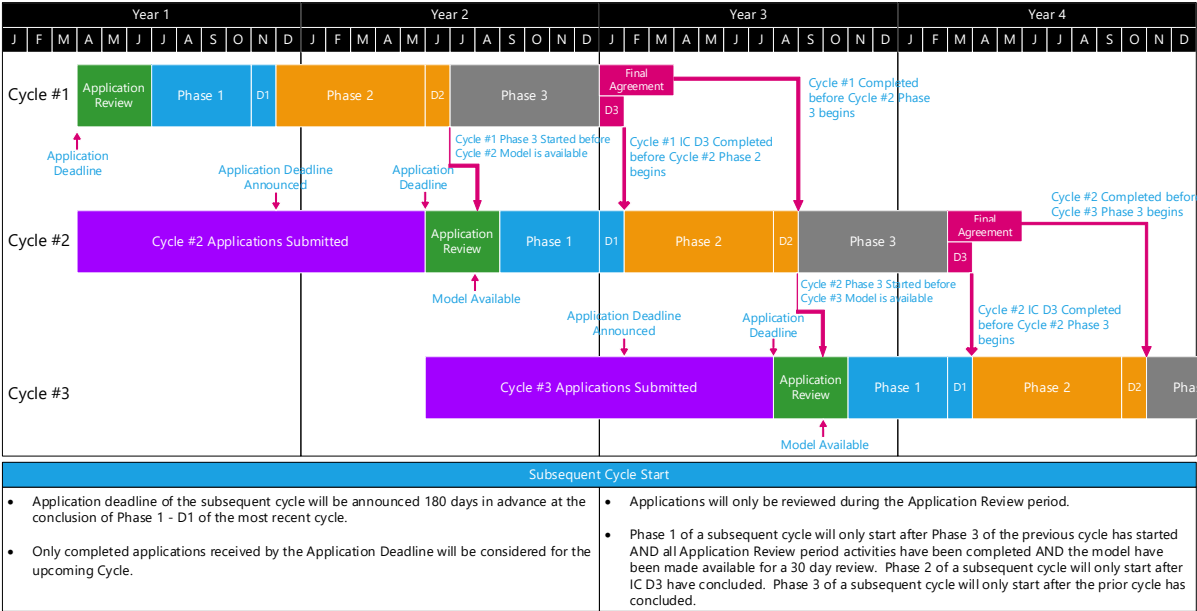
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<sup>71</sup> Part VIII, sections 406(A)(1) and 408(A)(1).



witness Mr. Mark Sims describes the studies to be performed at each phase, I provide a brief description of these studies. I also describe the Site Control requirements and the Study Deposit and Readiness Deposit requirements in more detail below. Figure 3 below shows the New Rules timing and process.

FIGURE 3



34. To be considered in a Cycle, the party submitting a New Service Request must submit a completed and signed Application by the Application Deadline along with the required Study Deposit and Readiness Deposit, and comply with Site Control requirements similar to those required under Part VII.<sup>72</sup> PJM is to post notice of the Cycle’s applicable deadline at the beginning of the Phase II of the prior Cycle, with at least 180 days’ notice.<sup>73</sup>

<sup>72</sup> Part VIII, section 403(A). A form of Application and Study Agreement is found in Part IX, Subpart A.

<sup>73</sup> Part VIII, section 403(A).

35. Similar to the Transition Period, and shown in Figure 3, each Cycle is effectively gated from other Cycles such that the start of each new Cycle cannot occur before the completion of certain steps in the prior Cycle. For example, the model for one Cycle will not be made available until Decision Point II of the prior Cycle concludes and those project decisions are incorporated into that model, and Phase II of a subsequent Cycle will only start after Decision Point III of the previous Cycle has concluded.<sup>74</sup> This gating requirement will avoid PJM having to address a large number of requests in one Cycle while still undertaking the studies required for a prior Cycle. The gating requirement should also simplify cost allocation, reduce uncertainty, and minimize the need for restudies and any resulting backlog.
36. Phase I will start on the first Business Day immediately following the end of the Application Review phase, but no earlier than 30 days following the distribution of the Phase I Base Case data, with PJM to use Reasonable Efforts to complete Phase I within 120 calendar days.<sup>75</sup> PJM will post during Phase I, and at least 30 days prior to initiating a Cycle's Decision Point I, an estimated start date for Decision Point I in order for Project Developers and Eligible Customers to prepare to meet their Decision Point I requirements.<sup>76</sup> The Phase I System Impact Study will evaluate peak load flow conditions. This study will be the equivalent of an impact study analysis at full commercial probability and provide estimates of the scope, cost, and target dates to complete the identified necessary Interconnection Facilities

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<sup>74</sup> See Part VIII, section 400 (definition of Phase II) and sections 403(A) and 407(A)(1)(e).

<sup>75</sup> Part VIII, section 405(A)(1)(b)(i).

<sup>76</sup> Part VIII, section 405(A)(1)(b)(ii).

and Network Upgrades. The results will be provided as a single Cycle format that will be publicly available on PJM's website.

37. Subject to the gating procedures described above, Decision Point I will commence on the first Business Day following the end of Phase I and will end 30 calendar days thereafter.<sup>77</sup> The Project Developer or Eligible Customer must decide during Decision Point I whether to remain in the Cycle or withdraw.<sup>78</sup> The New Service Request may accelerate to a final interconnection-related service agreement where no additional studies are required and other required conditions are met.<sup>79</sup> If the Project Developer or Eligible Customer wishes to proceed, it must pay Readiness Deposit No. 2.<sup>80</sup> A Project Developer must make an additional Site Control showing.<sup>81</sup> The Project Developer or Eligible Customer must also present evidence of having obtained air and water permits (if applicable), and satisfy other criteria; if the Project Developer or Eligible Customer fails to comply with these requirements, its New Service Request will be deemed withdrawn.<sup>82</sup>
38. Subject to the gating procedures described above, Phase II commences after the end of Decision Point I, with the Phase II System Impact Study analysis to retool load flow results based on decisions made during Decision Point I, perform short circuit

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<sup>77</sup> Part VIII, section 406(A).

<sup>78</sup> *Id.*

<sup>79</sup> Part VIII, section 406(A)(1).

<sup>80</sup> Part VIII, section 405(A)(1)(a)(i).

<sup>81</sup> Part VIII, section 406(A)(1)(b).

