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March 29, 2018

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

**Re: *Duke Energy Carolinas, LLC***  
**Docket No. ER18-\_\_\_-000**  
***PJM Interconnecton, L.L.C.***  
**Docket No. ER18-1229-000**  
**Amended and Restated Dynamic Transfer Agreement among Duke Energy Carolinas, LLC, North Carolina Electric Membership Corporation and PJM Interconnection, L.L.C.**

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act<sup>1</sup> and Part 35 of the regulations<sup>2</sup> of the Federal Energy Regulatory Commission (the "Commission"), Duke Energy Carolinas, LLC ("DEC") and PJM Interconnection, L.L.C. ("PJM") hereby submit for filing an Amended and Restated Dynamic Transfer Agreement (the "Amended Agreement") among DEC, the North Carolina Electric Membership Corporation ("NCEMC") and PJM.

The Amended Agreement is designated as Rate Schedule No. 348 under DEC's Joint Open Access Transmission Tariff and Service Agreement No. 5047 under the PJM Open Access Transmission Tariff ("PJM Tariff"). Capitalized terms used but not defined herein have meaning ascribed to them in the Amended Agreement.

## **I. Background and Description of the Filing**

DEC is an investor-owned utility that provides generation, transmission, and distribution services to wholesale and retail customers in North Carolina and South Carolina. NCEMC is a wholesale power and transmission customer of DEC and through its members owns and operates multiple distribution systems within the DEC Balancing Authority Area.

PJM is the regional transmission organization ("RTO") comprised of interconnected electric transmission systems in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, North Carolina and the District of Columbia. PJM is the transmission provider under, and the administrator of,

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<sup>1</sup> 16 U.S.C. § 824e.

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

the PJM Tariff and controls the day-to-day operations of the bulk power system of the PJM Region.

On August 1, 2016, DEC, NCEMC and PJM entered into a Dynamic Transfer Agreement (the “Current Agreement”) to allow NCEMC to pseudo tie 50 MW of capacity and energy from Catawba Unit 1 to the PJM Balancing Authority Area. The Current Agreement was accepted for filing by the Commission in a letter order issued on September 14, 2016 in Docket No. ER16-2311.

Since the effective date of the Current Agreement, an additional 50 MW (for a total of 100 MW) of Catawba Unit 1 became eligible to offer as a PJM Capacity Performance Resource. As a result, on October 1, 2013 PJM received from NCEMC a request for the firm transmission service for five years commencing June 1, 2017, adding 50 MW of generation from the Catawba Unit 1 (for a total of 100 MW) into the PJM Balancing Authority Area.<sup>3</sup> Upon completion of the applicable studies for additional firm transmission service (Network External Designated), the request for the additional 50 MW transmission service was accepted on May 2, 2014, and PJM and NCEMC entered into a Network Integration Transmission Service Agreement effective May 2, 2014, pursuant to the PJM Open Access Transmission Tariff.<sup>4</sup>

## **II. Description of Amendments to the Dynamic Transfer Agreement**

The Amended Agreement modifies the Current Agreement to reflect the addition of 50 MW of generation from the Catawba Unit 1 (for a total of 100 MW) that is eligible to serve as a Capacity Performance Resource in PJM. A summary of these changes is below:

- Sections 2.1.2-2.1.4 (General Requirements): change reference from 50 MW to 100 MW; and
- Sections 4.4. and 4.5 (Operational and Modeling Requirements): change reference from 50 MW to 100 MW.

## **III. Contents of Filing**

The following documents are included in this filing in addition to the relevant tariff records:

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<sup>3</sup> NCEMC preemptively obtained the transmission service for the additional 50 MWs but Catawba Unit 1 was not selected in the PJM Capacity Market for the full 100 MWs until the 2018/2019 Delivery Year. Since the transmission service commenced June 1, 2017, and NCEMC did not yet have a capacity commitment for the full Catawba Unit 1 100 MWs, PJM reduced the 2<sup>nd</sup> transmission service reservation to zero for the 2017/2018 Delivery Year. Now that NCEMC will be delivering the full 100 MWs, the transmission service is in place.

<sup>4</sup> The Current Agreement predates February 5, 2018, the date the Commission accepted the PJM *pro forma* pseudo tie agreements (*See PJM Interconnection, L.L.C.* 162 FERC ¶ 61,086 (2018)). Moreover, the process leading to the Amended Agreement, the pseudo tie thereunder and the transmission service was submitted to PJM and accepted prior February 5, 2018, and the effective date of the PJM Tariff *pro forma* pseudo tie agreements (*i.e.* November 29, 2017). Thus, the Amended Agreement is filed by PJM as non-conforming under the PJM Tariff.

- This transmittal letter;
- A clean copy of the Amended Agreement; and
- A marked copy of the Amended Agreement.

#### **IV. Requested Effective Date**

DEC and PJM respectfully requests that the Commission accept the Amended Agreement effective as of June 1, 2018, which is more than 61 days from the date of filing. It is not seeking any waivers to permit an earlier effective date.

#### **V. Requirements of 18 C.F.R. Section 35.13**

The Amended Agreement is being submitted under the abbreviated filing requirements because it does not reflect a rate increase. To the extent necessary, DEC and PJM seek waiver of any filing requirements of 18 C.F.R. § 35.13 necessary to allow the Commission to accept this filing.

The agreement of the customer has been obtained. No expenses or costs in connection with these service agreements have been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.

#### **VI. Communications**

All correspondence, communications, pleadings, and other documents related to these proceedings should be addressed to the persons listed below.

