Tariff, Part V, Subpart A

## FORM RELIABILITY MUST RUN SERVICE AGREEMENT

Service Agreement No. [ ]

# FORM RELIABILITY MUST RUN SERVICE AGREEMENT By and Among PJM INTERCONNECTION, L.L.C. And [Name of Generation Owner]

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## RELIABILITY MUST RUN SERVICE AGREEMENT By and Among PJM Interconnection, L.L.C. And [Name of Generation Owner]

This Reliability Must Run ("RMR") Service Agreement (hereafter, the "Agreement"), dated [<u>Date of Execution</u>], is entered into, by and between PJM Interconnection, L.L.C. ("PJM") and [Name of Generation Owner] ("Generation Owner") (hereinafter referred to individually as "Party" or collectively as the "Parties"), for purposes of facilitating the continued operation and provision of RMR Service from [<u>Facility Name</u>, by Unit(s) if Applicable] ("RMR Resource"), as contemplated by Part V of the PJM Open Access Transmission Tariff ("Tariff").

#### **RECITALS**

- A. PJM is the Federal Energy Regulatory Commission ("FERC")-designated Regional Transmission Organization for the PJM Region, and the North American Electric Reliability Corporation ("NERC")-registered Reliability Coordinator, Balancing Authority, Transmission Operator, Planning Authority/Planning Coordinator, and Resource Planner, among other things, for the PJM Region.
- B. Generation Owner is the owner of the RMR Resource, and a PJM Member that has executed the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"), having agreed to and assumed the rights, commitments, and obligations therein.
- C. Generation Owner has submitted requisite notice of Deactivation for the RMR Resource, and PJM has correspondingly provided to Generation Owner notice that Deactivation of the RMR Resource would adversely affect the reliability of the PJM Transmission System ("Notice of Reliability Impact"), pursuant to Tariff, Part V.
- D. Generation Owner is able and willing to continue operating the RMR Resource beyond its specified Deactivation Date, and provide RMR Service in accordance with the terms of this Agreement.

NOW THEREFORE, in consideration of the mutual covenants herein contained, together with other good and valuable consideration, the receipt and sufficiency of which is hereby mutually acknowledged, the Parties agree as follows:

## SECTION 1 DEFINITIONS

#### 1.0 Definitions

Except as otherwise defined in this Agreement, capitalized terms used within this Agreement shall have the same meaning established under the PJM Tariff, Operating Agreement, and the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region ("RAA").

**"eDART"** shall mean the Dispatcher Application and Reporting Tool that permits Generation Owners to submit to PJM outage and reduction requests, updates to reactive capability curves (D-curves), Automatic Voltage Regulator status, Power System Stabilizer status, Governor status, MVAR tests, Supplementary Status Reports (SSRs), Instantaneous Reserve Checks (IRCs), Minimum Generation Reports, Gen Checkout, and permits Generation Owners to receive and respond to required PJM data requests.

"Effective Date" shall have the meaning set forth in Section 2.0 of this Agreement.

"Catastrophic Force Majeure" shall mean an event or circumstance which physically prevents Generation Owner from being able to provide RMR Service from the RMR Resource for the remainder of the Term, which event or circumstance was not anticipated as of the date of execution of this Agreement, which is not within the reasonable control of, or the result of the negligence by, Generation Owner, and which, by the exercise of due diligence, Generation Owner is unable to overcome or avoid or cause to be avoided.

"Project Investment" shall mean an investment made by Generation Owner to enable continuing operations for the period of time during which PJM has identified a reliability need for the RMR Resource. A Project Investment may include repairs, replacements, actions required for NERC or other regulatory compliance, and maintenance of generator facilities and equipment and associated parts, supplies, labor (including overtime if consistent with Good Utility Practice), and overheads.

**"RMR Resource"** shall mean the generation resource that provides RMR Service pursuant to this Agreement and Part V of the PJM Tariff. The term RMR Resource may refer to and include specific units within a generation facility.

**"RMR Service"** shall mean the service provided by the Generation Owner from the RMR Resource, in accordance with the terms of this Agreement.

