

**AMENDED AND RESTATED
JOINT OPERATING AGREEMENT
AMONG AND BETWEEN
PJM INTERCONNECTION, L.L.C., AND
DUKE ENERGY PROGRESS , LLC**

Effective Date: July 22, 2019

TABLE OF CONTENTS

ARTICLE ONE – RECITALS

ARTICLE TWO – ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

- 2.1 Abbreviations and Acronyms
- 2.2 Definitions
- 2.3 Rules of Construction

ARTICLE THREE – OVERVIEW, ADMINISTRATION, AND RELATIONSHIP WITH OTHER AGREEMENTS

- 3.1 Overview and Scope of this Agreement
- 3.2 Functions of Operating Committee
- 3.3 Ongoing Review and Revisions

ARTICLE FOUR – EXCHANGE OF INFORMATION AND DATA

- 4.1 Exchange of Operating Data
- 4.2 Cost of Data and Information Exchange
- 4.3 Exchange of Information
- 4.4 No Duty to Disclose Confidential Information

ARTICLE FIVE – TTC/ATC/AFT CALCULATIONS

- 5.1 TCC/ATC/AFC Protocols

ARTICLE SIX – [RESERVED]

ARTICLE SEVEN – COORDINATION OF SCHEDULED OUTAGES

- 7.1 Operating Protocols for Coordinating Scheduled Outages

ARTICLE EIGHT – PRINCIPLES CONCERNING JOINT OPERATIONS IN EMERGENCIES

- 8.1 Emergency Operating Principles
- 8.2 Power System Restoration
- 8.3 Operating the Most Conservative Result
- 8.4 Emergency Energy
- 8.5 Costs of Compliance with Emergency Operating Principles and Procedures

ARTICLE NINE – COORDINATED TRANSMISSION PLANNING STUDIES

- 9.1 Scope of Activities
- 9.2 Data and Information Exchange

ARTICLE TEN – JOINT CHECKOUT PROCEDURES

- 10.1 Interchange Scheduling Protocols

ARTICLE ELEVEN – VOLTAGE CONTROL AND REACTIVE POWER COORDINATION

ARTICLE TWELVE – MANAGING PARALLEL FLOW ON THE VACAR/PJM INTERFACE

- 12.1 Schedule of Parties Adopting Local Transmission Loading Relief Procedures
- 12.2 Calculate ATC Value on VACAR/PJM Interface

ARTICLE THIRTEEN – LOSS COMPENSATION PROCESS FOR NON-FIRM POWER FLOWS

ARTICLE FOURTEEN – [RESERVED]

ARTICLE FIFTEEN – ACCOUNTING AND BILLING

- 15.1 Revenue Distribution
- 15.2 Billing and Invoicing Procedures
- 15.3 Access to Information by the Parties

ARTICLE SIXTEEN – DISPUTE RESOLUTION PROCEDURES

- 16.1 Dispute Resolution Procedures

ARTICLE SEVENTEEN – RETAINED RIGHTS OF PARTIES

- 17.1 Parties Entitled to Act Separately

ARTICLE EIGHTEEN – EFFECTIVE DATE, IMPLEMENTATION, TERM AND TERMINATION

- 18.1 Effective Date; Implementation
- 18.2 Term
- 18.3 Right of a Party to Terminate
- 18.4 Survival
- 18.5 Post-Termination Cooperation

ARTICLE NINETEEN – CONFIDENTIAL INFORMATION

- 19.1 Definition
- 19.2 Protection
- 19.3 Scope
- 19.4 Standard of Care
- 19.5 Required Disclosure
- 19.6 Return of Confidential Information
- 19.7 Equitable Relief

ARTICLE TWENTY – ADDITIONAL PROVISIONS

- 20.1 Unauthorized Transfer of Third-Party Intellectual Property
- 20.2 Intellectual Property Developed Under This Agreement
- 20.3 Indemnification
- 20.4 Limitation of Liability
- 20.5 Permitted Assignments
- 20.6 Liability to Non-Parties
- 20.7 Force Majeure

- 20.8 Amendment
- 20.9 Headings
- 20.10 Counterparts
- 20.11 Notices
- 20.12 Governing Law
- 20.13 Prior Agreements; Entire Agreement

APPENDIX A – TRANSMISSION LOADING RELIEF AGREEMENT

APPENDIX B – DESCRIPTION OF INTERCONNECTION FACILITIES

**AMENDED AND RESTATED
JOINT OPERATING AGREEMENT
AMONG AND BETWEEN
PJM INTERCONNECTION, L.L.C., AND
DUKE ENERGY PROGRESS, LLC**

This Amended and Restated Joint Operating Agreement (“Agreement”) dated this 22nd day of July, 2019, is entered into among and between the following parties:

PJM Interconnection, L.L.C. (“PJM”) a Delaware limited liability company having a place of business at 2750 Monroe Blvd., Audubon, Pennsylvania 19403

Duke Energy Progress, LLC (“DEP”), a North Carolina limited liability company having a place of business at 410 South Wilmington Street, Raleigh, North Carolina 27601.

ARTICLE ONE - RECITALS

1. PJM is the regional transmission organization that provides operating and reliability functions in portions of the mid-Atlantic and Midwest States. PJM also administers an open access tariff for transmission and related services on its transmission grid, and independently operates markets for day-ahead and real-time energy, and financially firm transmission rights;

2. DEP is a transmission provider that provides operating and reliability functions in the CPLE and CPLW Balancing Authority Areas, and administers its Joint Open Access Transmission Tariff for open access transmission and related services on its system.

3. PJM and DEP agreed in a settlement agreement entered in a proceeding before the North Carolina Utilities Commission (Docket E-22, sub 418) that the parties would negotiate and conclude a Joint Operating Agreement to address loop flows, Mega Volt-Amperes Reactive (“MVARs”), and other operational matters that materially impact DEP’s system that arise as a consequence of Dominion’s membership with PJM.

4. PJM and DEP entered into a Joint Operating Agreement (“Original JOA”) dated July 27, 2005. The Original JOA was designated as DEP FERC Electric Tariff, Rate Schedule No. 171 and PJM FERC Electric Tariff, Rate Schedule No. 40.

5. PJM and DEP subsequently entered into a revised JOA dated February 2, 2010 (“First Revised JOA”), and thereafter entered in a further revised JOA dated December 3, 2014, which was designated by DEP as DEP Rate Schedule No. 188 and by PJM as PJM Rate Schedule No. 50, DEP-PJM JOA filed in its Interregional Agreements database of its FERC FPA Electric Tariff (“Second Revised JOA”).

6. PJM and DEP mutually desire to amend and restate the Second Revised JOA in order to improve reliability and efficiency of system operations by adding provisions addressing the mitigation and management of congestion on facilities that are impacted by both systems.

7. In accordance with Good Utility Practice, NERC and Regional Reliability Standards, the Parties seek to establish or confirm other arrangements and protocols in furtherance of the reliability of their systems, and in compliance with all applicable reliability standards, as provided under the terms and conditions of this Agreement.

NOW, THEREFORE, for good and valuable consideration including the Parties’ mutual reliance upon the covenants contained herein, the Parties agree as follows:

**ARTICLE TWO -
ABBREVIATIONS, ACRONYMS, AND DEFINITIONS**

2.1 Abbreviations and Acronyms

2.1.1 - ATC

“ATC” shall mean Available Transfer Capability.

2.1.2 - AFC

“AFC” shall mean Available Flowgate Capability.

2.1.3 - BA

"BA" shall mean Balancing Authority.

2.1.4 - CBM

“CBM” shall mean Capacity Benefit Margin.

2.1.5 - CF

“CF” shall mean a Coordinated Flowgate.

2.1.6 - CIM

“CIM” shall mean Common Information Model.