Ann L. Warren  
Associate General Counsel  
Duke Energy Corporation  
Tryon Street (DEC 45A)  
Charlotte, NC 28202  
704-382-2108  
[ann.warren@duke-energy.com](mailto:ann.warren@duke-energy.com)

Steven R. Pincus  
Associate General Counsel  
PJM Interconnection, L.L.C. 550 South  
2750 Monroe Boulevard  
Audubon, PA 19403  
610-666-4370  
[steven.pincus@pjm.com](mailto:steven.pincus@pjm.com)

#### **VII. Service of Filing**

This filing will be served on persons listed below which include those persons required to be served in accordance with the Commission's regulations:

Public Service Commission of South Carolina  
Jocelyn Boyd, Chief Clerk and Administrator  
101 Executive Center Drive, Suite 100  
Columbia, SC 29210  
[jocelyn.boyd@psc.sc.gov](mailto:jocelyn.boyd@psc.sc.gov)

South Carolina Office of Regulatory Staff  
Nanette S. Edwards, Chief Counsel and Director of  
Legal Services  
1401 Main Street, Suite 900  
Columbia, S.C. 2920  
[nsedwar@regstaff.sc.gov](mailto:nsedwar@regstaff.sc.gov)

North Carolina Utilities Commission  
M. Lynn Jarvis, Chief Clerk  
4325 Mail Service Center  
Raleigh, NC 27699-4325  
[vance@ncuc.net](mailto:vance@ncuc.net)  
[chiefclerksoffice@ncuc.net](mailto:chiefclerksoffice@ncuc.net)  
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F. Stuart Bresler  
PJM Interconnection, L.L.C.  
2750 Monroe Boulevard  
Audubon, PA 19403  
[stu.bresler@pjm.com](mailto:stu.bresler@pjm.com)

Public Staff – North Carolina Utilities Commission  
Antoinette R. Wike, Chief Counsel  
4326 Mail Service Center  
Raleigh, NC 27699-4326  
[antoinette.wike@psncuc.nc.gov](mailto:antoinette.wike@psncuc.nc.gov)

Michael Burnette, Sr.  
North Carolina Electric Membership Corporation  
3400 Sumner Boulevard  
Raleigh, NC 27616  
[mike.burnette@ncemcs.com](mailto:mike.burnette@ncemcs.com)

## VIII. Conclusion

For the reasons stated herein, DEC and PJM respectfully request that the Commission issue an order accepting the Amended Agreement as of the requested effective date.

Respectfully submitted,

*/s/ Ann L. Warren*

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PJM Interconnection, L.L.C.  
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Audubon, PA 19403  
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E-mail: [steven.pincus@pjm.com](mailto:steven.pincus@pjm.com)

**Rate Schedule No. 348**

**AMENDED AND RESTATED**  
**DYNAMIC TRANSFER AGREEMENT**

AMONG

**DUKE ENERGY CAROLINAS, LLC**

**NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION**

AND

**PJM INTERCONNECTION, L.L.C.**

## **Amended and Restated Dynamic Transfer Agreement**

This Amended and Restated Dynamic Transfer Agreement (the “Agreement”) is dated as of June 1, 2018, among Duke Energy Carolinas, LLC (“DEC”), North Carolina Electric Membership Corporation (“NCEMC”), and PJM Interconnection, L.L.C. (“PJM”) (hereinafter collectively the “Parties”).

### **Recitals**

**Whereas**, NCEMC is the majority owner and has contractual authority for ~682 MW of Unit 1 of the Catawba Nuclear Facility located in York County, South Carolina, which is within the DEC Balancing Authority Area (“DEC BAA”);

**Whereas**, the DEC Balancing Authority is the Balancing Authority responsible for balance and interconnection frequency support within the DEC BAA;

**Whereas**, 50 MW of Catawba Unit 1, was initially eligible to offer as a Capacity Performance Resource for PJM;

**Whereas**, the Parties entered into a Dynamic Transfer Agreement dated as of August 1, 2016 which was filed with and accepted for filing by the Federal Energy Regulatory Commission via a delegated letter order issued on September 14, 2016 in Docket No. ER16-2311-000 (the “Original Agreement”); **Whereas**, since that time, an additional 50 MW (for a total of 100 MW) of Catawba Unit 1 was eligible to offer as a Capacity Performance Resource for PJM;

**Whereas**, NCEMC has received a Capacity Import Limit (“CIL”) exemption from PJM for the Catawba Unit 1 that is the subject of the Pseudo-Tie;

**Whereas**, NCEMC is required to Pseudo-Tie 100 MW of Catawba Unit 1, to the PJM Balancing Authority Area (“PJM BAA”) to satisfy the PJM Open Access Transmission Tariff (“OATT”) requirements for Capacity Performance Resources;

**Whereas**, the PJM Balancing Authority is the Balancing Authority responsible for balance and interconnection frequency support within the PJM BAA;

**Whereas**, PJM and DEC wish to coordinate operation of any Pseudo-Ties to satisfy North American Electric Reliability Corporation reliability standards, North America Energy Standards Board criteria, and Good Utility Practice;

**Whereas**, PJM and DEC wish to establish the terms and conditions for the operation of the Pseudo-Ties;

**Whereas**, NCEMC will ensure that Catawba Unit 1, will comply with the terms and conditions of this Agreement, the DEC OATT, and the PJM OATT regarding the Pseudo-Tie that are applicable to it; and

**Whereas**, the Parties wish to enter into this amended and restated Agreement to supersede the Original Agreement and effectuate the purposes stated herein.

**Now Therefore** the Parties agree as follows:

## **1. Definitions and Acronyms**

Unless the context otherwise specifies or requires, each capitalized term used in this Agreement shall have the meaning assigned herein, or attachments hereto (such definitions to be equally applicable to both the singular and the plural forms of the terms defined). All references to the *Glossary of Terms Used in NERC Reliability Standards* shall refer to the version of the *Glossary of Terms Used in NERC Reliability Standards* that is in effect as of the date of this Agreement, or if this Agreement is amended, the version in effect as of the date of the amendment of this Agreement.

- 1.1. “Agreement” shall mean this document, as amended from time to time, including all attachments, appendices, and schedules, if any.
- 1.2. “Balancing Authority” shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards*.
- 1.3. “Balancing Authority Area” shall have the meaning set for in the *Glossary of Terms Used in NERC Reliability Standards*.
- 1.4. “Breach” shall mean the failure of a Party to perform or observe any material term or condition of the Agreement.
- 1.5. “Capacity Performance Resource” shall have the meaning set forth in the PJM OATT.
- 1.6. “Congestion Management Process” refers to the congestion management process in the MISO-PJM Joint Operating Agreement.
- 1.7. “Delivery Year” shall have the meaning set forth in the PJM OATT.
- 1.8. “FERC” shall mean the Federal Energy Regulatory Commission.
- 1.9. “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 to be acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act section 215(a)(4).