<sup>82</sup> Part VIII, sections 406(A)(1)(d)-(g).

and stability analyses as required, and identify potentially Affected Systems.<sup>83</sup> PJM will use Reasonable Efforts to complete Phase II within 180 days.<sup>84</sup>

39. Similar to Decision Point I, Decision Point II commences on the first Business Day following the end of Phase II and will end 30 calendar days thereafter, with the Project Developer or Eligible Customer to decide whether to continue to Phase III or withdraw its project.<sup>85</sup> If the Project Developer or Eligible Customer elects to proceed, it must provide Readiness Deposit No. 3,<sup>86</sup> and is subject to additional informational requirements and a deficiency review.<sup>87</sup>
40. Subject to the gating procedures described above, Phase III commences the first Business Day immediately following the end of Decision Point II (unless the Final Agreement Negotiation Phase of the immediately preceding Cycle is still open), with PJM to use Reasonable Efforts to complete Phase III within 180 days of commencement.<sup>88</sup> Phase III System Impact Study analysis will retool load flow, short circuit, and stability results based on decisions made in Decision Point II, and include any required final Affected System studies, and provide final cost

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<sup>83</sup> Part VIII, sections 407(A)(1)(a)-(b).

<sup>84</sup> Part VIII, section 407(A)(1)(e).

<sup>85</sup> Part VIII, section 408(A). The New Service Request may accelerate to a final interconnection-related service agreement is no additional studies are required. Part VIII, section 408(A)(1).

<sup>86</sup> Part VIII, section 408(A)(1)(b).

<sup>87</sup> Part VIII, sections 408(A)(1)(c)-(j).

<sup>88</sup> Part VIII, section 409(A)(1)(e).

estimates.<sup>89</sup> A Facilities Study may also be performed.<sup>90</sup> PJM will also provide the interconnection-related service agreement to the relevant parties during Phase III.<sup>91</sup>

41. Decision Point III will commence on the first Business Day immediately following the end of Phase II, running concurrently with the Final Agreement Negotiation Phase, and will end 30 calendar days thereafter.<sup>92</sup> In order to remain in the Cycle, a Project Developer or Eligible Customer must provide the required Security for its project (based upon the Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results), notify PJM of its intent to proceed, and comply with the additional applicable Site Control and other requirements. In the event a Project Developer or Eligible Customer fails to satisfy the foregoing requirements, its New Service Request shall be deemed terminated and withdrawn.<sup>93</sup> If a New Service Request is withdrawn or is deemed terminated, the Project Developer or Eligible Customer may be eligible for refunds subject to requirements similar to those for Part VII described above, including reductions to offset the cost of underfunded Network Upgrades as determined at the end of a specific Cycle.<sup>94</sup>
42. The Final Agreement Negotiation Phase allows for the negotiation of the relevant interconnection-related service agreement. It commences on the first Business Day immediately following the end of Phase III, to run concurrently with Decision Point

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<sup>89</sup> Part VIII, sections 409(A)(1)(a)-(b).

<sup>90</sup> Part VIII, section 404(A)(4). The purpose of any such study is to determine the effect the requested service will have on system operations, identify any system constraints, redispatch options, and determine whether system expansion will be required to provide the requested service. *Id.*

<sup>91</sup> Part VIII, section 409(A)(1)(f).

<sup>92</sup> Part VIII, section 410(A).

<sup>93</sup> Part VIII, sections 410(A)(1)-(B).

<sup>94</sup> Part VIII, section 401(D)(2)(c).

III, with PJM to use Reasonable Efforts to complete this phase within 60 days of its start.<sup>95</sup> PJM is to provide the parties with a draft version of the interconnection-related service agreement(s); parties then have 20 Business Days to provide comments to PJM, with PJM to respond within 10 Business Days.<sup>96</sup> PJM is to provide the final interconnection-related service agreement(s) to the parties in electronic form within 5 Business Days following the end of negotiations within the Final Agreement Negotiation Phase; parties then have the option of executing the agreement, requesting dispute resolution, or requesting that the agreement is filed with the Commission on an unexecuted basis.<sup>97</sup>

**B. Application Submission and Review**

43. As mentioned above, PJM has adopted a more streamlined and focused application process that applies to Transition Cycle #2 and to New Rules that uses one application for all New Service Requests, the form of which is set forth in Part A of Part IX. All Applications and required information must be submitted electronically, and all deposits are to be made by wire transfer, or for Readiness Deposits, by wire transfer or letter of credit.
44. The New Rules also implement enhanced Site Control procedures, which build and expand upon PJM's existing requirements, and are intended to ensure that a project has made sufficient investments and commitments to acquire the land necessary for its project. Site Control is required for a project to have a valid position within a Cycle. Similar to the Transition Period Rules, proof of Site Control can be in the

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<sup>95</sup> Part VIII, section 411(A).

<sup>96</sup> Part VIII, sections 411(B)(1)-(2).

<sup>97</sup> Part VIII, section 411(B)(4).

form of one of the following: (1) deed; (2) lease; (3) option to lease or purchase; or (4) as deemed acceptable by PJM, any other contractual or legal right to possess, occupy, and control the Site; however, memorandums, letters of intent, and other “agreements to agree” are not sufficient.<sup>98</sup> The Project Developer must also show it has sufficient acreage for its project, and Project Developers are prohibited from submitting evidence of Site Control that utilizes the same land for multiple New Service Requests unless the total acreage amount of such land is adequate to support all such New Service Requests.<sup>99</sup> A Site Control showing must provide evidence of the term, exclusivity, and conveyance, subject to same evaluation as described above.<sup>100</sup>

45. Site Control must be demonstrated at different points in the Cycle. As part of its Application and Studies Agreement for a Generating Facility, the Project Developer must provide Site Control evidence for at least a one-year term beginning from the Application Deadline, for 100 percent of the Generating Facility Site, including the location of the high-voltage side of the Generating Facility’s main power transformers, and provide a company officer’s certification.<sup>101</sup> In the case of a Merchant Transmission Facility, Site Control must be shown for the Site of the high-voltage direct current converter stations, phase angle regulator or variable frequency transformer, as applicable, for at least a one-year term beginning from

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<sup>98</sup> Part VIII, sections 402(A)(1)-(2).

<sup>99</sup> Part VIII, sections 402(A)(3) and 402(A)(5).

<sup>100</sup> Part VIII, section 402(A)(8).

<sup>101</sup> Part VIII, section 403(B)(5).

the Application Deadline, for 100 percent of the Site, and provide a similar officer's certification.<sup>102</sup>

46. The Project Developer must provide similar Site Control evidence at Decision Point I for an additional one-year term beginning from the last day of Phase I of the relevant Cycle, and provide evidence of 50 percent Site Control of the linear distance for any required Interconnection Facilities, and 50 percent of the acreage required for the Interconnection Switchyard.<sup>103</sup> While there is no requirement to demonstrate Site Control at Decision Point II, the Project Developer must supply at Decision Point III Site Control for an additional three-year term evidence of 100 percent Site Control for the Generating Facility or Merchant Transmission Facility, 100 percent of the linear distance for the required Interconnection facilities, and 100 percent of the acreage required for the identified required Interconnection Switchyard.<sup>104</sup> The Project Developer can provide this Site Control within 180 days of execution of the final interconnection-related service agreement if certain conditions are met.
47. Figure 4 below illustrates the Site Control requirements. The New Rules impose detailed Site Control requirements because in PJM's experience, the ability to demonstrate Site Control is a key indicator of whether a project is ready to move forward. These Site Control requirements were vetted through the stakeholder process, and while they may be stricter than certain developers may prefer, they are

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<sup>102</sup> Part VIII, section 403(B)(6).