2.1.7 - CMP

“CMP” shall mean a Congestion Management Process.

2.1.8 - CPLE

"CPLE" shall mean the eastern BA of the DEP system.

2.1.9 - CPLW

“CPLW” shall mean the western BA of the DEP system.

2.1.10 - CTPS

“CTPS” shall mean the Coordinated Transmission Planning Study.

2.1.11 – DNR

“DNR” shall mean Designated Network Resource.

2.1.12 – DOM

"DOM" shall mean the system of Dominion Virginia Power Company

2.1.13 – EFOR

"EFOR" shall mean Equivalent Forced Outage Rate.

2.1.14 – EMS

"EMS" shall mean the respective Energy Management Systems utilized by the Parties to manage the flow of energy within their Regions.

2.1.15 – ERAG

"ERAG" shall mean the Eastern Interconnection Reliability Assessment Group.

2.1.16 – FERC

"FERC" shall mean the Federal Energy Regulatory Commission or any successor agency thereto.

2.1.17 – FTP

"FTP" shall mean the standardized file transfer protocol for data exchange.

2.1.18 – ICCP, ISN and ICCP/ISN

"ICCP", "ISN", and "ICCP/ISN" shall mean those common communication protocols adopted to standardize information exchange.

2.1.19 – IDC

"IDC" shall mean the NERC Interchange Distribution Calculator used for identifying and requesting congestion management relief.

2.1.20 – IROL

"IROL" shall mean Interconnected Reliability Operating Limit.

2.1.21 – ISN

"ISN" shall have the meaning referred to in the reference to ICCP.

2.1.22 – JPC

“JPC” shall mean the Joint Planning Committee.

2.1.23 – [Reserved]

2.1.24 – MMWG

“MMWG” shall mean the NERC working group that is charged with multi-regional modeling.

2.1.25 – MVAR

“MVAR” shall mean megavolt amp of reactive power.

2.1.26 - MWH

"MWH" shall mean megawatts per hour.

2.1.27 – NERC

“NERC” shall mean the North American Electric Reliability Corporation or successor organization, which has been certified by FERC as the Electric Reliability Organization pursuant to Section 215 of the Federal Power Act to establish and enforce Reliability Standards.

2.1.28 – OASIS

“OASIS” shall mean the Open Access Same-Time Information System required by FERC for the posting of market and transmission data on the Internet.

2.1.29 – OATT

“OATT” shall mean the applicable open access transmission tariff.

2.1.30 – OC

“OC” shall refer to the Operating Committee under this Agreement.

2.1.31 – PMAX

“PMAX” shall mean the maximum generator real power output reported in MWs on a seasonal basis.

2.1.32 – PMIN

“PMIN” shall mean the minimum generator real power output reported in MWs on a seasonal basis.

2.1.33 – QMIN

“QMIN” shall mean the minimum generator reactive power output reported in MVARs at full real power output of the unit.

2.1.34 – RC

“RC” shall mean Reliability Coordinator.

2.1.35 – RCF

“RCF” shall mean a Reciprocal Coordinated Flowgate.

2.1.36 – RCIS

“RCIS” shall mean the Reliability Coordinator Information System.

2.1.37 – RFC

“RFC” shall mean the Reliability First Corporation, a Regional Reliability Organization.

2.1.38 – RTO

“RTO” refers to Regional Transmission Organization as defined in FERC’s Order No. 2000, or PJM, as applicable.

2.1.39 – SERC

“SERC” shall mean the SERC Reliability Corporation, a Regional Reliability Organization.

2.1.40 – SCADA

“SCADA” refers to a supervisory control and data acquisition system.

2.1.41 – SDX System

“SDX System” shall mean the system used by NERC to exchange system data.

2.1.42 – SOL

“SOL” shall mean System Operating Limit.

2.1.43 – TLR

“TLR” shall mean the NERC Transmission Loading Relief Procedures used in the Eastern Interconnection as specified in NERC Operating Policies.

2.1.44 – TRM

“TRM” shall mean Transmission Reliability Margin.

2.1.45 – TTC

“TTC” shall mean Total Transfer Capability.

2.1.46 – VACAR

"VACAR" shall mean the northeastern region of SERC that includes systems located in the Virginia, North Carolina and South Carolina regions.

2.2 Definitions.

Any undefined, capitalized term used in this Agreement that is not defined in this Section shall have the meaning given in the preamble of this Agreement, and if not defined in the preamble, shall have the meaning given under industry custom, and where applicable, in accordance with Good Utility Practice.

2.2.1 – a & b multipliers

“a & b multipliers” shall mean the multipliers that are applied to TRM in the planning horizon and in the operating horizon to determine non-firm AFC/ATC. The “a” multiplier is applied to TRM in the planning horizon to determine non-firm AFC/ATC. The “b” multiplier is applied to TRM in the operating horizon to determine non-firm AFC/ATC. The “a & b” multipliers can vary between 0 and 1, inclusive. They are determined by individual transmission providers based on network reliability considerations.

2.2.2 – Agreement

“Agreement” shall have the meaning stated in the preamble.

2.2.3 – Available Flowgate Capability

“Available Flowgate Capability” shall have the meaning stated in Section 5.1.7.1.

2.2.4 – Available Flowgate Rating

“Available Flowgate Rating” shall mean the maximum amount of power that can flow across the applicable interface without overloading (either on an actual or contingency basis) any element of the Flowgate. The Flowgate rating is in units of megawatts. If the Flowgate is voltage or stability limited, a megawatt proxy is determined to ensure adequate voltages and stability condition.

2.2.5 – Available Transfer Capability

“Available Transfer Capability” shall mean the Total Transfer Capability less the projected loading across the interface, less TRM and CBM.

2.2.5a – Balancing Authority

“Balancing Authority” shall refer to the responsible entity that integrates resources plans ahead of time, maintain load-interchange –generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time. The term “Balancing Authority” as used herein is intended to be consistent with the definition as set forth in the NERC Glossary of Terms Used in Reliability Standards published on February 12, 2008.

2.2.5b – Balancing Authority Area

“Balancing Authority Area” shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The term “Balancing Authority Area” as used herein is intended to be consistent with the definition as set forth in the NERC Glossary of Terms Used in Reliability Standards published on February 12, 2008.

2.2.6 – Balancing Operating Reserves

"Balancing Operating Reserves" shall mean the charges and credits to resources operating at the direction of PJM in real time as described in Section 3.2.3 of Schedule 1 of the PJM Operating Agreement.

2.2.7 – Confidential Information

“Confidential Information” shall have the meaning stated in Section 19.1.

2.2.8 – Congestion Management Process

“Congestion Management Process” means a Congestion Management Process mutually agreed upon by both Parties that may be amended, revised, or restated from time to time.

2.2.9 – [Reserved]

[Reserved]

2.2.10 – Coordinated Operations

“Coordinated Operations” means all activities that will be undertaken by the Parties pursuant to this Agreement.

2.2.11 – Designated Network Resource

“Designated Network Resource” shall mean a firm MW resource delivered over a firm transmission path designated for serving network/ native load.

2.2.12 – Duke

"Duke" shall mean the system of the Duke Energy Carolinas, LLC.

2.2.13 – [Reserved]

2.2.14 – [Reserved]

2.2.15 – Effective Date

“Effective Date” shall have the meaning stated in Section 18.1.

2.2.16 – Existing Business

"Existing Business" shall mean the transmission commitments on a respective transmission provider's system at the time an ATC calculation is conducted.

2.2.17- - Flowgate

“Flowgate” shall mean a representative modeling of facilities or groups of facilities that may act as potential constraint points on the regional system.

2.2.18 – Flow Percentages

"Flow Percentages" shall have the meaning Section 12.3 of the Agreement.