- 1.10. “NAESB” shall mean the North America Energy Standards Board.
- 1.11. “NERC” shall mean the North American Electric Reliability Corporation.
- 1.12. “Party” or “Parties” refers to any party to this Agreement or all parties, as applicable.
- 1.13. “Pseudo-Tie” shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards*.
- 1.14. “Regional Entity” shall mean an entity that NERC has authorized to enforce compliance with reliability standards.
- 1.15. “Third Party” means any entity other than a Party to this Agreement.

## **2. General Requirements**

- 2.1. The Pseudo-Tie under the terms of this Agreement shall be provided in accordance with each of the following conditions:
  - 2.1.1 DEC shall not provide generation resources to satisfy the Pseudo-Tie.
  - 2.1.2 The first 100 MW of NCEMC entitled ownership capacity from Catawba Unit 1 (referred to as Designated Capacity by DEC and NCEMC) would be dedicated to the Pseudo-Tie.
  - 2.1.3 Long-term firm point-to-point transmission service has been procured to sufficiently deliver 100 MW of capacity and energy from Catawba Unit 1, to the PJM BAA and must be maintained for the term of this Agreement. Except with respect to permitted redirects per Section 2.1.5 of this Agreement, NCEMC agrees to maintain the long-term firm point-to-point transmission reservation for the duration for the relevant Delivery Year(s). A failure to maintain such reservation would constitute a violation of the PJM rules and regulations pertaining to Capacity Performance Resources and a Breach of this Agreement.
  - 2.1.4 If the 100 MW of capacity from Catawba Unit 1 is not called upon as a Capacity Performance Resource on any given day in PJM and NCEMC wishes to utilize the 100 MW to serve its load in the DEC BAA or Duke Energy Progress, LLC (DEP) East or West BAAs, then NCEMC must block schedule and tag the amount of energy and capacity it wishes to use for this purpose (up to the 100 MW limit) to move such energy and capacity from PJM to the DEC BAA or DEP BAAs, as the case may be.
  - 2.1.5 If Catawba Unit 1 is in a declared outage, then NCEMC may redirect the firm point-to-point transmission service associated with such unit for the duration of the outage. If NCEMC redirects the firm point-to-point transmission service associated with Catawba Unit 1, then such unit cannot be identified as a Point of Receipt (as defined in the DEC OATT) or source for the redirected service.



- 2.1.6 The Pseudo-Tie is registered in the NAESB registry.
- 2.1.7 NCEMC fully complies with the terms and conditions and its obligations under this Agreement.
- 2.2. DEC shall implement this Pseudo-Tie such that it is consistent with the provisions of the DEC OATT or any successor OATT.
- 2.3. PJM shall implement this Pseudo-Tie such that it is consistent with the provisions of the PJM OATT or any successor OATT.
- 2.4. The VACAR South Reliability Coordinator (RC) will be the native RC responsible for the transmission related congestion (SOLs and IROLs as defined in the *Glossary of Terms Used in NERC Reliability Standards*) on the transmission system where the Catawba Pseudo-Tie is connected. All of the procedures associated with this dynamic transfer service will conform to the direction of the VACAR South RC under all circumstances and the VACAR South RC shall have the right to direct that the amount of energy utilizing the dynamic transfer service be adjusted for local transmission reliability concerns. PJM will be the attaining RC and under normal operating conditions, is responsible for the capacity, energy and dispatch of the Pseudo-Tie that is the subject of this Agreement.

### **3. Performance/Reliability Requirements**

- 3.1. It is the obligation of each Balancing Authority to fulfill its commitment to the Eastern Interconnection. The use of this Pseudo-Tie in no way lessens or diminishes a Balancing Authority's reliability or performance expectations as defined by NERC.
- 3.2. All data transfer associated with this Pseudo-Tie shall have a primary path utilizing Inter-Control Center Communications Protocol ("ICCP") communications.

### **4. Operational and Modeling Requirements**

- 4.1. The use of this Pseudo-Tie as between DEC and NCEMC shall be modeled in accordance with DEC's established practices and Good Utility Practice. Accordingly, PJM shall use Good Utility Practice to prepare and provide forecast data set forth in accordance with NERC standards. Specifically, PJM shall provide to DEC unit commitment data in the form of hourly dispatch forecasts for the next operating day.
- 4.2. Tagging of the Pseudo-Tie is not required since (1) neither NERC nor NAESB standards that are currently effective require Pseudo-Tie transactions to be tagged and (2) information about the Pseudo-Tie is included in congestion management procedures via an alternate method as described in Section 4.3 of this Agreement.

- 4.3. PJM shall include the generator real power output of Catawba Unit 1, in its Market Flow impacts, report such Market Flow impacts to the Interchange Distribution Calculator (“IDC”), and otherwise coordinate and manage congestion in accordance with the Congestion Management Process. In addition, PJM shall model the Catawba Unit 1 as a “must run” unit in its PJM Market Flow study.
- 4.4. Generator real power output of, and management thereof, for 100 MW of Catawba Unit 1 is considered within the PJM BAA for all purposeful application, implementation, and execution of NERC Reliability Standards requirements for the duration of this Agreement. NCEMC will calculate the value for this Pseudo-Tie from its contractual authority for 100 MW of Catawba Unit 1 and will provide this value to both PJM and DEC via ICCP. PJM will also forward to DEC the Pseudo-Tie value it received from NCEMC. DEC will send back to PJM and NCEMC the final Pseudo-Tie value.
- 4.5. NCEMC will clamp the maximum amount for the Pseudo-Tie value to 100 MW and the minimum to 0 MW.