<sup>103</sup> Part VIII, section 406(A)(1)(b).

<sup>104</sup> Part VIII, sections 410(A)(1)(c)(i)-(iii).



a critical element of the New Rules reform, and are necessary to ensure its success as this process moves forward.

**FIGURE 4**

<b>Site Control Term</b>	
<b>SUBMISSION #1 – APPLICATION PHASE</b>	
<b>Full Site Control:</b> <ul style="list-style-type: none"> <li>• 100% Generating facility: deed/lease/option</li> </ul>	<b>Term Requirement:</b> <ul style="list-style-type: none"> <li>• 1 Year from Application Deadline</li> </ul>
<b>SUBMISSION #2 – DECISION POINT 1</b>	
<b>Partial Site Control:</b> <ul style="list-style-type: none"> <li>• 100% Generating facility: deed/lease/option</li> <li>• 50% Interconnection Facilities: deed/lease/option/ROW</li> <li>• 50% Interconnection Switchyard: deed/lease/option</li> </ul>	<b>Term Requirement:</b> <ul style="list-style-type: none"> <li>• Additional 1 Year from last day of Phase 1</li> <li>• 1 Year from last day of Phase 1</li> <li>• 1 Year from last day of Phase 1</li> </ul>
<b>SUBMISSION #3 – DECISION POINT 3</b>	
<b>Full Site Control<sup>1</sup>:</b> <ul style="list-style-type: none"> <li>• 100% Generating facility: deed/lease/option</li> <li>• 100% Interconnection Facilities: deed/lease/option/ROW</li> <li>• 100% Interconnection Switchyard: deed/lease/option</li> </ul>	<b>Term Requirement:</b> <ul style="list-style-type: none"> <li>• Additional 3 Years from last day of Phase 3</li> <li>• Additional 3 Years from last day of Phase 3</li> <li>• Additional 3 Years from last day of Phase 3</li> </ul>

<sup>1</sup> **NOTE:** If 100% of site control is not obtained by Decision Point 3, then Developer must show concrete evidence acceptable to PJM they are in negotiations to achieve 100% of all site control for a period of at least 3 years from the last day of Phase 3. PJM will add a condition precedent in the GIA tariff template requiring that within 180 days of the effective date of the GIA, 100% site control be acquired for at least 3 years from the last day of Phase 3. If 100% of site control is not obtained within 180 days of the effective date of the GIA, then the project will automatically be deemed terminated and will be withdrawn from the cycle.

48. New Service Requests will also be subject to deficiency reviews as part of the Application Review Phase, at Decision Point I and at Decision Point II.<sup>105</sup> At each of these stages, PJM will commence a deficiency review to determine whether the Project Developer or Eligible Customer meets the applicable Tariff requirements. PJM is to use Reasonable Efforts to inform the Project Developer or Eligible Customer of any deficiencies within 15 Business Days after the close of the Application Deadline, with the Applicant to have 10 Business Days to respond. PJM will then exercise Reasonable Efforts to review Applicant's response within

<sup>105</sup> Part VIII, sections 403(B)(1), 406(A)(1)(h), and 408(A)(2).

15 Business Days, and will either validate or reject the Application.<sup>106</sup> Similar procedures apply at Decision Points I and II, except that PJM is to use Reasonable Efforts to notify the Project Developer or Eligible Customer of any applicable deficiencies within 10 Business Days, and the Project Developer or Eligible Customer is to have 5 Business Days to respond. PJM will then use Reasonable Efforts to review the response within 10 Business Days, and either include the request in the next Phase or reject it.<sup>107</sup>

### **C. Study Deposit and Readiness Deposit Requirements**

49. The obligation to provide Study and Readiness Deposits is a key component of the negotiated solution package, intended to allow projects that are ready to move forward to do so, while at the same time keeping non-ready projects from entering or remaining in a Cycle. Project Developers and Eligible Customers pay only one Study Deposit, based on the MWs of energy (e.g., Maximum Facility Output) or capacity (e.g., Capacity Interconnection Rights), whichever is greater. The deposit amounts range from \$75,000 to \$400,000, depending on the application MW size.<sup>108</sup> Similar to the Transition Period Rules, 10 percent of the Study Deposit is to be non-refundable, with such portion to be used to fund the costs of any necessary restudies or the pay amounts owed if the Applicant withdraws or its New Service Request is terminated at any point of the Cycle.<sup>109</sup> The remaining 90 percent is refundable, subject to the Applicant paying the actual costs of its studies and the

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<sup>106</sup> Part VIII, section 403(B)(1).

<sup>107</sup> Part VIII, sections 406(A)(1)(h) and 408(A)(2).

<sup>108</sup> Part VIII, section 403(A)(5)(a)(iv).

<sup>109</sup> Part VIII, section 403(A)(5)(a)(i).

applicable review, with the Applicant also responsible for paying any amounts that exceed its Study Deposit, as well as necessary restudies if the New Service Request is deemed terminated or withdrawn at any point of the Cycle.<sup>110</sup>

50. The Project Developer or Eligible Customer must also provide up to three Readiness Deposits. The Readiness Deposits and refund procedures are similar to those outlined in my discussion of the Transition Period above, with Readiness Deposit No. 1 to be the greater of the amount equal to \$4,000 per MW of energy or capacity submitted as part of its initial Application.<sup>111</sup> At Decision Point I, if the Project Developer or Eligible Customer wishes to proceed, it must pay Readiness Deposit No. 2, which will be the amount equal to the greater of 10 percent of the cost allocation for the Network Upgrades as calculated in Phase I or Readiness Deposit No. 1, minus the Readiness Deposit No. 1 amount during the Application Phase.<sup>112</sup> If the Project Developer or Eligible Customer decides to move forward at Decision Point II, it must provide Readiness Deposit No. 3, which is equal to 20 percent of the cost allocation for the Network Upgrades as calculated in Phase II or the sum of Readiness Deposit No. 1 and Readiness Deposit No. 2, minus the total of Readiness Deposit No. 1 and Readiness Deposit No. 2.<sup>113</sup> Readiness Deposits at Decision Points I and II can be zero, but cannot be less than zero. The Readiness Deposits are partially or wholly at risk if a project is withdrawn or deemed terminated, with the at-risk portion of the Readiness Deposit to be used to offset

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<sup>110</sup> Part VIII, sections 403(A)(5)(a)(ii)-(iii).