2.2.19 – Good Utility Practice

“Good Utility Practice” shall mean any of the practices, methods, and acts engaged in or approved of by a majority 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, and acts generally accepted in the region.

2.2.20 – Governmental Authority

“Governmental Authority” shall mean any federal, state, regional, local, or foreign court, tribunal, government, governmental agency, military, governmental or regulatory body (including any stock exchange, automated quotation system, or self-regulatory body), or authority over the transmission and/or generation facilities of a Party or the Parties.

2.2.21 – Intellectual Property

“Intellectual Property” shall mean (i) ideas, designs, concepts, techniques, inventions, discoveries, or improvements, regardless of patentability, including without limitation patents, patent applications, mask works, trade secrets, and know-how; (ii) works of authorship, regardless of copyright ability, including

copyrights, and any moral rights recognized by law; and (iii) any other similar rights, in each case on a worldwide basis.

2.2.22 – Interconnected Reliability Operating Limit

“Interconnected Reliability Operating Limit” shall mean the value (such as MW, MVAR, Amperes, Frequency, or Volts) derived from, or a subset of, the System Operating Limits, which if exceeded, could expose a widespread area of the bulk electrical system to instability, uncontrolled separation(s) or cascading outages.

2.2.23 – Market Based Operating Entity

“Market-Based Operating Entity” shall mean an Operating Entity that operates a security constrained, bid-based economic dispatch bounded by a clearly defined market area.

2.2.24 – Market Flows

“Market Flows” shall mean the calculated energy flows on a specified Flowgate as a result of dispatch of generating resources within a Market Based Operating Entity’s market (excluding tagged transactions).

2.2.25 – NERC and Regional Reliability Standards

“NERC and Regional Reliability Standards” shall refer to the reliability standards developed by NERC and the applicable Regional Reliability Organization, and adopted by the Federal Energy Regulatory Commission as mandatory and enforceable.

2.2.26 – Network Upgrades

“Network Upgrades” shall mean those facilities located beyond the point of interconnection of a generating facility to the transmission grid.

2.2.27 – Notice

“Notice” shall have the meaning stated in Section 20.11.

2.2.28 – Operating Committee

“Operating Committee” shall have the meaning stated in Article 3.

2.2.29 – Operating Entity

“Operating Entity” shall mean an entity that operates and controls a portion of the bulk transmission system with the goal of ensuring reliable energy interchange between generators, loads, and other operating entities.

2.2.30 – Party or Parties

“Party” or “Parties” refers to each party to this Agreement or all, as applicable.

2.2.31 – PJM Mid-Atlantic

“PJM Mid-Atlantic” shall mean the mid-Atlantic region of PJM that consists of the systems of the original members of the PJM power pool.

2.2.32 – Real-time Settlement Interval

“Real-time Settlement Interval” shall mean the interval used by settlements, which shall be every five minutes.

2.2.33 – RCF Base Usage

“RCF Base Usage” shall mean the long-term firm and network service usage of RCFs.

2.2.34 – Region

“Region” shall mean the Balancing Authorities and transmission facilities with respect to which a Party serves as a transmission provider or Reliability Coordinator under NERC policies and procedures.

2.2.35 – Regional Reliability Organization

“Regional Reliability Organization” shall mean, with respect to a Balancing Authority, an entity approved by NERC to be responsible for reliability for one or more Balancing Authorities, and which has undertaken such responsibility for the applicable Balancing Authority.

2.2.36 – SCADA Data

“SCADA Data” shall mean the electric system security data that is used to monitor the electrical state of facilities, as specified in NERC policies and procedures.

2.2.37 – Scheduled Outages

“Scheduled Outages” shall mean the planned unavailability of transmission and/or generation facilities dispatched by a Party, as described in Article Seven of this Agreement, and do not include forced or other unplanned outages.

2.2.38 – SERC East RFC Working Group

"SERC East-RFC Working Group" shall mean the working group consisting of representatives from utilities located in the SERC reliability region and the eastern portion of the Reliability First Corporation reliability region.

2.2.39 – System Operating Limit

“System Operating Limit” shall mean the value (such as MW, MVAR, Amperes, Frequency, or Volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria.

2.2.40 Third Party

“Third Party” refers to any entity other than a Party to this Agreement.

2.2.41 – Total Transfer Capability

“Total Transfer Capability” shall mean the amount of electric energy that can be transferred over applicable transmission facilities in a reliable manner, generally the applicable rating of the applicable transmission facility.

2.2.42 – Transmission Reliability Margin

“Transmission Reliability Margin” shall mean that amount of transmission transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.

2.2.43 – VACAR/PJM Interface

"VACAR/PJM Interface" shall mean the transmission capability between PJM and the VACAR region of SERC.

2.2.44 – VACAR South

“VACAR South” shall mean the VACAR companies that are not located in the PJM BA area.

2.2.45 – Voltage and Reactive Power Coordination Procedures

“Voltage and Reactive Power Coordination Procedures” shall have the meaning given under Article Eleven.

2.3 Rules of Construction

2.3.1 No Interpretation Against Drafter.

Each Party participated in the drafting of this Agreement and each Party agrees that no rule of construction or interpretation against the drafter shall be applied to the construction or the interpretation of this Agreement.

2.3.2 Incorporation of Preamble and Recitals.

The Preamble and Recitals of this Agreement are incorporated into the terms and conditions of this Agreement and made a part thereof.

2.3.3 Rules of Interpretation.

Defined terms in the singular shall include the plural and vice versa, and the masculine, feminine, or neuter gender shall include all genders. Whenever the words “include,” “includes,” or “including” are used in this Agreement, they are not limiting and have the meaning as if followed by the words “without limitation.” The word “Section” refers to the applicable section of this Agreement and, unless otherwise stated, includes all subsections thereof. The word “Article” refers to articles of this Agreement.

2.3.4 NERC and Regional Reliability Organization Policies, Procedures and Standards.

All respective rights and obligations of a Party to this Agreement shall be conducted in a manner that meet or exceed the applicable NERC and Regional Reliability Organization policies, procedures, and standards; as such policies, procedures, and standards may be revised from time to time.

2.3.5 Geographic Scope.

Each Party will perform this Agreement with respect to each Balance Authority for which the Party serves as transmission provider.

**ARTICLE THREE -
OVERVIEW, ADMINISTRATION, AND
RELATIONSHIP WITH OTHER AGREEMENTS**

3.1 Overview and Scope of this Agreement.

Subject to Section 3.2, this Agreement provides the following:

3.1.1

The equitable and economical management of congestion on Flowgates affected by flows of PJM orDEP.

3.1.2

Certain arrangements among the Parties for coordination of their systems.

3.1.3

Certain arrangements among the Parties for administration of this Agreement.

3.1.4

Certain arrangements among the Parties providing for mitigation and management of congestion on facilities impacted by both systems.

3.2 Functions of Operating Committee

To administer the arrangements under this Agreement, the Parties shall appoint representatives to the Operating Committee (“OC”).

3.2.1

The OC shall have the following duties and responsibilities with respect to this Agreement:

- 3.2.1.1** Determine the date(s) for implementing the various parts of this Agreement in accordance with Section 18.1;
- 3.2.1.2** Meet or hold a web or teleconference as required, but no less than semi-annually, to address any issues associated with this Agreement that a Party may raise and to determine whether any changes to this Agreement, or procedures employed under this Agreement, would enhance reliability, efficiency, or economy;
- 3.2.1.3** Conduct additional meetings upon Notice given by any Party, provided that the Notice specifies the reason(s) for the requested meeting;
- 3.2.1.4** Conduct dispute resolution in accordance with Article Sixteen of this Agreement;
- 3.2.1.5** Initiate process reviews at the request of any Party for activities undertaken in the performance of this Agreement;
- 3.2.1.6** In its discretion, monitor, evaluate, and collaboratively seek to improve a congestion management process; and
- 3.2.1.7** In its discretion, take other actions, including the establishment of subcommittees and/or task forces, to address any issues that the OC deems necessary in the implementation of this Agreement.