## **5. Establishment of Coordinated Flowgates**

- 5.1. DEC may propose additional Coordinated Flowgates (as defined in the Congestion Management Process) to be included in PJM’s congestion management and coordination procedure subject to the requirements of the Congestion Management Process. DEC shall provide PJM with any information necessary for PJM to conduct such studies. PJM shall study those flowgates in accordance with Section 3.2 (Coordinated Flowgates) of the Congestion Management Process, as amended from time to time, and communicate the results of the studies to DEC within a reasonable period. PJM shall add a flowgate to its Congestion Management Process if the flowgate passes the studies in Section 3.2 of the Congestion Management Process.
- 5.2. PJM shall add Coordinated Flowgates to its congestion management procedures in accordance with sensitivity studies described in the Congestion Management Process.

## **6. Energy Accounting**

- 6.1. In the event the Parties do not agree upon the hourly values associated with the Pseudo-Tie in after-the-fact checkouts, values recorded by DEC will be used by all Parties.

## **7. Contingency Operational Requirements**

- 7.1. If the Pseudo-Tie signal is lost or determined to be unacceptable, or the telemetry from the Catawba Unit 1 to DEC is lost or determined to be unacceptable, operation of the Pseudo-Tie will continue under the following procedure.
  - 7.1.1. DEC or PJM will notify NCEMC of the failure.

- 7.1.2. DEC will hold the last known accurate value on the Pseudo-Tie until it is determined to be inaccurate or a more accurate value is provided by NCEMC.
- 7.1.3. Changes to the manually-updated Pseudo-Tie value cannot occur more frequently than once per hour unless otherwise mutually agreed upon by all Parties.
- 7.1.4. To the extent possible, the Party maintaining the failed telemetry will provide a reasonable estimate of anticipated time of restoration.
- 7.1.5. If the primary data source is not restored within 24 hours, all Parties must agree on a plan to restore an acceptable data source for the Pseudo-Tie to continue.
- 7.2. If the Pseudo-Tie resource is redispached for a local transmission system contingency, DEC reserves the right to direct the operation of the resource.
- 7.3. All Balancing Authorities shall retain Regional Entity responsibilities and no liability or costs shall be shifted to other Balancing Authorities as a result of an outage.

## **8. Indemnity and Consequential Damages**

- 8.1. NCEMC shall at all times indemnify, defend, and save DEC and PJM 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, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from DEC's or PJM's performance of its respective obligations under this Agreement on behalf of NCEMC, except in cases of negligence or intentional wrongdoing by DEC or PJM, respectively.
- 8.2. In no event shall any Party be liable under any provision of this Agreement for any losses, damages, costs, or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability related to this Agreement, except to the extent the damages are direct damages that arise or result from or result from gross negligence or intentional misconduct of the Party.

## **9. References to Agreements and Tariffs on File with FERC**

Unless a clear contrary intention appears, any reference to any agreement or tariff means such agreement as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof.

## **10. Dispute Resolution**

- 10.1. **Internal Dispute Resolution Procedures:** Any dispute between or among the Parties under the Agreement shall be referred to a designated senior representative of the each

“Disputing Party” for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within thirty (30) days, or such other period as the Disputing Parties may agree upon, by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

- 10.2. **External Arbitration Procedures:** Any arbitration initiated under the Agreement shall be conducted before a single neutral arbitrator appointed by the Disputing Parties. If the Disputing Parties fail to agree upon a single arbitrator within ten (10) days of the referral of the dispute to arbitration, each Disputing Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any Party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Disputing Parties an opportunity to be heard and, except as otherwise provided herein, shall generally conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association and any applicable FERC regulations.
- 10.3. **Arbitration Decisions:** Unless otherwise agreed, the arbitrator(s) shall render a decision within ninety (90) days of appointment and shall notify the Disputing Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the Agreement and shall have no power to modify or change any of the above in any manner. The decision of the arbitrator(s) shall be final and binding upon the Disputing Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act and/or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service or facilities.
- 10.4. **Costs:** Each Disputing Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (A) the cost of the arbitrator chosen by the Disputing Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (B) one half the cost of the single arbitrator jointly chosen by the Disputing Parties.
- 10.5. **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. Interpretation**

In the event of a conflict between the terms and conditions in this Agreement and the terms and conditions in a Party's respective tariffs on file with FERC, the Party's tariff shall control.

## **12. Term and Termination**

12.1. Any Party may unilaterally terminate this Agreement at any time upon not less than forty-two months' written notice to the other Parties prior to the commencement of a Delivery Year.

12.2. This Agreement may be terminated at any time by mutual agreement in writing.

12.3. Termination in the event of Breach.

12.4.1 No Breach shall exist where such failure to discharge an obligation is the result of force majeure as described in section 15 of this Agreement or the result of an act of omission of the other Party. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the breaching Party. The breaching Party shall have thirty (30) calendar days from receipt of the default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) calendar days, the breaching Party shall commence such cure within thirty (30) calendar days after notice and continuously and diligently complete such cure within ninety (90) calendar days from receipt of the default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

12.4.2 Right to Terminate. If a Breach is not cured as provided in this article, or if a Breach is not capable of being cured within the period provided for herein, the non-breaching Party shall be relieved of any further obligation hereunder. The provisions of this article will survive termination of this Agreement.

## **13. Permitted Assignments.**

This Agreement may not be assigned by any Party except: (a) with the written consent of the non-assigning Parties, which consent may be withheld in such Parties' absolute discretion; and (b) in the case of a merger, consolidation, sale, or spin-off of substantially all of a Party's assets. In the case of a merger, consolidation, sale, reorganization, or spin-off by a Party, such Party shall assure that the successor or purchaser adopts this Agreement, and the other Parties shall be deemed to have consented to such adoption.

## **14. Liability to Non-Parties**

Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies under or by reason of this Agreement on any person or entity that is not a Party or a permitted successor or assign.

## **15. Force Majeure**

No Party shall be in Breach of this Agreement to the extent and during the period that such Party's performance is made impracticable by any unanticipated cause or causes beyond such Party's control, and without such Party's fault or negligence, which may include, but are not limited to, any act, omission, or circumstance occasioned by or in consequence of any act of God, labor dispute, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, or curtailment, order, regulation or restriction imposed by a governmental authority. Upon the occurrence of an event considered by a Party to constitute a force majeure event, such Party shall use reasonable efforts to endeavor to continue to perform its obligations as far as reasonably practicable and to remedy the event, provided that this Section shall not require any Party to settle any strike or labor dispute. A Party claiming a force majeure event shall notify the other Parties in writing immediately, and in no event later than forty-eight (48) hours after the occurrence of the force majeure event. The foregoing notwithstanding, the occurrence of a cause under this Section shall not excuse a Party from making any payment otherwise required under this Agreement.