"Term" shall have the meaning set forth in Section 2.1.

## SECTION 2 EFFECTIVE DATE AND TERM

#### 2.0 Effective Date

This Agreement is contingent on submission by PJM to the Commission and Commission acceptance, and shall become effective on [Enter Date], or such other date specified by the Commission.

#### **2.1** Term

The Term of this Agreement shall commence on the Effective Date, and end on [Enter the Anticipated In-Service Date of Transmission Upgrades], provided however that this Agreement may be subject to earlier termination, or extension beyond the Term, in accordance with this Section 2. To the extent that PJM has administratively included the RMR Resource in a Reliability Pricing Model Auction under Tariff, Attachment DD, Section 5.3(b), the Term shall end on the later of [Enter the Anticipated In-Service Date of Transmission Upgrades] or the conclusion of the Delivery Year in which the RMR Resource is administratively included in a Reliability Pricing Model Auction.

#### 2.2 Termination by Generation Owner

Generation Owner may terminate this Agreement, with respect to the entire RMR Resource or specific units therein, upon occurrence of the following circumstances:

- A. Catastrophic Force Majeure; or
- B. PJM does not approve Project Investment, properly submitted in accordance with the applicable compensation mechanism under Section 4 of this Agreement, necessary for the Generation Owner to continue operation of the RMR Resource to provide RMR Service for the Term of this Agreement;

Upon the occurrence of circumstances A andor B, Generation Owner shall promptly provide written notice to PJM and the Market Monitoring Unit as soon as reasonably practical, describing in detail the applicable circumstances, and stating Generation Owner's intention to terminate the Agreement.

Under the occurrence of circumstances A or B, termination shall be effective on the sixty-first day after the RMR Resource becomes inoperable by virtue of the Catastrophic Force Majeure, or by virtue of PJM not approving Project Investment necessary for the Generation Owner to continue operation of the RMR Resource to provide RMR Service for the Term of this Agreement.

#### 2.3 Termination by PJM

Upon determining that the RMR Resource is no longer necessary, PJM shall promptly provide Generation Owner and the Market Monitoring Unit with written notice, describing the basis for PJM's conclusion. Termination shall be effective upon the sixty-first day after receipt of the written notice by Generation Owner, or alternatively, at the conclusion of the applicable Delivery Year in the event that the RMR Resource is administratively included in a Reliability Pricing Model Auction pursuant to Tariff, Attachment DD, section 5.3(b) and not subsequently replaced through the submission of a PJM bid or offer for such applicable Delivery Year.

#### 2.4 Effect of Termination

Termination of this Agreement shall not relieve Generation Owner of its obligations as a PJM Member under the Operating Agreement or under the PJM Tariff, PJM's ability to pursue remedies against Generation Owner under the Operating Agreement or the PJM Tariff, or PJM's ability to submit an application to the Department of Energy under Section 202(c) of the Federal Power Act. Termination of this Agreement shall not relieve either Party of any obligation or remedy arising during the period that the Agreement was in effect.

#### 2.5 Extension

If PJM determines that the RMR Resource is needed beyond the Term of this Agreement, PJM shall submit a written request to Generation Owner, proposing to extend the Term of this Agreement to a specified date in the future. Within fourteen (14) days after receipt of PJM's written request, and no less than three (3) days prior to the conclusion of the Term, Generation Owner shall provide written notice to PJM that it will either accept the extended Term, or that it cannot accept the extended Term because the Generation Owner is not capable of continuing to provide RMR Service from the RMR Resource for the extended Term.

Generation Owner shall provide to PJM, as part of its written notification, a status update regarding the ability or inability to extend operations of the RMR Resource for the specified extended Term, including any additional required Project Investment needed, or legal, economic, physical, or other impediments to continued operations for the extended Term. Generation Owner's acceptance of an extended Term pursuant to this Section 2.5 may be subject to PJM's approval of necessary Project Investment, and any corresponding changes to compensation pursuant to Section 4 of this Agreement.