<sup>111</sup> Part VIII, section 403(A)(5)(b).

<sup>112</sup> Part VIII, section 406(A)(1)(b).

<sup>113</sup> Part VIII, section 408(A)(1)(b).

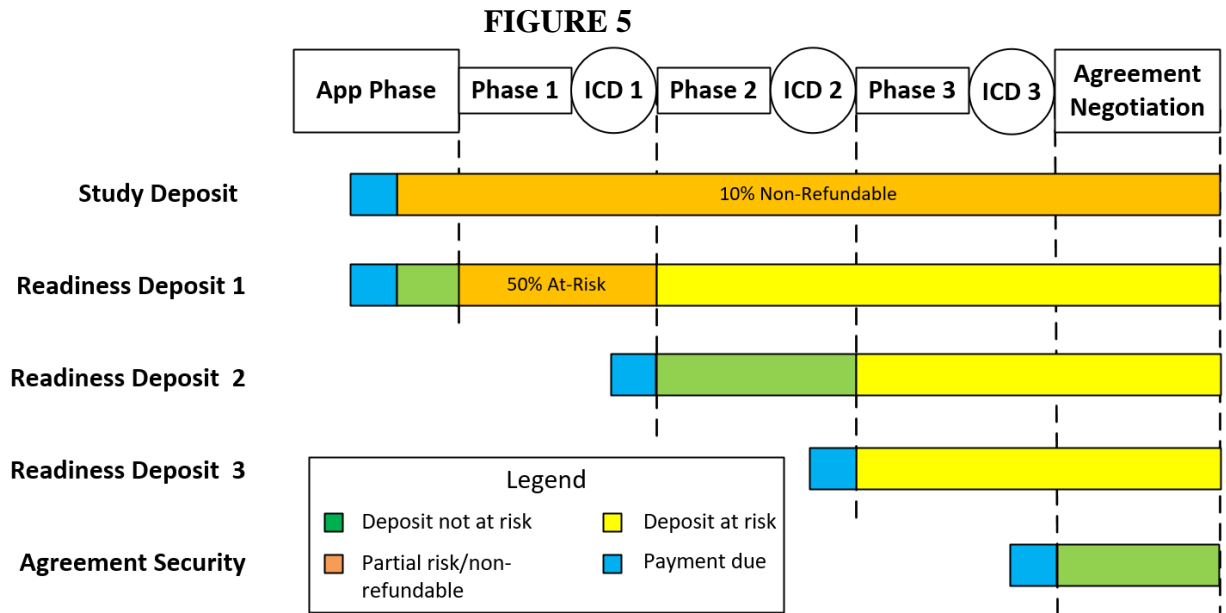
the costs of any underfunded Network Upgrades resulting from such withdrawal or termination, and are similar to the refund provisions described in paragraph 24 above.

51. A Project Developer or Eligible Customer will have the right to withdraw without forfeiting its Readiness Deposits at Decision Points II and III if the relevant System Impact Study reveals certain cost increases over the cost estimates in the prior System Impact Study.<sup>114</sup> This offers a reasonable level of protection against unexpected cost increases, while at the same time preserving the basic nature of the at-risk Readiness Deposits.
52. Figure 5 below illustrates the at-risk components of the Readiness Deposits, as well as refundable portions of the Study Deposit. The use of these at-risk Readiness Deposits are an integral part of the Part VII and Part VIII Tariff procedures, and are based on those adopted by MISO and SPP.<sup>115</sup> These phased Readiness Deposits, along with the ability of Project Developer or Eligible Customer to withdraw at Decision Points I, II and III, will allow projects that are ready to move forward to do so, while at the same time providing less than ready projects with financial requirements that incent them not to enter a Cycle or to withdraw from the Cycle at an earlier date.

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<sup>114</sup> Part VIII, sections 408(B)(3)(b)(ii) and 410(B)(5)(d).

<sup>115</sup> See MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff, Attachment X, sections 3.3.1, 7.3.1.4.1 and 7.3.2.4, and SPP Open Access Transmission Tariff, Attachment V, sections 8.2, 8.5.1 and 8.5.2.



#### D. Elimination of Suspension

53. Another key element of the New Rules is the elimination of suspension. Under PJM’s currently effective *pro forma* Interconnection Construction Service Agreement (“ICSA”), a developer can request one or more suspensions of up to three years in total if PJM determines that such suspension would not be deemed a Material Modification, or one year if it determines that such suspension would be deemed a Material Modification.<sup>116</sup> Under the New Rules, PJM proposes to eliminate suspension under the Generator Interconnection Agreement (“GIA”), but will provide a Project Developer a one-time option to extend its milestones (other than any milestone related to Site Control) for a total period of one year regardless of cause. PJM’s concern is that developers have been able to use the current suspension provisions to enter the queue with non-ready projects, and then enter

<sup>116</sup> Tariff, Attachment P, Appendix 2, section 3.4.1.

suspension while they determine whether to move forward with their projects. PJM has balanced the elimination of the suspension option with the one-time “free-pass” in order to preserve flexibility for Project Developers, and PJM is hopeful that this option will help to reduce the number of requests filed with the Commission for waiver of Tariff deadlines. The one-time extension option in lieu of suspension is a critical element of the negotiated stakeholder solution package. PJM may also reasonably extend any such milestone dates, in the event of delays that the Project Developer did not cause and could not have remedied through the exercise of due diligence,<sup>117</sup> which protects Project Developers who experience delays for reasons beyond their control.

**E. Final Agreements, Cost Allocation, and Provision of Security**

54. The relevant parties begin the process of negotiating the final agreements during Phase III or after being accelerated (where additional studies are not required). The Phase III System Impact Study will provide final cost estimates for the Network Upgrades and other facilities necessary to interconnect to the underlying project. While a Project Developer or Eligible Customer that is ready to move forward may receive a refund of its Readiness Deposits (once the interconnection-related service agreement(s) have been executed and all Decision Point III Site Control requirements have been met) and a refund of the unspent amounts of its Study Deposit, it must provide Security for its project (based upon the Network Upgrades costs allocated pursuant to the Phase III System Impact Study Results). This Security serves two purposes—first, to protect the Transmission Owner in the event

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<sup>117</sup> See Part IX, Subpart B (Form of GIA), section 6.4.

a Project Developer or Eligible Customer fails to pay amounts due. Second, it will help ensure that there are sufficient funds for the necessary Network Upgrades to get constructed, even if the Project Developer or Eligible Customer elects not to move forward with its project after executing the interconnection-related service agreement(s). In such event, the Security can be used to fund the withdrawing Project Developer's or Eligible Customer's cost responsibility for the upgrades it has previously committed to fund. This will protect other Project Developers or Eligible Customers in a Cycle, including Project Developers or Eligible Customers who are jointly responsible for funding a particular upgrade subject to a Network Upgrade Cost Responsibility Agreement, from having to pay costs of underfunded upgrades if a Project Developer or Eligible Customer withdraws.