## **16. Amendment**

Nothing contained in this Agreement shall be construed as affecting in any way the right of DEC to unilaterally make application to FERC for a change in rates, terms and conditions, charges, classification of service, rule or regulation under Section 205 of the Federal Power Act and pursuant to FERC's rules and regulations promulgated thereunder, and nothing contained in the Agreement shall be construed as affecting in any way the ability of any Party receiving service under the Agreement to exercise its rights under the Federal Power Act and pursuant to the FERC's rules and regulations promulgated thereunder.

## **17. Headings**

The headings used for the Articles and Sections of this Agreement are for convenience and reference purposes only, and shall not be construed to modify, expand, limit, or restrict the provisions of this Agreement.

## **18. Counterparts**

This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together will constitute one instrument, binding upon the Parties hereto, notwithstanding that both Parties may not have executed the same counterpart.

## **19. Notices**

A notice ("Notice") shall be effective only if in writing and delivered by: hand; reputable overnight courier; electronic mail; or United States mail. Notice shall be deemed to have been given: (a) when delivered to the recipient by hand, overnight courier or electronic

mail, or (b) if delivered by United States mail, on the postmark date. Notice shall be addressed as follows:

PJM: F. Stuart Bresler  
Senior Vice President, Markets  
PJM Interconnection, L.L.C.  
2750 Monroe Boulevard  
Audubon, PA 19403  
Tel: (610) 666-8942  
Email: Stu.Bresler@pjm.com

DEC: Mike Anthony  
Manager of System Operations  
Tariff Administration and Business Services  
Duke Energy Carolinas, LLC  
3401 Hillsborough Street  
Raleigh, NC 27607  
Tel: (919) 546-5690  
Email: michael.anthony@duke-energy.com

NCEMC: Mr. Michael Burnette  
Senior Vice President, Power Supply and Chief Operating Officer,  
NCEMC  
North Carolina Electric Membership Corporation  
3400 Sumner Boulevard  
Raleigh, NC 27616  
Tel: (919) 875-3042  
Email: mike.burnette@ncemcs.com

A Party may change its designated recipient of Notices, or its address, from time to time, by giving Notice of such change.

NCEMC may appoint an agent from time-to-time that will be responsible for implementation of the Pseudo-Tie. If NCEMC appoints an agent, a written procedure will be developed that will inform the Parties as to which types of notices should be directed to the agent and provide all applicable contact information.

## **20. Governing Law**

This Agreement and the rights and duties of the Parties relating to this Agreement shall be governed by and construed in accordance with the Federal laws of the United States of America, including but not limited to federal, and general contract law.

**21. Prior Agreements; Entire Agreement**

All prior agreements by or among all the Parties relating to the matters contemplated by this Agreement, whether written or oral, are superseded by this Agreement, and shall be of no further force or effect.

[Signatures on following page.]



IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers as of the day and year first above written.

**PJM INTERCONNECTION, L.L.C.**

By: /s/ Frederick S. Bresler, III  
Name: Frederick S. Bresler, III  
Title: Senior Vice President, Operations and Markets  
Date: March 29, 2018

**DUKE ENERGY CAROLINAS, LLC**

By: /s/ Nelson Peeler  
Name: Nelson Peeler  
Title: SVP Chief Transmission Officer  
Date: 3/29/2018

**NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION**


By: /s/ S. Lee Ragsdale, Jr.  
Name: S. Lee Ragsdale, Jr.  
Title: SVP, Grid Infrastructure & Compliance  
Date: 23 Mar 2018

# **ATTACHMENT A**

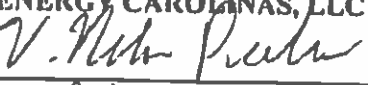
Copy of the Original Signatures  
Service Agreement No. 5047

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers as of the day and year first above written.


**PJM INTERCONNECTION, L.L.C.**

By:   
Name: Frederick S. Bresler, III  
Title: Senior Vice President, Operations and Markets  
Date: March 29, 2018

**DUKE ENERGY CAROLINAS, LLC**

By:   
Name: Nelson Peeler  
Title: SVP Chief Transmission Officer  
Date: 3/28/2018

**NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION**

By:   
Name: S. LEE RAGDALE, JR  
Title: SVP, GRID INFRASTRUCTURE & COMPLIANCE  
Date: 23 MAR 2018

# **ATTACHMENT B**

Service Agreement No. 5047  
(Redlined Agreement)

Service Agreement No. 5047

Rate Schedule No. 348

**AMENDED AND RESTATED**  
**DYNAMIC TRANSFER AGREEMENT**

AMONG

**DUKE ENERGY CAROLINAS, LLC**

**NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION**

AND

**PJM INTERCONNECTION, L.L.C.**

## **Amended and Restated Dynamic Transfer Agreement**

This Amended and Restated Dynamic Transfer Agreement (the “Agreement”) is ~~entered into~~dated as of ~~August 1, 2016~~June 1, 2018, among Duke Energy Carolinas, LLC (“DEC”), North Carolina Electric Membership Corporation (“NCEMC”), and PJM Interconnection, L.L.C. (“PJM”) (hereinafter collectively the “Parties”).