3.2.2 Operating Committee Representatives.

Upon execution of this Agreement, each Party shall designate a primary and alternate representative to the OC and shall inform the other Parties of its designated representatives by Notice. A Party may change its designated OC representatives at any time, provided that timely Notice is given to the other Parties. Each designated OC representative shall have the authority to make decisions on issues that arise during the performance of this Agreement. The costs and expenses associated with each Party's designated OC representatives shall be the responsibility of the designating Party.

3.2.3 Limitations Upon Authority of Operating Committee.

Any decision to implement new arrangements or protocols under this Agreement that any Party determines, in its sole discretion, would materially enhance its costs of performance must be by unanimous consent of the Parties' OC representatives.

3.3 Ongoing Review and Revisions.

The Parties have agreed to the terms and conditions of this Agreement as their respective systems exist and are contemplated as of the Effective Date. The Parties expect that these systems and technology applicable to those systems and to the collection and exchange of data will change from time to time throughout the term of this Agreement, including changes to the boundaries of PJM in its capacity as an RTO, changes to the boundaries of, or identities of, Balancing Authorities for which a Party serves as Reliability Coordinator, and changes to the Balancing Authorities included in the security constrained, bid-based economic dispatch markets administered by PJM. The Parties agree that the objectives of this Agreement can be fulfilled only if the Parties, from time to time, review and, as appropriate, revise the requirements stated herein in response to changes, including deleting, adding, or revising requirements and protocols. Each Party shall negotiate in good faith in response to such revisions the other Parties may propose from time to time. Nothing in this Agreement, however, shall require any Party to reach agreement with respect to any such changes, or to purchase, install, or otherwise implement new equipment, software, or devices, or functions except as required to perform this Agreement.

**ARTICLE FOUR -
EXCHANGE OF INFORMATION AND DATA**

4.1 Exchange of Operating Data.

As requested, the Parties will exchange the following types of data and information: (a) Real-Time and Projected Operating Data; (b) SCADA Data; (c) EMS Models; (d) Operations Planning Data; and (e) Planning Information and Models. The frequency of exchange will be as stated with respect to specific exchanges provided under this Article or, if no frequency is stated, then the frequency shall be as necessary or appropriate to support the purpose of the exchange or otherwise in accordance with Good Utility Practice. Nothing in this Agreement shall require a Party to provide or exchange information that it does not possess or cannot reasonably obtain.

To facilitate the exchange of all such data, each Party will designate to each other Party's Operating Committee Representative, a contact to be available twenty-four (24) hours each day, seven (7) days per week, and an alternate contact to act in the absence or unavailability of the primary contact, to respond to any inquiries. With respect to each contact and alternate, each Party shall provide the name, telephone number, e-mail address, and fax number. Each Party may change a designee from time to time by Notice to the other Party's Operating Representative.

The Parties agree to exchange data in a timely manner consistent with existing defined formats or such other formats to which the Parties may agree. If any required data exchange format has not been agreed upon as of the Effective Date, or if a Party determines that an agreed format should be revised, a Party shall give Notice of the need for an agreed format or revision and the Parties will jointly seek to complete development of the format within thirty (30) days of such Notice.

4.2 Cost of Data and Information Exchange.

Each Party shall bear its own cost of providing data and information to the other Party as required under this Article Four and otherwise under this Agreement.

4.3 Exchange of Information.

The Parties may share information otherwise not contemplated by this Article 4 as mutually agreed upon by the Parties.

4.4 No Duty to Disclose Confidential Information.

Notwithstanding anything to the contrary in this Agreement, the parties shall have no obligation to disclose Confidential Information or data to the extent such disclosure of information or data would be a violation of or inconsistent with the terms and conditions of the PJM Amended and Restated Operating Agreement, either Party's OATT, any other agreement, or applicable state or federal regulation or law.

**ARTICLE FIVE -
TTC/ATC/AFC CALCULATIONS**

5.1 TTC/ATC/AFC Protocols.

The Parties will use the mutually agreed upon mechanism(s) to exchange the data need to complete TTC/ATC/AFC calculations.

5.1.1 Each Party will provide data to the other Party as necessary to support TTC/ATC/AFC calculations.

This data may include but is not limited to Scheduled Outages of generation resources and transmission facilities, dispatch order, transmission interchange schedules, transmission reservations, load forecast data, calculated AFC values, Flowgate ratings and Flowgate definitions for Flowgates included in each Party's AFC calculations.

5.1.2 Each Party will respect each other Party's Flowgates as follows:

Each Party will limit approvals of transmission service reservations, including roll-over transmission service, so as to not exceed the lesser of the sum of the thermal or stability capabilities of the tie lines that interconnect the Parties, provided that firm transmission service customers rollover rights retain the rollover rights and reservation priority granted to them under the applicable Party's OATT and further provided that if explicitly stated in the applicable service agreement, a Party may limit rollover rights for new long-term firm service if there is not enough AFC/ATC to accommodate rollover rights beyond the initial term.

5.1.3 Power System Model Updates.

The Parties agree to exchange TTC/ATC/AFC calculation models of their transmission systems in a reasonable timeframe when requested.

**ARTICLE SIX -
[Reserved]**

**ARTICLE SEVEN -
COORDINATION OF SCHEDULED OUTAGES**

7.1 Operating Protocols for Coordinating Scheduled Outages.

The Parties agree to the following with respect to transmission and generation Scheduled Outage coordination.

7.1.1 Exchange of Transmission and Generation Scheduled Outage Data.

Upon a Party's request, the projected status of generation and transmission availability will be communicated among the Parties, subject to data confidentiality agreements. All requested and available information regardless of scheduled date will be shared. The Parties shall exchange the most current information on proposed Scheduled Outage information and provide a timely response on potential impacts of proposed Scheduled Outages.

The Parties agree that this information will be shared promptly upon its availability, but no less than daily and more often as required by system conditions. The Parties shall utilize the NERC SDX (or other jointly developed, common format as determined by the OC) for the exchange of this information. The information shall include the data required for the SDX per NERC and Regional Reliability Standards.

Each Party will also provide information independently on approved and anticipated Scheduled Outages formatted as required for the NERC SDX System.

7.1.2 Evaluation and Coordination of Transmission and Generation Scheduled Outages.

The Parties will utilize network applications to analyze planned critical facility maintenance to determine its effects on the reliability of the transmission system. Each Party's Scheduled Outage analysis will consider the impact of its critical Scheduled Outages on the other Party's system reliability, in addition to its own.

No Party has the authority to cancel another Party's Scheduled Outage (except transmission facilities interconnecting the two Parties' transmission systems). However, the Parties will work together to resolve any identified Scheduled Outage conflicts. The outage coordination could include the possibility of changing the current outage schedule if required. If analysis of Scheduled Outages indicates unacceptable system conditions, the Parties will work with one another and the facility owner(s), as necessary, to provide remedial steps to be taken in advance of proposed maintenance. If an operating procedure cannot be developed, and a change to the proposed schedule is necessary based on significant impact, the Parties shall discuss the facts involved, and make every effort to effect the requested schedule change.

If the Parties have identified a sub-set of facilities that would be have significant impacts to reliability during an outage, the Parties will notify each other of applicable emergency maintenance and forced outages on those previously identified facilities as soon as practicable after such conditions are indentified. In relation to these outages, the Parties will evaluate the impact of emergency and forced outages on the Parties' systems and work together to develop remedial and appropriate steps as necessary.