55. The Final Agreement Negotiation Phase commences the first Business Day immediately following the end of Phase III, to run concurrently with Decision Point III, and with PJM to use Reasonable Efforts to complete this phase within 60 days of its start.<sup>118</sup> PJM is to provide the parties with a draft agreement; parties then have 20 Business Days to provide comments to PJM, with PJM to respond within 10 Business Days.<sup>119</sup> PJM is to provide the final interconnection-related service agreement to the parties in electronic form within 5 Business Days following the end of negotiations within the Final Agreement Negotiation Phase; parties then have the option of executing the agreement, requesting dispute resolution, or

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<sup>118</sup> Part VIII, section 411(A).

<sup>119</sup> Part VIII, sections 411(B)(1)-(2). A party can request dispute resolution or that the agreement be filed on an unexecuted basis if it believes the negotiations are at an impasse. *Id.* section 411(B)(3).

requesting that the agreement be filed with the Commission on an unexecuted basis.<sup>120</sup>

56. The Final Agreement Negotiation Phase allows for the negotiation of the relevant interconnection-related service agreement(s). Project Developers will enter into a GIA, which functions much like the ISA that is Attachment O of PJM's current Tariff. One primary difference is that the GIA now includes provisions from the existing ICSA. PJM has made this change to facilitate the issuance of a construction agreement when required in connection with a GIA and to better link what are now two separate agreements. It will also streamline the process of entering in an ICSA, and can also reduce the number of filings with the Commission. For example, under the current structure, PJM may have to submit two filings if the ISA and ICSA both contain nonconforming provisions, but were executed at different times.
57. Instead of entering into a GIA, a Project Developer that seeks to physically interconnect its Generating Facility at a local distribution or sub-transmission facility will enter into a Wholesale Market Participant Agreement ("WMPA"). While PJM has been using wholesale market participant agreements for years, there was no form of agreement under the Tariff, and adding one will reduce the administrative burden on PJM to file such agreements, and the corresponding burden on the Commission to review such filings. PJM has also retained a stand-alone form of ICSA as Part IX, Subpart J, which will be used when: (1) an Eligible Customer has requested Long-Term Firm Point-To-Point Transmission Service or

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<sup>120</sup> Part VIII, section 411(B)(4).



Network Integration Transmission Service; (2) an Affected System Customer requires Network Upgrades on the PJM System; or (3) a Project Developer requires Network Upgrades to the system of a Transmission Owner with which its Generation Facility or Merchant Transmission Facility does not directly interconnect, and the Transmission Owner is not a party to the underlying GIA.

58. In addition, PJM has also developed the Network Upgrade Cost Responsibility Agreement (“NUCRA”) (Part IX, Subpart H). This agreement will be used in addition to a GIA when there are Common Use Upgrades—Network Upgrades for which multiple Project Developers have cost responsibility. This agreement is intended to securitize the interests of Project Developers that are responsible for the costs of Common Use Upgrades, and ensure that there are sufficient funds for the construction of a Common Use Upgrade if a Project Developer(s) withdraw. The NUCRA will be developed during the Final Agreement Negotiation Phase along with the GIA. A GIA might identify multiple Network Upgrades, some of which will be Common Use Upgrades that are subject to NUCRAs as well as Network Upgrades whose costs are allocated to only one Project Developer, and are not subject to a separate NUCRA.
59. PJM is also proposing three additional agreements. PJM has updated and renamed its Interim Interconnection Service Agreement as the Engineering and Procurement Agreement (Part IX, Subpart D), and clarified it is to be used for long-term engineering and procurement activities, but not for actual construction activities. Part IX includes a form of Cost Responsibility Agreement (“CRA”) as Subpart F and a form of Necessary Study Agreement (“NSA”) as Subpart G. The CRA is to

be used when a Project Developer with an existing Generating Facility that is not a party to an interconnection agreement between PJM and the relevant Transmission Owner wishes to enter into a three-party GIA, and provides the terms, conditions, Study Deposit, and cost responsibility for PJM to perform modeling, studies, or analysis to determine whether the Project Developer may enter into a GIA with PJM and the Transmission Owner. The NSA is to be used when a Project Developer that has entered into a GIA plans to undertake modifications pursuant to that GIA to its Generating Facility or Merchant Transmission Facility, and provides the terms and conditions for PJM to undertake a study of the proposed modification. While PJM has entered into CRAs and NSAs in the past, PJM has developed forms of these agreements to be reflected in the Tariff, which will provide standardized agreements, and will reduce the filing burden on PJM and burdens on the Commission to review such filings.

60. Under the cost allocation rules, each Project Developer or Eligible Customer will be obliged to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, with such costs not to be less than zero.<sup>121</sup> All New Service Requests that contribute to the need for a Network Upgrade will receive cost allocation for that upgrade pursuant to each New Service Request's contribution to the reliability

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<sup>121</sup> Part VIII, section 404(A)(5)(a). There are also separate provisions that apply when a New Service Request requires accelerating the construction of Network Upgrades that are included in the Regional Transmission Expansion Plan. *Id.* section 404(A)(5)(b).

violation identified on the Transmission System in accordance with PJM Manuals.<sup>122</sup> There will be no inter-Cycle cost allocation, instead all such costs will be allocated to New Service Requests in that Cycle.<sup>123</sup> A Project Developer or Eligible Customer will be obliged to pay 100 percent of the costs of the Interconnection Facilities required to accommodate its New Service Request.<sup>124</sup>

#### **F. Upgrade Request Procedures**

61. Finally, PJM has developed a separate parallel process for Upgrade Requests, which are currently subject to Tariff Attachment EE. An Upgrade Request is a request submitted by an Upgrade Customer for an evaluation of the feasibility and estimated costs of (a) a Merchant Network Upgrade; or (b) the Customer-Funded Upgrades that would be needed to provide Incremental Auction Revenue Rights specified in a request pursuant to Operating Agreement, Schedule 1, section 7.8, and the parallel provisions of Tariff Attachment K-Appendix, section 7.8.<sup>125</sup>
62. PJM's experience has been that it only receives a small number of these requests, which are usually submitted by merchant transmission interconnection customers or by Upgrade Customers pursuant to current Tariff Attachment EE. With no priority among a group of New Service Requests within a Cycle, an issue arises between Upgrade Request customers and Project Developers and Eligible Customers needing the same upgrade, as to who receives the incremental rights to the upgrade. In addition, the current process, with Upgrade Customers as part of

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<sup>122</sup> Part VIII, section 404(A)(5)(c).

<sup>123</sup> *Id.*

<sup>124</sup> Part VIII, section 404(A)(6).