### **Recitals**

**Whereas**, NCEMC is the majority owner and has contractual authority for ~682 MW of Unit 1 of the Catawba Nuclear Facility located in York County, South Carolina, which is within the DEC Balancing Authority Area (“DEC BAA”);

**Whereas**, the DEC Balancing Authority is the Balancing Authority responsible for balance and interconnection frequency support within the DEC BAA;

**Whereas**, 50 MW of Catawba Unit 1, was initially eligible to offer as a Capacity Performance Resource for PJM~~has cleared the PJM Capacity Transition Incremental Auction in PJM for the 2016/2017 Delivery Year as a Capacity Performance Resource for PJM;~~

**Whereas**, the Parties entered into a Dynamic Transfer Agreement dated as of August 1, 2016 which was filed with and accepted for filing by the Federal Energy Regulatory Commission via a delegated letter order issued on September 14, 2016 in Docket No. ER16-2311-000 (the “Original Agreement”);

**Whereas**, since that time, an additional 50 MW (for a total of 100 MW) of Catawba Unit 1 was eligible to offer as a Capacity Performance Resource for PJM;

**Whereas**, NCEMC has received a Capacity Import Limit (“CIL”) exemption from PJM ~~beginning in the 2016/2017 Delivery Year~~ for the ~~50 MW output from~~ Catawba Unit 1 that is the subject of the Pseudo-Tie;

**Whereas**, NCEMC is required to Pseudo-Tie ~~50~~100 MW of Catawba Unit 1, to the PJM Balancing Authority Area (“PJM BAA”) to satisfy the PJM Open Access Transmission Tariff (“OATT”) requirements for Capacity Performance Resources;

**Whereas**, the PJM Balancing Authority is the Balancing Authority responsible for balance and interconnection frequency support within the PJM BAA;

**Whereas**, PJM and DEC wish to coordinate operation of any Pseudo-Ties to satisfy North American Electric Reliability Corporation reliability standards, North America Energy Standards Board criteria, and Good Utility Practice;

**Whereas**, PJM and DEC wish to establish the terms and conditions for the operation of the Pseudo-Ties; **and**

**Whereas**, NCEMC will ensure that Catawba Unit 1, will comply with the terms and conditions of this Agreement, the DEC OATT, and the PJM OATT regarding the Pseudo-Tie that are applicable to it; ~~and-~~

**Whereas, the Parties wish to enter into this amended and restated Agreement to supersede the Original Agreement and effectuate the purposes stated herein.**

**Now Therefore** the Parties agree as follows:

## **1. Definitions and Acronyms**

Unless the context otherwise specifies or requires, each capitalized term used in this Agreement shall have the meaning assigned herein, or attachments hereto (such definitions to be equally applicable to both the singular and the plural forms of the terms defined). All references to the *Glossary of Terms Used in NERC Reliability Standards* shall refer to the version of the *Glossary of Terms Used in NERC Reliability Standards* that is in effect as of the date of this Agreement, or if this Agreement is amended, the version in effect as of the date of the amendment of this Agreement.

- 1.1. “Agreement” shall mean this document, as amended from time to time, including all attachments, appendices, and schedules, if any.
- 1.2. “Balancing Authority” shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards*.
- 1.3. “Balancing Authority Area” shall have the meaning set for in the *Glossary of Terms Used in NERC Reliability Standards*.
- 1.4. “Breach” shall mean the failure of a Party to perform or observe any material term or condition of the Agreement.
- 1.5. “Capacity Performance Resource” shall have the meaning set forth in the PJM OATT.
- 1.6. “Congestion Management Process” refers to the congestion management process in the MISO-PJM Joint Operating Agreement.
- 1.7. “Delivery Year” shall have the meaning set forth in the PJM OATT.
- 1.8. “FERC” shall mean the Federal Energy Regulatory Commission.
- 1.9. “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 to be acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act section 215(a)(4).

- 1.10. “NAESB” shall mean the North America Energy Standards Board.
- 1.11. “NERC” shall mean the North American Electric Reliability Corporation.
- 1.12. “Party” or “Parties” refers to any party to this Agreement or all parties, as applicable.
- 1.13. “Pseudo-Tie” shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards*.
- 1.14. “Regional Entity” shall mean an entity that NERC has authorized to enforce compliance with reliability standards.
- 1.15. “Third Party” means any entity other than a Party to this Agreement.

## **2. General Requirements**

2.1. The Pseudo-Tie under the terms of this Agreement shall be provided in accordance with each of the following conditions:

2.1.1 DEC shall not provide generation resources to satisfy the Pseudo-Tie.

2.1.2 The first ~~50MW~~100 MW of NCEMC entitled ownership capacity from Catawba Unit 1 (referred to as Designated Capacity by DEC and NCEMC) would be dedicated to the Pseudo-Tie.

2.1.3 Long-term firm point-to-point transmission service has been procured to sufficiently deliver ~~50~~100 MW of capacity and energy from Catawba Unit 1, to the PJM BAA and must be maintained for the term of this Agreement. Except with respect to permitted redirects per Section 2.1.5 of this Agreement, NCEMC agrees to maintain the long-term firm point-to-point transmission reservation for the duration for the relevant Delivery Year(s). A failure to maintain such reservation would constitute a violation of the PJM rules and regulations pertaining to Capacity Performance Resources and a Breach of this Agreement.

2.1.4 If the ~~50~~100 MW of capacity from Catawba Unit 1 is not called upon as a Capacity Performance Resource on any given day in PJM and NCEMC wishes to utilize the ~~50~~100 MW to serve its load in the DEC BAA or Duke Energy Progress, LLC (DEP) East or West BAAs, then NCEMC must block schedule and tag the amount of energy and capacity it wishes to use for this purpose (up to the ~~50~~100 MW limit) to move such energy and capacity from PJM to the DEC BAA or DEP BAAs, as the case may be.

2.1.5 If Catawba Unit 1 is in a declared outage, then NCEMC may redirect the firm point-to-point transmission service associated with such unit for the duration of the outage. If NCEMC redirects the firm point-to-point transmission service



associated with Catawba Unit 1, then such unit cannot be identified as a Point of Receipt (as defined in the DEC OATT) or source for the redirected service.