Changes to Scheduled Outages of these facilities, both before or after the work has started, may require additional review. Each Party will consider the impact of these changes on the other Party's system reliability, in addition to its own. The Parties will contact each other as soon as possible if these changes result in unacceptable system conditions, and will work with one another to develop remedial steps as necessary.

**ARTICLE EIGHT -
PRINCIPLES CONCERNING JOINT OPERATIONS IN EMERGENCIES**

8.1 Emergency Operating Principles.

8.1.1

In the event an emergency condition is declared that requires PJM / DEP coordination in accordance with a Party's published operating protocols, the Parties will coordinate respective actions to provide immediate relief until the declaring Party eliminates the declaration of emergency. If the emergency response allows for coordinating with the other Party before action must be taken, the normal procedures for action requests will be followed.

8.1.2

In furtherance of maintaining system stability, and providing prompt response to identified issues the Parties agree that in situations where there is an actual IROL violation and/or the system is on the verge of imminent collapse, and when there exists an applicable emergency principles or operating guide, each Party will allow the affected Party to take immediate steps by modifying the normal procedures for action requests so that the Parties and affected operating entities can communicate and coordinate simultaneously via telephone conference call or other appropriate means.

8.1.3

The Parties will use all applicable emergency principles and operating guides available to them. Furthermore, the Parties will jointly develop and commit to additional emergency principles and operating guides if the need for such procedures arises.

8.1.4

TLR Level 5 may be implemented when, in the judgment of a Party, the system is in an emergency condition that is characterized by the potential, either imminently or for the next contingency, for system instability or cascading, or for equipment loading or voltages significantly beyond applicable operating limits, such that stability of the system cannot be assured, or to prevent a condition or situation that in the judgment of a Party is imminently likely to endanger life or property. In the event that either it becomes necessary for a Party or its RC to issue a TLR Level 5 for an area that is in close electrical proximity to any of the Parties' Regions, the affected Parties or their RC will either issue a TLR Level 5 or redispatch without declaring a TLR. Such redispatch, absent a declaration of a TLR Level 5, will include redispatching network customers back to their DNRs if it will minimize the load at risk, and take action(s) in kind to address the situation that prompted the TLR. These actions may include:

- (a) Curtailment of equivalent amounts of firm point-to-point transactions within the affected Parties' or Party's Balancing Authorities;
- (b) Redispatching of generation within the affected Parties' or Party's Balancing Authorities which may include minimizing the load at risk by restoring network customers to their DNRs; and
- (c) Load shedding within the affected Parties.

8.1.5

In situations where an actual IROL violation exists, or the next contingency would exist, and the transmission system is currently, or for the next contingency would be, on the verge of imminent collapse, and there is not an existing emergency principle or operating guide, each Party will receive, and subject to the next two sentences of this Section implement: (i) the instruction of the affected Party and communicate the instruction to the affected entity within its own boundary, or; (ii) utilize telephone conference call capabilities or other appropriate means of communication to allow simultaneous coordination/communication between the Parties and the affected entity. All occurrences of this kind may be reviewed by both Parties after the fact, but the instruction of the affected Party shall be implemented when issued. Provided, however, a Party may delay implementation in instances where a Party concludes that the requested action will result in a more serious condition on the transmission system, or the requested action is imminently likely to endanger life or property. Financial considerations shall have no bearing on actions taken to prevent the collapse of the transmission system.

8.1.6

In a situation where an SOL violation exists within a Party's Region, or the next contingency would exist, the Parties will work together as necessary, following Good Utility Practices, and take action in kind as required to address the situation.

8.1.7

To the extent a Party is an RC with respect to a Balancing Authority Area and/or Balancing Authority, the Party will also coordinate in that capacity with the other Party's RC and, as may be provided under arrangements other than this Agreement, direct emergency action on the part of generation or transmission within such Balance Authorities to protect the reliability of the network. Each RC that is Party to this agreement shall exercise such authority in accord with Good Utility Practice as required to resolve emergency conditions in another Party's Region of which it is aware and, in conjunction with any applicable stakeholder processes, will develop emergency operating procedures.

8.2 Power System Restoration.

Effective procedures for restoration of the network require coordination and communication at all levels of the Parties' organizations and with their membership. During power system restoration, the Parties will coordinate their actions with each other, as well as with other appropriate entities in order to restore the transmission system as safely and efficiently as possible. In order to enhance the effectiveness of actual restoration operations among the Parties, the Parties will exchange their respective restoration plan and coordinate as required by NERC and Regional Reliability Standards.

8.3 Operating the Most Conservative Result.

When one Party identifies an overload/emergency situation that may impact the other Party's system and the affected Party's results/systems do not observe a similar situation, the Parties will operate to the most conservative result until the Parties can identify the reasons for these difference(s).

8.4 Emergency Energy.

The Parties will exchange emergency energy as requested and/or required to the extent consistent with NERC's Emergency Preparedness and Operations ("EOP"), or other applicable, Reliability Standards.

8.5 Costs of Compliance with Emergency Operating Principles and Procedures.

In accordance with each Party's OATT, or other applicable agreements, each Party is to bear its own costs of compliance with this Article. Purchases of emergency energy by PJM under this Article in order to address the flow of DEP, or purchases of emergency energy by DEP under this Article in order to address the flow of PJM, shall occur in accordance with this Agreement.

**ARTICLE NINE -
COORDINATED TRANSMISSION PLANNING STUDIES**

9.1 Scope of Activities.

To facilitate the coordination of transmission planning activities, the parties will:

9.1.1

Schedule and oversee an annual meeting of the Parties to review issues that may impact long range planning and the coordination of planning, including Designated Network Resources, between and among the systems.

9.1.2

Notify the other Party concerning transmission service and generator interconnection activity on its system that it recognizes as potentially impacting to the other Party's system.

9.1.3

Perform a Coordinated Transmission Planning Study (CTPS), as mutually agreed, to evaluate and recommend solutions related to the issues identified through the annual meeting of the Parties.

9.1.4

Coordinate planning activities under this Article Nine, including the exchange of data under this Article and developing necessary report and study protocols, as mutually agreed.

9.2 Data and Information Exchange.

When mutually agreeable, each Party shall provide the other Party with the following data and information.

9.2.1

Data required for the performance of a CTPS including the development of load flow cases, short-circuit cases, and stability cases, including the timing of planned enhancements.

9.2.2

Transmission system maps of the Party's bulk transmission system and lower voltage transmission system maps that are relevant to the coordination of planning between or among the systems.

9.2.3

As studies are needed, load flow, short-circuit, and stability data will be exchanged in a format acceptable to both Parties.

**ARTICLE TEN --
JOINT CHECKOUT PROCEDURES**

10.1 Interchange Scheduling Protocols.

The Parties will adhere to the following interchange scheduling protocols:

10.1.2

Each Party will conduct all checkouts with first tier Balancing Authorities. A first tier Balancing Authority is any Balancing Authority that is directly connected to any Party's members' Balancing Authority.

10.1.3

The Parties will require all interchange schedules to be submitted in accordance with the NERC's Interchange Scheduling and Coordination ("INT"), or other applicable, Reliability Standards. For reserve sharing and other emergency schedules that are exempt from INT Reliability Standard compliance (as per INT-010 - Interchange Coordination Exemptions), the Parties will enter after the fact interchange into their respective scheduling systems to facilitate after the fact checkout between the Parties.

10.1.4

If a specific interchange schedule is identified as the cause of a checkout discrepancy, the Parties will work in unison to modify the interchange schedule as soon as practical via the curtailment process. If the discrepancy is identified before the interchange schedule has started, then the Parties will immediately make a curtailment effective at the start of the interchange schedule. If the interchange schedule has already started, then the Parties will make the curtailment effective at the next quarter hour increment. If a checkout discrepancy cannot be resolved between the Parties, then the Parties will curtail the interchange schedule to 0 MW for the duration of the discrepancy.