<sup>125</sup> Part VII, section 300 (definition of Upgrade Request) and Part VIII, section 400 (definition of Upgrade Request).

the current New Services Queue, introduces cost uncertainty, as it may be unclear if the Upgrade Request project is moving forward and who will build the upgrade. PJM will be able to use this separate process in the New Rules because the analyses required for these types of requests do not overlap the analyses that will be required to study the Project Developer's and Eligible Customer's New Service Requests under the New Rules, and will allow Upgrade Requests to be evaluated without affecting projects in the relevant Cycle. Project Developers and Eligible Customers who are responsible for Network Upgrades to support their requested service in the Cycle process can still request incremental rights for those Network Upgrades by submitting an Upgrade Application and Studies Agreement. In addition, the Upgrade Requests can now be evaluated and processed more quickly compared to being a part of the new Cycle process.

63. To initiate an Upgrade Request, an Upgrade Customer must submit an Upgrade Application and Studies Agreement, a form of which is located in Part IX, Subpart K. Upgrades Requests are processed serially, in the order in which an Upgrade Request is received.<sup>126</sup> PJM shall use Reasonable Efforts to process an Upgrade Request within fifteen months of receiving a valid Upgrade Request, with the Upgrade Customer to enter into an Upgrade Construction Service Agreement ("Upgrade CSA") upon completion of this process.<sup>127</sup> PJM will conduct a deficiency review after receiving the completed Application, with PJM to use Reasonable Efforts to inform the Upgrade Customer of any deficiencies within 15

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<sup>126</sup> Part VII, section 337(B)(1)(a) and Part VIII, section 435(B)(1)(a).

<sup>127</sup> Part VII, section 337(B)(1)(b) and Part VIII, section 435(B)(1)(b).

Business Days after receipt of the completed Application, with the Upgrade Customer to have 10 Business Days to respond.<sup>128</sup> PJM will then exercise Reasonable Efforts to review the response within 15 Business Days, and will either validate or reject the Upgrade Request.<sup>129</sup>

64. An Upgrade Customer needs to pay a Study Deposit of \$150,000 for its System Impact Study as part of its Upgrade Request.<sup>130</sup> Similar to the procedures for New Service Requests, 10 percent of this amount is non-refundable, and the Upgrade Customer must pay the actual study costs, even if these exceed the Study Deposit.<sup>131</sup> If there are any amounts left over after the System Impact Study is performed, such amounts can be applied to the Facilities Study.<sup>132</sup> If the Upgrade Customer decides to remain in the Upgrade Request process, or if the Upgrade Customer withdraws its Upgrade Request, the remaining amounts, less actual costs, will be returned upon completion of the required studies.<sup>133</sup> If, after receiving the System Impact Study report, the Upgrade Customer decides to remain in the Upgrade Request process, it must submit a Readiness Deposit within 30 days of when PJM provides the System Impact Study report equal to 20 percent of the cost of the Network Upgrades identified in the System Impact Study.<sup>134</sup>

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<sup>128</sup> Part VII, section 337(D) and Part VIII, section 435(D).

<sup>129</sup> Part VII, section 337(D) and Part VIII, section 435(D).

<sup>130</sup> Part VII, section 337(B)(2)(a) and Part VIII, section 435(B)(2)(a).

<sup>131</sup> Part VII, section 337(B)(2)(a) and Part VIII, section 435(B)(2)(a).

<sup>132</sup> Part VII, section 337(B)(2)(a) and Part VIII, section 435(B)(2)(a).

<sup>133</sup> Part VII, section 337(B)(2)(a) and Part VIII, section 435(B)(2)(a).

<sup>134</sup> Part VII, section 337(B)(2)(b) and Part VIII, section 435(B)(2)(b).

65. If the Upgrade Request is withdrawn or terminated after the Readiness Deposit has been provided, the Readiness Deposit refund amount will be determined by the point at which the Upgrade Request was withdrawn or terminated, subject to reduction by the need for any additional subsequent restudies as a result of the withdrawal or termination.<sup>135</sup> If the project proceeds to a final Upgrade CSA, the Readiness Deposit will be refunded upon Upgrade Customer fully executing such agreement and providing Security.<sup>136</sup>
66. PJM will perform both a System Impact Study and Facilities Study, if necessary, in response to an Upgrade Request. The System Impact Study is intended to identify the system constraints relating to the Upgrade Request included therein and any required Network Upgrades or Contingent Facilities.<sup>137</sup> The Facilities Study will provide the final details regarding the type, scope, and construction schedule of Network Upgrades and any other facilities that may be required to accommodate the Upgrade Request, and provide the Upgrade Customer with a final estimate of its cost responsibility for the Upgrade Request.<sup>138</sup>
67. Upon completion of the Facilities Study, PJM will tender a draft Upgrade CSA,<sup>139</sup> and the parties will enter the Final Agreement Negotiation Phase. PJM is to use Reasonable Efforts to complete this phase within 60 days of its start.<sup>140</sup> PJM is to provide the parties with a draft agreement; parties then have 20 Business Days to

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<sup>135</sup> Part VII, section 337(B)(2)(b)(i) and Part VIII, section 435(B)(2)(b)(i).

<sup>136</sup> Part VII, section 337(B)(2)(b)(i) and Part VIII, section 435(B)(2)(b)(i).

<sup>137</sup> Part VII, section 337(E) and Part VIII, section 435(E).

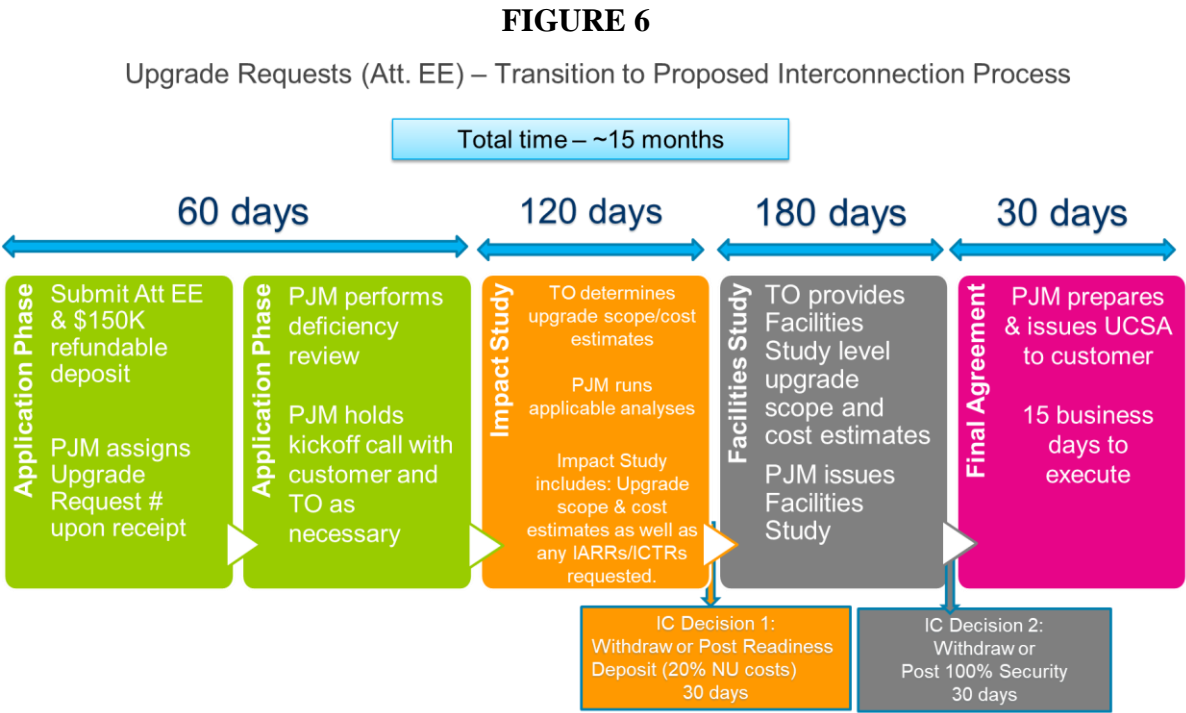
<sup>138</sup> Part VII, section 337(F) and Part VIII, section 435(F).