<u>During the Term of this Agreement</u>, Generator Owner shall not enter into any contracts, agreements, or settlements, or take any other action that would prevent extension of the Term pursuant to this Section 2.5.

## SECTION 3 OPERATING REQUIREMENTS

#### 3.0 Use of Market Resources Prior to RMR Resource

Prior to scheduling and dispatching the RMR Resource in accordance with the terms of this Section 3, PJM shall first examine the use of available economic generation resources to address the applicable reliability concern. PJM shall not be required to call an emergency in order to schedule or dispatch the RMR Resource in accordance with the terms of this Section 3.

#### 3.1 Scheduling and Dispatch of RMR Resource

PJM may schedule and dispatch the RMR Resource, or specific units therein, when, in PJM's sole determination and engineering judgment, such scheduling and dispatch is necessary to address any of the following circumstances:

- A. Transmission facilities within the PJM Region are at risk of not being operated within thermal, voltage, and stability limits established under PJM Manual 3;
- B. A transmission reliability need caused by a system restoration, effectuated in accordance with PJM Manual 36;
- C. A projected or actual capacity emergency, as described in PJM Manual 13, during which PJM determines that the resources scheduled and available for a specific Operating Day may not be sufficient to maintain appropriate reserve levels for the PJM Region; or
- D. The RMR Resource needs to perform any required operational testing.

Schedule and dispatch of the RMR Resource shall be subject to any operating limitations identified by the Generation Owner under Section 3.2 of this Agreement.

Generation Owner shall operate the RMR Resource upon receipt of, and consistent with, any scheduling or dispatch instruction issued by PJM pursuant to this Section 3, and in accordance with the limitations described in Section 3.3 of this Agreement.

#### 3.2 Offering RMR Resource Into PJM Markets

When not scheduled or dispatched by PJM in accordance with Section 3.1, Generation Owner shall offer the RMR Resource into the Day-ahead Energy Market and the Real-time Energy Market via Markets Gateway, using the status "Unavailable" and a corresponding eDART ticket indicating that the RMR Resource is available to run if requested by PJM pursuant to this Agreement. PJM shall utilize the applicable cost-based schedule when

dispatching the RMR Resource. Generation Owner shall enter and update in Markets Gateway any applicable unit parameters or operational limitations in order to accurately reflect the operating condition of the RMR Resource. Generation Owner shall submit an eDART ticket for any outage, planned maintenance work, or unplanned maintenance work, and use best efforts to submit any planned outage as far in advance as practicable.

During the Term of this Agreement, Generation Owner shall not offer the RMR Resource into Reliability Pricing Model Auctions, and shall not be subject to penalties arising under the Reliability Pricing Model Auctions for operation of the RMR Resource.

#### 3.3 Operational Obligations and Commitments

PJM shall not issue a scheduling or dispatch instruction to Generation Owner during periods when the RMR Resource is operationally unavailable due to an outage or maintenance work, properly submitted in accordance with Section 3.2 of this Agreement.

Generation Owner shall not be obligated to cause the RMR Resource to be operated in a manner that will cause Generation Owner to violate any applicable federal, state, or local law or regulation, including but not limited to any applicable environmental, emissions, or permit requirements.

Generation Owner shall undertake best efforts to cost-effectively ensure the availability of fuel, equipment, parts, and/or any other inputs necessary to the production of electric energy, including but not limited to, chemicals and lubricating oils. Generation Owner shall at all times prepare, maintain, and operate the RMR Resource consistent with Good Utility Practice, so that the RMR Resource can be reasonably expected to be able to operate for the entire applicable Delivery YearTerm of this Agreement, notwithstanding the limitations described in this Agreement. Generation Owner shall ensure that the RMR Resource continues to meet the deliverability requirements under RAA, Schedule 10, and maintain sufficient Capacity Interconnection Rights to safely inject the output of the RMR Resource into the Transmission System. Generation Owner shall arrange for and maintain an appropriate level of liability and property insurance with respect to the RMR Resource consistent with Good Utility Practice.