10.1.5

For entities that do not use the respective Parties' electronic scheduling interfaces, the Parties will contact the non-member first-tier entities by telephone to perform checkouts.

10.1.6

The Parties will perform the following types of interchange schedule checkouts:

- (a) Pre-schedule (Day-Ahead), on a daily basis.
- (b) Hourly Before the Fact (Real-Time):
 - (i) Hourly before the fact checkout includes the verification of import and export totals, and is not limited to net scheduled interchange for Balancing Authorities with the ability to determine such net scheduled interchange. At a future time, the Parties may checkout individual interchange schedules;
 - (ii) Hourly checkout is performed starting at the half hour and ending at the ramp hour;
 - (iii) Intra-hour checkout/schedule confirmation will occur as required due to intra-hour scheduled changes.
- (c) After the fact (day end) daily.
- (d) After the fact (monthly) on a daily month to date basis (usually via email), starting on the first business day of the following month and ending by the tenth (10th) business day of that month.

10.1.7

The Parties will require that each of these checkouts be performed with first tier Balancing Authorities. If a checkout discrepancy is discovered, the Parties will use the NERC tag to determine where the discrepancy exists. The Parties will require any entity that conducts business within its Region to checkout with the applicable Party by using NERC tag numbers exclusively. Special naming conventions used by that entity or other naming conventions given to schedules by other entities will not be permitted.

**ARTICLE ELEVEN -
VOLTAGE CONTROL AND REACTIVE POWER COORDINATION**

11.1

Each Party shall maintain adequate reactive resources to supply its own reactive load and losses at all load levels.

11.2

Each Party shall determine adequate and reliable voltage schedules considering actual and post-contingency conditions. Each Party shall maintain operational or functional control of reactive sources within its System, and will direct adjustments to voltage schedules at appropriate facilities to maintain an adequate voltage profile..

11.3

Each Party will implement or direct voltage schedule changes requested by the other Party, provided that a Party may decline a requested change if the change would result in equipment violations or reduce the effective operation of its facilities. A Party that declines a requested change must inform the requesting Party that the request cannot be granted and state the reason for denial.

**ARTICLE TWELVE -
MANAGING PARALLEL FLOW ON THE VACAR/PJM INTERFACE**

12.1 Schedule of Parties Adopting Local Transmission Loading Relief Procedures.

Article Twelve is intended to limit the ATC to minimize the need of TLR. In this regard PJM and DEP have a local relief procedure as specified within the OATT (see, Second Revised Sheet 546A) and at Appendix A of this Agreement.

12.2 Calculate ATC Value on VACAR/PJM Interface.

Additional parallel flow management shall be accomplished by PJM supporting the DEP/Duke Energy Carolinas non-firm parallel flow management agreement by calculating a single path, non-firm ATC value for the combined Duke/DEP interface with PJM. This process results in a single ATC value for CPLW, CPLE and Duke paths to/from PJM. Parties, through the OC, shall determine the ATC value on the VACAR/PJM Interface. The ATC value will be calculated using CPLW, CPLE, and Duke as one source/sink and PJM Mid-Atlantic as the other source/sink.

**ARTICLE THIRTEEN --
LOSS COMPENSATION PROCESS FOR NON-FIRM POWER FLOWS**

13.1

The Parties agree to develop a process to address conditions when the non-firm power flow on one system causes parallel power flow on the neighboring system resulting in an increase in losses.

13.2

The Parties agree to develop the data exchange necessary to implement the process after the design is completed.

13.3

The Parties shall work diligently and in good faith to develop this process following the Effective Date of this Agreement.

**ARTICLE FOURTEEN –
[RESERVED]**

**ARTICLE FIFTEEN -
ACCOUNTING AND BILLING**

15.1 Revenue Distribution.

This Agreement does not modify any FERC approved agreement between a Party and the owners of the transmission facilities over which the Party exercises control with regard to revenue distribution. All distribution of revenue received under this Agreement shall be distributed by the Party receiving such revenue in accordance with the terms of such Party's agreement with the transmission owners.

15.2 Billing and Invoicing Procedures.

Each Party shall render invoices to the other Party for amounts due under this Agreement in accordance with its customary billing practices (or as otherwise agreed between the Parties) and payment shall be due in accordance with the invoicing Party's customary payment requirements (unless otherwise agreed). All payments shall be made in immediately available funds payable to the invoicing Party by wire transfer pursuant to instructions set out by the Parties from time to time. Interest on any amounts not paid when due shall be calculated in accordance with the methodology specified for interest on refunds in the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii).

15.3 Access to Information by the Parties.

Each Party grants the other Party, acting through its officers, employees and agents, such access to the books and records of the other as is reasonably necessary to audit and verify the accuracy of charges between the Parties under this Agreement. Such access shall be at the location of the Party whose books and records are being reviewed pursuant to this Agreement and shall occur during regular business hours.

**ARTICLE SIXTEEN --
DISPUTE RESOLUTION PROCEDURES**

16.1 Dispute Resolution Procedures.

The Parties shall attempt in good faith to achieve consensus with respect to all matters arising under this Agreement and to use reasonable efforts through good faith discussion and negotiation to avoid and resolve disputes that could delay or impede a Party from receiving the benefits of this Agreement. These dispute resolution procedures apply to any dispute that arises from a Party's performance of, or failure to perform, in compliance with this Agreement and which the Parties are unable to resolve prior to invocation of these procedures.

16.1.1 - Step One.

In the event a dispute arises, a Party shall give Notice of the dispute to the other Party. Within ten (10) days of such Notice, the OC shall meet and the Parties will attempt to resolve the Dispute by reasonable efforts through good faith discussion and negotiation. In addition to a Party's OC representative, a Party shall also be permitted to bring no more than two (2) additional individuals to OC meetings held under this Step One as subject matter experts; however, all such participants must be employees of the Party they represent. In addition, each Party may bring no more than two (2) attorneys.

16.1.2 Step Two.

In the event the OC is unable to resolve the dispute under Step One within twenty (20) days of the giving of Notice as provided under Section 16.1.1, and only in such event, a Party shall be entitled to invoke Step Two. A Party may invoke Step Two by giving Notice thereof to the OC no later than thirty (30) days after the meeting of the OC under Step One. **IF A PARTY DOES NOT INVOKE STEP TWO WITHIN SUCH THIRTY (30)-DAY PERIOD, IT WILL BE DEEMED TO HAVE WAIVED ITS RIGHTS WITH RESPECT TO THE DISPUTE, AND SHALL BE PRECLUDED FROM PURSUING ITS RIGHTS OR DEFENDING UNDER STEP TWO OR STEP THREE.** In the event a Party invokes Step Two, the OC shall, in writing, and no later than five (5) days after receipt of the Notice, refer the dispute in writing for consideration to the appropriate senior vice president of the applicable Parties. Such officers shall meet in person no later than fourteen (14) days after such referral, and shall make a good faith effort to resolve the dispute. The Parties shall exchange written position papers concerning the dispute no later than forty-eight (48) hours in advance of such meeting. In the event the Parties fail to resolve the dispute under Step Two, any one of the disputing Parties shall be entitled to invoke Step Three.

16.1.3 Step Three.

Upon demand of either Party, the dispute shall be referred to the FERC's Office of Dispute Resolution for mediation, and upon a Party's determination at any point in the mediation that mediation has failed to resolve the dispute, either Party may seek formal resolution by initiating a proceeding with FERC

16.1.4 Exceptions.

In the event of disputes involving Confidential Information, infringement or ownership of Intellectual Property or rights pertaining thereto, or any dispute where a Party seeks temporary or preliminary injunctive relief to avoid alleged immediate and irreparable harm, the procedures stated in this Article shall apply, but shall not preclude a Party from seeking such temporary or preliminary injunctive relief, provided that if such a Party seeks such judicial relief but fails to obtain it, the Party seeking such relief shall pay the reasonable attorneys' fees and costs of the other Party or Parties incurred with respect to opposing such relief.