<sup>139</sup> Part VII, section 337(F) and Part VIII, section 435(F).

<sup>140</sup> Part VII, section 337(G)(1) and Part VIII, section 435(G)(1).

provide comments to PJM, with PJM to respond within 10 Business Days.<sup>141</sup> PJM is to provide the final Upgrade CSA to the parties in electronic form within 5 Business Days following the end of negotiations within the Final Agreement Negotiation Phase. Parties then have option of executing the agreement, requesting dispute resolution, or requesting that the agreement be filed with the Commission on an unexecuted basis.<sup>142</sup> The Upgrade CSA provides the general terms and conditions for construction of the Customer-Funded Upgrade to accommodate an Upgrade Request. A form of this agreement appears in Part IX, Subpart E.

68. PJM anticipates that it will take approximately fifteen months to process Upgrade Requests, starting from the time the initial application is submitted until the time the final Upgrade CSA is executed. Figure 6 below shows the expected timeline.



<sup>141</sup> Part VII, section 337(G)(2)(b) and Part VIII, section 435(G)(2)(b).

<sup>142</sup> Part VII, section 337(G)(2)(d) and Part VIII, section 435(G)(2)(d).

69. With respect to cost allocation, each Upgrade Customer is obliged to pay for 100 percent of the costs of the minimum amount of Network Upgrades necessary to accommodate its Upgrade Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such Upgrade Request.<sup>143</sup> This determines net of benefits resulting from the construction of the upgrades.<sup>144</sup>
70. This completes my affidavit.

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<sup>143</sup> Part VII, section 337(B)(8) and Part VIII, section 435(B)(8).

<sup>144</sup> Part VII, section 337(B)(8) and Part VIII, section 435(B)(8).



**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

PJM Interconnection, L.L.C.

)

Docket No. ER22-\_\_\_\_\_

**VERIFICATION**

Jason Shoemaker deposes and states that he is the Jason R. Shoemaker referred to in the foregoing "Affidavit of Jason Shoemaker on Behalf of PJM Interconnection, L.L.C.," that he has read the same and is familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of his knowledge, information, and belief.


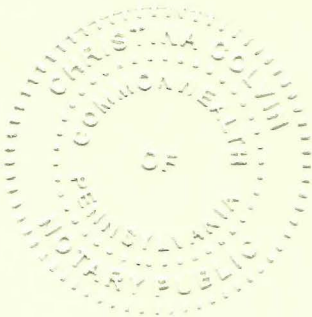


Jason R. Shoemaker

2022

Subscribed and sworn to before me, the undersigned notary public, this 10<sup>th</sup> day of June,

Commonwealth of Pennsylvania - Notary Seal Christina Colvin, Notary Public Chester County My commission expires May 23, 2024 Commission number 1257159 Member, Pennsylvania Association of Notaries
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Notary Public

# Attachment E

Affidavit of  
Mark Sims

On Behalf of  
PJM Interconnection, L.L.C.

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

PJM Interconnection, L.L.C.                      )                      Docket No. ER22-\_\_\_\_\_

**AFFIDAVIT OF MARK SIMS ON  
BEHALF OF PJM INTERCONNECTION, L.L.C.**

1. My name is Mark Sims. I am the Manager of Interconnection Analysis at PJM Interconnection, L.L.C. (“PJM”) and have been in that position since April 2021. My duties and responsibilities include overseeing the analytical tasks in support of new interconnections within the PJM footprint. This responsibility includes studies of new generation, merchant transmission and long term firm transmission service.
2. I joined PJM in 1999. Prior to becoming the Manager of Interconnection Analysis, I held various other positions in PJM Planning, including the Manager of Infrastructure Coordination and Manager of Transmission Planning. I received a Bachelor of Science in Electrical Engineering in May of 1999 and a Masters of Engineering in Systems Engineering in May of 2003, both from The Pennsylvania State University.
3. My affidavit supports PJM’s filing to comprehensively reform its interconnection procedures by describing the study processes under both the new interconnection procedures and the Transition Period Rules. In addition to my affidavit, PJM’s filing is being supported by the affidavits of Mr. Jason P. Connell and Mr. Jason R. Shoemaker.

## **I. STUDY PROCESS UNDER NEW INTERCONNECTION PROCEDURES**

4. PJM has revised its interconnection study process to align with the proposed three-phase framework of the new interconnection procedures. Importantly, the substance of the study process will remain largely the same. The revised study process is intended to better align Project Developers' level of risk with the financial commitments necessary to ensure commitment to timely completion of the interconnection process.
5. PJM proposes to eliminate the Feasibility Study currently required in Tariff, Part IV. In its place, PJM will perform three System Impact Studies, aligning with each of the three phases of the new interconnection framework. The Phase I, Phase II, and Phase III System Impact Studies are regional analyses of the effect of adding to the Transmission System the new facilities and services proposed by valid New Service Requests, and an evaluation of their impact on deliverability to the aggregate of PJM Network Load. These studies will identify the system constraints, with specificity by transmission element or flowgate, relating to New Service Requests and any resulting Interconnection Facilities, Network Upgrades, and/or Contingent Facilities required to ensure system reliability in accommodating such New Service Requests. These studies will also provide estimates of Project Developer cost responsibility and construction lead times for new facilities required to interconnect the project and system upgrades.
6. Importantly, each of the System Impact Studies will be performed on all New Service Requests in a particular Cycle together (with some necessary breakdown by region/electrical location). The Phase III System Impact Study will involve a

single retool of previously performed analyses that encompasses all New Service Requests in the Cycle, rather than the current practice of performing multiple Facilities Studies for individual projects, which often results in cascading effects for subsequent projects in the queue. Moving from the current individual project-based study approach to a system-wide Cycle-based approach will help to expedite the interconnection process and reduce the need for time-consuming and costly restudies. Transitioning to a Cycle-wide study process is also consistent with similar study approaches approved by the Commission for other regional transmission organizations and independent system operators, such as the Southwest Power Pool, Inc. (“SPP”) and the Midcontinent Independent System Operator, Inc. (“MISO”).