- 2.1.6 The Pseudo-Tie is registered in the NAESB registry.
- 2.1.7 NCEMC fully complies with the terms and conditions and its obligations under this Agreement.
- 2.2. DEC shall implement this Pseudo-Tie such that it is consistent with the provisions of the DEC OATT or any successor OATT.
- 2.3. PJM shall implement this Pseudo-Tie such that it is consistent with the provisions of the PJM OATT or any successor OATT.
- 2.4. The VACAR South Reliability Coordinator (RC) will be the native RC responsible for the transmission related congestion (SOLs and IROLs as defined in the *Glossary of Terms Used in NERC Reliability Standards*) on the transmission system where the Catawba Pseudo-Tie is connected. All of the procedures associated with this dynamic transfer service will conform to the direction of the VACAR South RC under all circumstances and the VACAR South RC shall have the right to direct that the amount of energy utilizing the dynamic transfer service be adjusted for local transmission reliability concerns. PJM will be the attaining RC and under normal operating conditions, is responsible for the capacity, energy and dispatch of the Pseudo-Tie that is the subject of this Agreement.

### **3. Performance/Reliability Requirements**

- 3.1. It is the obligation of each Balancing Authority to fulfill its commitment to the Eastern Interconnection. The use of this Pseudo-Tie in no way lessens or diminishes a Balancing Authority's reliability or performance expectations as defined by NERC.
- 3.2. All data transfer associated with this Pseudo-Tie shall have a primary path utilizing Inter-Control Center Communications Protocol ("ICCP") communications.

### **4. Operational and Modeling Requirements**

- 4.1. The use of this Pseudo-Tie as between DEC and NCEMC shall be modeled in accordance with DEC's established practices and Good Utility Practice. Accordingly, PJM shall use Good Utility Practice to prepare and provide forecast data set forth in accordance with NERC standards. Specifically, PJM shall provide to DEC unit commitment data in the form of hourly dispatch forecasts for the next operating day.
- 4.2. Tagging of the Pseudo-Tie is not required since (1) neither NERC nor NAESB standards that are currently effective require Pseudo-Tie transactions to be tagged and (2) information about the Pseudo-Tie is included in congestion management procedures via an alternate method as described in Section 4.3 of this Agreement.

- 4.3. PJM shall include the generator real power output of Catawba Unit 1, in its Market Flow impacts, report such Market Flow impacts to the Interchange Distribution Calculator (“IDC”), and otherwise coordinate and manage congestion in accordance with the Congestion Management Process. In addition, PJM shall model the Catawba Unit 1 as a “must run” unit in its PJM Market Flow study.
- 4.4. Generator real power output of, and management thereof, for ~~50-100~~ MW of Catawba Unit 1 is considered within the PJM BAA for all purposeful application, implementation, and execution of NERC Reliability Standards requirements for the duration of this Agreement. NCEMC will calculate the value for this Pseudo-Tie from its contractual authority for ~~50-100~~ MW of Catawba Unit 1 and will provide this value to both PJM and DEC via ICCP. PJM will also forward to DEC the Pseudo-Tie value it received from NCEMC. DEC will send back to PJM and NCEMC the final Pseudo-Tie value.
- 4.5. NCEMC will clamp the maximum amount for the Pseudo-Tie value to ~~50-100~~ MW and the minimum to 0 MW.

## **5. Establishment of Coordinated Flowgates**

- 5.1. DEC may propose additional Coordinated Flowgates (as defined in the Congestion Management Process) to be included in PJM’s congestion management and coordination procedure subject to the requirements of the Congestion Management Process. DEC shall provide PJM with any information necessary for PJM to conduct such studies. PJM shall study those flowgates in accordance with Section 3.2 (Coordinated Flowgates) of the Congestion Management Process, as amended from time to time, and communicate the results of the studies to DEC within a reasonable period. PJM shall add a flowgate to its Congestion Management Process if the flowgate passes the studies in Section 3.2 of the Congestion Management Process.
- 5.2. PJM shall add Coordinated Flowgates to its congestion management procedures in accordance with sensitivity studies described in the Congestion Management Process.

## **6. Energy Accounting**

- 6.1. In the event the Parties do not agree upon the hourly values associated with the Pseudo-Tie in after-the-fact checkouts, values recorded by DEC will be used by all Parties.

## **7. Contingency Operational Requirements**

- 7.1. If the Pseudo-Tie signal is lost or determined to be unacceptable, or the telemetry from the Catawba Unit 1 to DEC is lost or determined to be unacceptable, operation of the Pseudo-Tie will continue under the following procedure.
  - 7.1.1. DEC or PJM will notify NCEMC of the failure.
  - 7.1.2. DEC will hold the last known accurate value on the Pseudo-Tie until it is determined to be inaccurate or a more accurate value is provided by NCEMC.

- 7.1.3. Changes to the manually-updated Pseudo-Tie value cannot occur more frequently than once per hour unless otherwise mutually agreed upon by all Parties.
- 7.1.4. To the extent possible, the Party maintaining the failed telemetry will provide a reasonable estimate of anticipated time of restoration.
- 7.1.5. If the primary data source is not restored within 24 hours, all Parties must agree on a plan to restore an acceptable data source for the Pseudo-Tie to continue.
- 7.2. If the Pseudo-Tie resource is redispached for a local transmission system contingency, DEC reserves the right to direct the operation of the resource.
- 7.3. All Balancing Authorities shall retain Regional Entity responsibilities and no liability or costs shall be shifted to other Balancing Authorities as a result of an outage.

## **8. Indemnity and Consequential Damages**

- 8.1. NCEMC shall at all times indemnify, defend, and save DEC and PJM 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, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from DEC's or PJM's performance of its respective obligations under this Agreement on behalf of NCEMC, except in cases of negligence or intentional wrongdoing by DEC or PJM, respectively.
- 8.2. In no event shall any Party be liable under any provision of this Agreement for any losses, damages, costs, or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability related to this Agreement, except to the extent the damages are direct damages that arise or result from or result from gross negligence or intentional misconduct of the Party.

## **9. References to Agreements and Tariffs on File with FERC**

Unless a clear contrary intention appears, any reference to any agreement or tariff means such agreement as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof.