Generation Owner does not guarantee that the RMR Resource will be available for operation upon receipt of a PJM scheduling or dispatch instruction, nor does Generation Owner guarantee that the RMR Resource will operate at its rated capacity.

#### SECTION 4 COMPENSATION

#### 4.0 Generation Owner Election and PJM Payment Obligation

Generation Owner may elect to receive compensation for the provision of RMR Service from the RMR Resource under this Agreement either through the Deactivation Avoidable Cost Credit, or alternatively through a separate cost-of-service rate filing submitted by the Generation Owner to the Commission under Tariff, Section 119 and Federal Power Act section 205. Depending on Generation Owner's election of compensation method, PJM shall compensate Generation Owner consistent with the provisions of the Deactivation Avoidable Cost Credit, or alternatively consistent with the Commission-approved rate filing submitted by the Generation Owner pursuant to Tariff, Section 119 and Federal Power Act section 205.

#### SECTION 5 INVOICING AND BILLING

#### 5.0 Invoicing

Generation Owner shall issue a monthly invoice to PJM, with a copy to the Market Monitoring Unit, for the amounts due under Section 4 of this Agreement no later than the 15th calendar day of the month, following the month in which RMR Service is provided. Upon request, Generation Owner shall also provide to PJM and the Market Monitoring Unit any supporting information applicable to items on the invoice, including but not limited to any Project Investment.

PJM shall credit any and all monthly net revenues (total credits net of total charges) generated from any sales by the RMR Resource of wholesale energy and ancillary services under the PJM Tariff, Operating Agreement, or RAA, identified on the applicable monthly PJM bill, against the charges paid to Generation Owner for RMR Service pursuant to Section 4. Any positive net revenues that exceed the aforementioned charges in a given month shall transfer to the following month's bill, and be available for use as a credit against any future charges under Section 4 of this Agreement for the duration of the Term. At the end of the Term, PJM shall credit any remaining net positive revenues that exceed the total charges under Section 4 of this Agreement to Generation Owner.

#### 5.1 Billing

PJM shall include the charges invoiced by Generation Owner pursuant to Section 5.0 of this Agreement in the PJM monthly billing statement, for the month in which PJM received the invoice from Generation Owner (for example, if the April invoice is received by PJM in May, those charges will become part of the PJM monthly bill for May). If the Generation Owner does not remit the invoice to PJM in accordance with the timeline specified in

Section 5.0, PJM shall include the charges in the PJM monthly billing statement by no later than the month following the month in which the Generation Owner remits the invoice to PJM. PJM shall remit payment to Generation Owner according to the standard financial settlement timeline for such PJM monthly billing statement.

#### SECTION 6 COVENANTS OF THE PARTIES

#### 6.0 Representations of PJM

PJM represents to Generation Owner as follows:

- A. PJM is a validly existing limited liability company with full authority to enter into this Agreement.
- B. PJM has full power and authority to perform all of PJM's obligations, representations, and covenants under this Agreement.
- C. PJM has all regulatory authorizations necessary for it to perform its obligations, representations, and covenants under this Agreement.
- D. The execution, delivery, and performance of this Agreement are within PJM's powers and do not violate any of the terms and conditions of the PJM Tariff, Operating Agreement, or RAA, nor the terms and conditions under any contracts or agreements to which PJM is a party, nor any law applicable to PJM.

#### 6.1 Representations of Generation Owner

Generation Owner represents to PJM as follows:

- A. Generation Owner is duly organized, validly existing and in good standing under the laws of the jurisdiction under which it is organized.
- B. Generation Owner is a PJM Member and signatory to the Operating Agreement, and has met all applicable credit requirements under Tariff, Attachment Q.
- C. Generation Owner has full power and authority to enter into this Agreement, and to perform all of Generation Owner's duties, obligations, representations, and covenants under this Agreement, and to operate, maintain, and administer the RMR Resource, all in accordance with this Agreement, the PJM Manuals, and the PJM Tariff, Operating Agreement, and RAA.
- D. Generation Owner possesses all regulatory authorizations necessary to perform its obligations, representations, and covenants under this Agreement, including a

Commission-approved and legally effective market-based rate tariff under Part 35 of the Commission's regulations.