7. During Phase I, the System Impact Study analysis will include summer peak load flow and light load seasonal load flow, equivalent to a Feasibility Study analysis under the current interconnection process. The Phase I System Impact Study will also include estimates of the scope and cost of the identified necessary Interconnection Facilities and Network Upgrades. Consistent with the analytical approach, the results of the Phase I System Impact Study are anticipated to be provided to Project Developers on a Cycle-wide basis, rather than on an individual-project basis, and will be presented in a standard format such as a spreadsheet. These results will also be posted on the PJM website.
8. The Phase I System Impact Study is similar to the current Feasibility Study process—both studies identify high-level system reliability issues caused by a proposed project, as well as any corresponding issues identified by the relevant

Transmission Owner, with the aim of identifying those items that are expected to generate the greatest cost to the Project Developer. Providing this information prior to the Phase I Decision Point will enable Project Developers to more readily project their costs and better inform their decision as to proceed to Phase II.

9. The Phase II System Impact Study includes the bulk of analytical simulations performed by PJM in the current interconnection study process. PJM will perform a Cycle-wide retool of its initial load flow results study from Phase I, as well as an assessment of project-related short circuit duty issues, and a detailed assessment of project-related system stability issues. PJM will also perform an interconnection Facilities Study jointly with each impacted Transmission Owner. Finally, the Phase II System Impact Study will include an analysis to determine cost allocation responsibility for required facilities and upgrades. Together, the analyses included in the Phase II System Impact Study will provide Project Developers with a substantially complete picture of the cost to interconnect and thereby provide the best available benchmark for Project Developers to evaluate whether to proceed to Phase III.
10. PJM will also conduct its Affected Systems analysis as part of the Phase II System Impact Study, which is essentially the same point in the process as the Affected Systems analysis performed during the current interconnection process. If a New Service Request implicates an Affected System, PJM will notify the Project Developer of its obligation to enter into an Affected System Agreement.
11. The Phase III System Impact Study includes a final retool of all analyses performed in the Phase II System Impact Study, as well as a final Affected System Study, if

applicable. Target back-feed dates for Interconnection Facilities are established. The Transmission Owner will also perform a Facilities Study jointly with PJM to identify final system upgrade issues associated with the projects still in the Cycle, and final cost allocation analyses are provided. The Phase III System Impact Study assumes that all projects remaining in the Cycle are serious and committed, as Project Developers are fully aware of the maximum financial exposure associated with required Network Upgrades and Interconnection Facilities.

### **Additional Tools**

12. Project Developers interested in obtaining a high-level view of potential project system impacts before entering the interconnection queue will be able to take advantage of PJM's forthcoming prescreening portal. Similar to the planning tool MISO provides for interested parties, the prescreening portal will give interested parties a preliminary view of project system impacts on an individual basis based on inputs provided by the users. However, it should be noted that these preliminary impacts are calculated on an individual project basis, whereas actual impacts and corresponding costs in the interconnection process will be calculated based on the study of all New Service Requests in a particular Cycle. The portal will be available on the PJM website in early 2023, prior to implementation of the new interconnection process.

## **II. STUDY PROCESS UNDER TRANSITION PERIOD RULES**

13. The study process under the Transition Period Rules largely mirrors the study process developed for the new interconnection procedures, with one critical difference: the Transition Period Rules include a "fast lane" mechanism to expedite

the study process for those projects that are currently in the interconnection queue that require minimal or no transmission Network Upgrades in order to interconnect. PJM developed the fast lane methodology to prioritize projects that have little interaction with other projects, require minimal restudy to interconnect, and to expedite the review process during the transition period.

14. All projects in PJM's current interconnection queue associated with queue windows AE1 through AG1 (2018-2020) that do not have an executed service agreement in place and have not been tendered a service agreement for execution are eligible for inclusion in the fast lane process. Eligible projects must satisfy PJM's prerequisite Readiness Deposit and Site Control requirements and then will be analyzed as a group under a standard series of simulations to determine their shared Network Upgrade impacts. Eligible projects that are not the first to cause a Network Upgrade, or that do not have potential cost responsibility for Network Upgrades for load flow and short circuit violations greater than \$5 million, will enter the fast lane.
15. Projects in the fast lane proceed to Phase III of the transition study process and will be studied in accordance with the Facilities Study analysis and cost allocation requirements of the current interconnection rules. Upon completion of the Phase III analysis, these projects will also be issued service agreements in accordance with the currently effective Tariff requirements.
16. Those projects in PJM's current interconnection queue associated with queue windows AE1 through AG1 (2018-2020) that do not have an executed service agreement in place and have not been tendered a service agreement for execution



but are not eligible for the fast lane process (because they are the first to cause a Network Upgrade, or have potential cost responsibility for Network Upgrades for load flow, and short circuit violations that are greater than \$5 million, will be “re-queued” and processed in Transition Cycle #1 using a Cycle-based approach. These projects will proceed through a three-phase study process in the same Cycle-based manner as described above for the new interconnection process. Projects in queues AG2 and AH1 will be similarly processed in Transition Cycle #2.

17. PJM will maintain all New Service Requests in the current interconnection queue that have not been studied (i.e., New Service Requests submitted in queue windows AH2 and beyond) and will ask those Project Developers to submit updates to their applications and supplemental information required by the new interconnection rules. Those New Service Requests will then be processed under the new interconnection rules.
18. This completes my affidavit.

**UNITED STATES OF AMERICA  
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PJM Interconnection, L.L.C.                    )        Docket No. ER22-\_\_\_\_\_

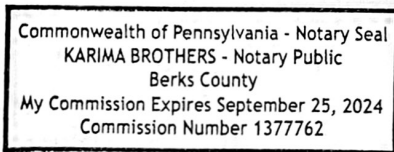
**VERIFICATION**

Mark Sims deposes and states that he is the Mark Sims referred to in the foregoing "Affidavit of Mark Sims on Behalf of PJM Interconnection, L.L.C.," that he has read the same and is familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of his knowledge, information, and belief.

Mark Sims

Mark Sims

Subscribed and sworn to before me, the undersigned notary public, this 6<sup>th</sup> day of June 2022.



K. Brothers  
Notary Public