## **10. Dispute Resolution**

- 10.1. **Internal Dispute Resolution Procedures:** Any dispute between or among the Parties under the Agreement shall be referred to a designated senior representative of the each "Disputing Party" for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within thirty (30) days, or such other period as the Disputing Parties may agree upon, by mutual agreement,

such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

- 10.2. **External Arbitration Procedures:** Any arbitration initiated under the Agreement shall be conducted before a single neutral arbitrator appointed by the Disputing Parties. If the Disputing Parties fail to agree upon a single arbitrator within ten (10) days of the referral of the dispute to arbitration, each Disputing Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any Party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Disputing Parties an opportunity to be heard and, except as otherwise provided herein, shall generally conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association and any applicable FERC regulations.
- 10.3. **Arbitration Decisions:** Unless otherwise agreed, the arbitrator(s) shall render a decision within ninety (90) days of appointment and shall notify the Disputing Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the Agreement and shall have no power to modify or change any of the above in any manner. The decision of the arbitrator(s) shall be final and binding upon the Disputing Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act and/or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service or facilities.
- 10.4. **Costs:** Each Disputing Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (A) the cost of the arbitrator chosen by the Disputing Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (B) one half the cost of the single arbitrator jointly chosen by the Disputing Parties.
- 10.5. **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. **Interpretation**

In the event of a conflict between the terms and conditions in this Agreement and the terms and conditions in a Party's respective tariffs on file with FERC, the Party's tariff shall control.

## **12. Term and Termination**

- 12.1. Any Party may unilaterally terminate this Agreement at any time upon not less than ~~thirty-seven~~~~forty-two~~ months' written notice to the other Parties prior to the commencement of a Delivery Year.
- 12.2. This Agreement may be terminated at any time by mutual agreement in writing.
- 12.3. Termination in the event of Breach.
- 12.4.1 No Breach shall exist where such failure to discharge an obligation is the result of force majeure as described in section 15 of this Agreement or the result of an act of omission of the other Party. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the breaching Party. The breaching Party shall have thirty (30) calendar days from receipt of the default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) calendar days, the breaching Party shall commence such cure within thirty (30) calendar days after notice and continuously and diligently complete such cure within ninety (90) calendar days from receipt of the default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.
- 12.4.2 Right to Terminate. If a Breach is not cured as provided in this article, or if a Breach is not capable of being cured within the period provided for herein, the non-breaching Party shall be relieved of any further obligation hereunder. The provisions of this article will survive termination of this Agreement.

## **13. Permitted Assignments.**

This Agreement may not be assigned by any Party except: (a) with the written consent of the non-assigning Parties, which consent may be withheld in such Parties' absolute discretion; and (b) in the case of a merger, consolidation, sale, or spin-off of substantially all of a Party's assets. In the case of a merger, consolidation, sale, reorganization, or spin-off by a Party, such Party shall assure that the successor or purchaser adopts this Agreement, and the other Parties shall be deemed to have consented to such adoption.

## **14. Liability to Non-Parties**

Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies under or by reason of this Agreement on any person or entity that is not a Party or a permitted successor or assign.

## **15. Force Majeure**

No Party shall be in Breach of this Agreement to the extent and during the period that such Party's performance is made impracticable by any unanticipated cause or causes beyond such Party's control, and without such Party's fault or negligence, which may include, but are not limited to, any act, omission, or circumstance occasioned by or in consequence of any act of God, labor dispute, act of the public enemy, war, insurrection,

riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, or curtailment, order, regulation or restriction imposed by a governmental authority. Upon the occurrence of an event considered by a Party to constitute a force majeure event, such Party shall use reasonable efforts to endeavor to continue to perform its obligations as far as reasonably practicable and to remedy the event, provided that this Section shall not require any Party to settle any strike or labor dispute. A Party claiming a force majeure event shall notify the other Parties in writing immediately, and in no event later than forty-eight (48) hours after the occurrence of the force majeure event. The foregoing notwithstanding, the occurrence of a cause under this Section shall not excuse a Party from making any payment otherwise required under this Agreement.

## **16. Amendment**

Nothing contained in this Agreement shall be construed as affecting in any way the right of DEC to unilaterally make application to FERC for a change in rates, terms and conditions, charges, classification of service, rule or regulation under Section 205 of the Federal Power Act and pursuant to FERC's rules and regulations promulgated thereunder, and nothing contained in the Agreement shall be construed as affecting in any way the ability of any Party receiving service under the Agreement to exercise its rights under the Federal Power Act and pursuant to the FERC's rules and regulations promulgated thereunder.

## **17. Headings**

The headings used for the Articles and Sections of this Agreement are for convenience and reference purposes only, and shall not be construed to modify, expand, limit, or restrict the provisions of this Agreement.

## **18. Counterparts**

This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together will constitute one instrument, binding upon the Parties hereto, notwithstanding that both Parties may not have executed the same counterpart.

## **19. Notices**

A notice ("Notice") shall be effective only if in writing and delivered by: hand; reputable overnight courier; electronic mail; or United States mail. Notice shall be deemed to have been given: (a) when delivered to the recipient by hand, overnight courier or electronic mail, or (b) if delivered by United States mail, on the postmark date. Notice shall be addressed as follows:

PJM: F. Stuart Bresler  
Senior Vice President, Markets  
PJM Interconnection, L.L.C.  
2750 Monroe Boulevard  
Audubon, PA 19403  
Tel: (610) 666-8942  
Email: Stu.Bresler@pjm.com

DEC: Mike Anthony  
Manager of System Operations  
Tariff Administration and Business Services  
Duke Energy Carolinas, LLC  
3401 Hillsborough Street  
Raleigh, NC 27607  
Tel: (919) 546-5690  
Email: michael.anthony@duke-energy.com

NCEMC: Mr. Michael Burnette  
Senior Vice President, Power Supply and Chief Operating Officer,  
NCEMC  
North Carolina Electric Membership Corporation  
3400 Sumner Boulevard  
Raleigh, NC 27616  
Tel: (919) 875-3042  
Email: mike.burnette@ncemcs.com

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Name: Frederick S. Bresler, III  
Title: Senior Vice President, Operations and Markets  
Date: March 29, 2018

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By: /s/ Nelson Peeler  
Name: Nelson Peeler  
Title: SVP Chief Transmission Officer  
Date: 3/29/2018

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By: /s/ S. Lee Ragsdale, Jr.  
Name: S. Lee Ragsdale, Jr.  
Title: SVP, Grid Infrastructure & Compliance  
Date: 27 Mar 2018