- E. The execution, delivery, and performance of this Agreement are within the Generation Owner's powers and do not violate any of the terms and conditions in its governing documents, any contracts or settlements to which it is a party, or any law applicable to it.
- F. Generation Owner is not in violation of any laws, ordinances, or governmental rules, regulations or order of any governmental authority or arbitration board affecting the performance of this Agreement.
- G. Generation Owner is not in arrears or default under any debt instrument, loan, promissory note, or other financial agreement or obligation.
- H. Generation Owner is not bankrupt, does not contemplate becoming bankrupt nor, to its knowledge, will become bankrupt.

#### SECTION 7 MISCELLANEOUS PROVISIONS

#### 7.0 PJM Settlements, Inc.

PJM may, in its sole discretion, utilize its subsidiary PJM Settlements, Inc. to perform any of the functions or obligations established pursuant to this Agreement.

#### 7.1 Scheduler or Energy Manager

Generation Owner may utilize a third-party scheduler or energy manager to, on Generation Owner's behalf, perform any of Generation Owner's obligations hereunder, provided that such third-party scheduler or energy manager is identified under Section 8 of this Agreement.

#### 7.2 Preservation of Rights Under the PJM Tariff and Operating Agreement

The Parties mutually acknowledge that this Agreement is being entered into pursuant to Part V of the PJM Tariff and the PJM Operating Agreement, and the rights and obligations set forth therein are fully preserved. Any breach hereunder shall constitute a breach under the PJM Tariff, Operating Agreement, and/or both, with all rights and obligations attended thereto.

#### 7.3 Waiver

The Parties may, by mutual agreement, waive any of the time periods set forth herein that apply to PJM and Generation Owner.

The failure to exercise any remedy or to enforce any right provided in this Agreement or applicable law shall not constitute a waiver of such remedy or right or of any other remedy or right. A Party shall be considered to have waived any remedies or rights only if such waiver is set forth in writing.

#### 7.4 No Third-Party Beneficiaries

Except as is specifically set forth in this Agreement, nothing in this Agreement, whether express or implied, confers any rights or remedies under, or by reason of, this Agreement on any persons other than the Parties and their respective successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligations or liability of any third party, nor give any third person any rights of subrogation or action against a Party.

#### 7.5 Transfer of RMR Resource

Generation Owner may not sell or transfer the RMR Resource to a different entity ("Purchaser") during the Term of this Agreement, unless:

- A. the Commission authorizes such disposition pursuant to Section 203 of the Federal Power Act;
- B. the Generation Owner and the Purchaser of the RMR Resource comply with all requirements under PJM Manual 14D related to generation transfers;
- C. the Purchaser satisfies all applicable credit requirements under Tariff, Attachment Q;
- D. the Purchaser executes the Operating Agreement and becomes a PJM Member;
- E. the Generation Owner assigns this Agreement to the Purchaser, and the Purchaser agrees, in writing, to assume this Agreement as the assignee and to perform all of Generation Owner's obligations under this Agreement; and
- F. PJM provides written authorization for such transfer, which shall not be unreasonably withheld.

#### SECTION 8 NOTICE

#### 8.0 Designated Representatives

For purposes of any notices required to be provided pursuant hereto, notice shall be provided by electronic mail and the designated representatives to receive such notices shall be:

For PJM:

Printed name of signer:

[Enter Name/Address/Email]		
For Generation Owner:		
[Enter Name/Address/Email]		
Either Party may change its respective designated representative by written notice to the other designated representative.		
SECTION 9 SIGNATURES		
IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.		
PJM: PJM Interconnection, L.L.C.		
By:		
Name	Title	Date
Printed name of signer:		
Generation Owner: [Name]		
By:		
Name	Title	Date

#### Appendix A: Resource-Specific Appendix

[Provide Characteristics of RMR Resource]

#### **Appendix B: Special Provisions**

[Provide Any Supplemental Terms and Conditions]