**ARTICLE SEVENTEEN -
RETAINED RIGHTS OF PARTIES**

17.1 Parties Entitled to Act Separately.

This Agreement does not create or establish, and shall not be construed to create or establish, any partnership or joint venture between or among any of the Parties. This Agreement establishes terms and conditions solely of a contractual relationship, among independent entities, to facilitate the achievement of the joint objectives described in the Agreement. The contractual relationship established hereunder implies no duties or obligations among the Parties except as specified expressly herein. All obligations hereunder shall be subject to, and performed in a manner that complies with each Party's internal requirements; provided, however, this sentence shall not limit any payment obligation, or indemnity obligation under Section 20.3.

**ARTICLE EIGHTEEN -
EFFECTIVE DATE, IMPLEMENTATION, TERM AND TERMINATION**

18.1 Effective Date; Implementation.

This Agreement shall become effective on the effective date established or accepted by FERC ("Effective Date"). Commencing with the Effective Date, the Parties shall commence and continue efforts to implement other provisions of this Agreement on dates determined by the OC, which dates shall be the earliest dates reasonably feasible for both Parties.

18.2 Term.

This Agreement shall continue in full force and effect for a term of ten (10) years, and shall continue year to year thereafter, unless terminated earlier in accordance with the provisions of this Agreement.

18.3 Right of a Party to Terminate.

18.3.1

DEP may terminate this Agreement at any time upon not less than twelve (12) months' Notice to PJM.

18.3.2

PJM may terminate this Agreement at any time upon not less than twelve (12) months' Notice to DEP.

18.3.3

Any such termination shall not affect the Parties' obligations to comply with and honor the terms and conditions of the settlement agreement entered into by the Parties in North Carolina Utilities Commission Docket No. E-22, Sub 418.

18.4 Survival.

The applicable provisions of this Agreement shall continue in effect after any termination of this Agreement to provide for adjustments and payments under Article Sixteen, dispute resolution, determination and enforcement of liability, and indemnification, arising from acts or events that occurred during the period this Agreement was in effect.

18.5 Post-Termination Cooperation.

Following any termination of this Agreement, all Parties shall thereafter cooperate fully and work diligently in good faith to achieve an orderly resolution of all matters resulting from such termination.

**ARTICLE NINETEEN -
CONFIDENTIAL INFORMATION**

19.1 Definition.

The term “Confidential Information” shall mean: (a) all data and information, whether furnished before or after the execution of this Agreement, whether oral, written, or recorded/electronic, and regardless of the manner in which it is furnished, that is marked “Confidential” or “Proprietary” or which under all of the circumstances should be treated as confidential or proprietary; (b) any data or information deemed confidential under some other form of confidentiality agreement or tariff provided to a Party by a generator; (c) all reports, summaries, compilations, analyses, notes, or any other data or information of a Party hereto which are based on, contain, or reflect any Confidential Information; (d) applicable material deemed Confidential Information by the appropriate PJM stakeholder group; and (e) any data and information which, if disclosed by a transmission function employee of a utility regulated by the FERC to a market function employee of the same utility system, other than by public posting, would violate the FERC’s Standards of Conduct set forth in 18 C.F.R. §§ 358.1-358.8 and the Parties’ Standards of Conduct on file with the FERC. The Parties agree that Confidential Information encompasses commercially sensitive and proprietary trade secret information.

Certain information exchanged by the Parties may be CEII, as that term is defined by the FERC’s regulations at 18 C.F.R. 388.13. Such information includes, but is not limited to, power flow information, files used in conjunction with power flows such as contingency and monitored element files, and information included in FERC Form No. 715, Parts 2, 3 and 6. Each individual that has access to CEII of a transmission operator shall fully comply with and abide by that Party’s CEII process prior to receiving any CEII under this Agreement. In the event that information qualifies as both Confidential Information and CEII, the more restrictive of the provisions applicable to either CEII or Confidential Information shall apply. Each Party shall be liable for any breach of this Agreement by any of its receiving persons.

19.2 Protection.

During the course of the Parties' performance under this Agreement, a Party may receive or become exposed to Confidential Information. Except as set forth herein, the Parties agree to keep in confidence, and not to copy, disclose, or distribute any Confidential Information or any part thereof, without the prior written permission of the issuing Party. In addition, each Party shall ensure that its employees, its agents, its subcontractors, and its subcontractors' employees, and agents to whom Confidential Information is given or exposed, agree to be bound by the terms and conditions contained herein. Each Party shall be liable for any breach of this Article by its employees, its agents, its subcontractors, and its subcontractors' employees and agents.

19.3 Scope.

This obligation of confidentiality shall not extend to data and information that, at no fault of a recipient Party, is or was: (a) in the public domain or generally available or known to the public; (b) disclosed to a recipient by a non-Party who had a legal right to do so; (c) independently developed by a Party or known to such Party prior to its disclosure hereunder; and (d) which is required to be disclosed by subpoena, law, or other directive of a Governmental Authority.

19.4 Standard of Care.

Each Party shall protect Confidential Information from disclosure, dissemination, or publication. Regardless of whether a Party is subject to the jurisdiction of the FERC under the Federal Power Act, and regardless of whether a Party is a RTO, each Party agrees to restrict access to all Confidential Information to only those persons authorized to view such information: (a) by the FERC's Standards of Conduct, 18 C.F.R. §§ 358.1-358.8 or, if more restrictive, (b) by such Party's board resolutions, tariff provisions, or other internal policies governing access to, and the sharing of, energy market or transmission system information.

19.5 Required Disclosure.

If a Governmental Authority requests or requires a Party to disclose any Confidential Information, such Party shall provide the supplying Party with prompt Notice of such request or requirement so that the supplying Party may seek an appropriate protective order or other appropriate remedy or waive compliance with the provisions of this Agreement. Notwithstanding the absence of a protective order or a waiver, a Party shall disclose only such Confidential Information, which it is legally required to disclose. Each Party shall use reasonable efforts to obtain reliable assurances that confidential treatment will be accorded to Confidential Information required to be disclosed.

If a Party is required to disclose any Confidential Information (the Disclosing Party) under this Section, a Party supplying such Confidential Information (the Supplying Party) shall have the right to immediately suspend supplying such Confidential Information to the Disclosing Party. In that event, the Parties shall meet as soon as practicable in an effort to resolve any and all issues associated with the required disclosure of such Confidential Information, and the likelihood of additional disclosures of such Confidential Information. If the Parties are unable to resolve those issues within ten (10) days, notwithstanding Section 18.3, the Supplying Party shall have the right to terminate this Agreement immediately.

19.6 Return of Confidential Information.

All Confidential Information provided by the supplying Party shall be returned by the receiving Party to the supplying Party promptly upon request. Upon termination or expiration of this Agreement, a Party shall use reasonable efforts to destroy, erase, delete, or return to the supplying Party any and all written or electronic Confidential Information. In no event shall a receiving Party retain copies of any Confidential Information provided by a supplying Party.

19.7 Equitable Relief.

Each Party acknowledges that remedies at law are inadequate to protect against breach of the covenants and agreements in this Article, and hereby in advance agrees, without prejudice to any rights to judicial relief that it may otherwise have, to the granting of equitable relief, including injunction, in the supplying Party's favor without proof of actual damages. In addition to the equitable relief referred to in this Section, a supplying Party shall only be entitled to recover from a receiving Party any and all gains wrongfully acquired, directly or indirectly, from a receiving Party's unauthorized disclosure of Confidential Information.

**ARTICLE TWENTY -
ADDITIONAL PROVISIONS**

20.1 Unauthorized Transfer of Third-Party Intellectual Property.

In the performance of this Agreement, no party shall transfer to another party any Intellectual Property, the use of which by another Party would constitute an infringement of the rights of any Third Party. In the event such transfer occurs, whether or not inadvertent, the transferring Party shall, promptly upon learning of the transfer, provide Notice to the receiving Party and upon receipt of such Notice the receiving Party shall take reasonable steps to avoid claims and mitigate losses.

20.2 Intellectual Property Developed Under This Agreement.

If during the term of this Agreement, the Parties mutually develop any new Intellectual Property that is reduced to writing or any tangible form, the Parties shall negotiate in good faith concerning the ownership and licensing of such Intellectual Property.

20.3 Indemnification.

Each Party will defend, indemnify, and hold the other Party harmless from all actual losses, damages, liabilities, claims, expenses, causes of action, and judgments (collectively, "Losses"), brought or obtained by any Third Party against such Party, only to the extent that such Losses arise directly from:

- (a) Gross negligence, recklessness, or willful misconduct of such Party or any of its agents or employees, in the performance of this Agreement, except to the extent the Losses arise (i) from gross negligence, recklessness, willful misconduct or breach of contract or law by the other Party or such other Party's agents or employees, or (ii) as a consequence of strict liability imposed as a matter of law upon the other Party, or such other Party's agents or employees;
- (b) Any claim that such Party violated any copyright, patent, trademark, license, or other intellectual property right of a Third Party in the performance of this Agreement;
- (c) Any claim arising from the transfer of Intellectual Property in violation of Section 16.1; or
- (d) Any claim that such Party caused bodily injury to an employee of Third Party due to gross negligence, recklessness, or willful conduct of such Party.

20.4 Limitation of Liability.

Except as set forth in this Article: (a) no Party shall be liable to the other Party, directly or indirectly, for any damages or losses of any kind sustained due to any failure to perform its obligations under this Agreement, unless such failure to perform was malicious or reckless; and (b) any liability of a Party to the other Party shall be limited to direct damages, and no lost profits, damages to compensate for lost goodwill, consequential damages, or punitive damages shall be sought or awarded.

20.5 Permitted Assignments.

This Agreement may not be assigned by any Party except: (a) with the written consent of the non-assigning Party, which consent may be withheld in such Party's 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 Party shall be deemed to have consented to such adoption.

20.6 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;.

20.7 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 Party 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.

20.8 Amendment.

No amendment of or modification to this Agreement shall be made or become enforceable except by a written instrument duly executed by both Parties.

20.9 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.

20.10 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.

20.11 Notices.

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

PJM:	Frederick Bresler III Senior Vice President, Operations and Markets PJM Interconnection, L.L.C. 2750 Monroe Blvd. Audubon, PA 19403 Tel: (610) 666-8249 Email: Stu.Bresler@pjm.com
DEP:	V. Nelson Peeler Senior Vice President and Chief Transmission Officer Duke Energy Progress, LLC 526 S. Church Street (EC3XP) Charlotte, NC 28202 Tel: (704) 382-3851 Email: nelson.peeler@duke-energy.com

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

20.12 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.

20.13 Prior Agreements; Entire Agreement.

Except for the settlement agreement entered into by the Parties in North Carolina Utilities Commission Docket No. E-22, Sub 418, 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.

This Agreement shall not be interpreted or construed as affecting, rescinding or amending any existing agreement between Dominion Resources and DEP.

DUKE ENERGY PROGRESS, LLC

By:

/s/ Nelson Peeler

Nelson Peeler

Senior Vice President and Chief Transmission Officer

PJM INTERCONNECTION, L.L.C.

By:

/s/ Frederick Bresler III

Frederick Bresler III

Senior Vice President, Operations and Markets

APPENDIX A

TRANSMISSION LOADING RELIEF AGREEMENT

This Agreement dated as of June 1, 2008, among Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. and PJM Interconnection, LLC ("PJM") (together referred to as the "Parties"), sets forth additional measures that the Parties agree to take regarding the North American Electric Reliability Corporation ("NERC") Transmission Loading Relief – Eastern Interconnect Procedure IRO-006. ("NERC TLR Procedure")

WHEREAS, the Parties operate extensive interconnected bulk electric transmission systems within the Eastern Interconnect Region of the United States;

WHEREAS, the Parties desire to prevent the curtailment of firm Designated Network Resource ("DNR") transmission service and firm point-to-point transmission services;

WHEREAS, the NERC TLR Procedure allows a Reliability Coordinator to implement local transmission loading relief procedures simultaneously with an Interconnection-wide procedure provided that the Reliability Coordinator shall be obligated to follow the curtailments as directed by the Interconnection-wide procedure.

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

1. The Parties agree to use the NERC TLR Procedure that has a 5% Transfer Distribution Factor ("TDF") for determining Non-Firm schedule curtailment.
2. The Parties agree that if the NERC TLR Procedure (NERC Standard IRO 006-3) does not provide the required relief from Non-Firm schedules that the parties will curtail Non-Firm schedules with a 3% TDF in accordance with local procedures as described in section 1.5.1 of the NERC TLR Standard.
 - a. This will be done by using an agreed upon model to determine if any tagged schedule has a 3% TDF that can provide relief on the flowgate, where either party is a source or sink for the schedule.
 - b. If any schedules are identified that curtailment will provide relief on the flowgate, then that Party will curtail the schedules until the flow is reduced on the flowgate or all of the schedules have been curtailed.
3. The Parties agree that the local transmission loading relief procedure described above shall be used to supplement, and not as a substitute for, the Interconnection-wide procedure. The Parties agree that they will

comply with the NERC TLR Procedure and all NERC Reliability Standards at all times.

4. The Parties agree to cooperate with each other in the event that the Parties' legal counsel determines that this Agreement must be filed and approved by the Federal Energy Regulatory Commission.
5. This Agreement shall be effective upon approval of the Parties' Open Access Transmission Tariff modifications by the Federal Energy Regulatory Commission adopting the subject local transmission loading relief procedures.

This space intentionally left blank.
Signatures on next page

The Parties have caused this Agreement to be executed by their duly authorized representatives as of the date set forth herein.

Progress Energy Carolinas, Inc.
Caren Anders
Vice President
Transmission Operations & Planning

By: Caren B. Anders

Date: June 2, 2008

PJM Interconnection, LLC
Thomas Bowe
Executive Director
Reliability Integration

By: Thomas Bowe

Date: 10 June 2008

APPENDIX B**Description of Interconnection Facilities**

The DEP-PJM interconnection contains twelve (12) alternating current interconnection facilities, including one (1) alternating current pseudo-tie. These are tabulated below:

PJM Interconnection Facility	DEP Interconnection Facility	Transmission Line Identifier	Transmission Line Voltage (Kilovolts)	Common Meter Point
East Danville	Roxboro	Not Applicable	230	East Danville
East Danville	Concord	Not Applicable	230	East Danville
Nagel	Cane River	Not Applicable	230	Nagel
Sullivan Gardens	Walters	Not Applicable	138	Sullivan Gardens
Battleboro	Rocky Mount	123	115	Rocky Mount
Hathaway West	Rocky Mount	2058	230	Rocky Mount
Hathaway East	Rocky Mount	2181	230	City of Rocky Mount POD #4
Heritage	Wake	570	500	Heritage
Sedge Hill	Person	296B	230	Sedge Hill
Kerr Dam	Henderson	45	115	Kerr Dam
Everetts	Greenville	218	230	Greenville
Littleton D.P. (Pseudo Tie)	Not Applicable	Not Applicable	115	Littleton D.P.
Not Applicable	Hamlet (Pseudo-Tie)	Not Applicable	230	Hamlet