# NYISO Tariffs

New York Independent System Operator, Inc.

NYISO Tariffs

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New York Independent System Operator, Inc. - NYISO Tariffs

# 35 Attachment CC – Joint Operating Agreement Among and Between New York Independent System Operator Inc. and PJM Interconnection, L.L.C.

This Joint Operating Agreement ("Agreement") dated this \_\_\_day of May 2007, 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 955 Jefferson Avenue, Valley Forge Corporate Center, Norristown, Pennsylvania 19403

New York Independent System Operator Inc. ("NYISO") a not-for-profit corporation established under the laws of New York State having a place of business at 10 Krey Boulevard, Rensselaer, New York 12144.

Effective Date: 6/30/2010

# 35.1 Recitals

- 35.1.1 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 grid, and independently operates markets for day-ahead, real-time energy, capacity, ancillary services and financially firm transmission rights;
- 35.1.2 NYISO is a not-for-profit corporation established pursuant to the ISO Agreement, responsible for providing transmission service, maintaining the reliability of the electric power system and facilitating efficient markets for capacity, energy and ancillary services in the New York Control Area in accordance with its filed Tariffs;
- 35.1.3 In accordance with good utility practice, the Parties seek to establish or confirm other arrangements and protocols in furtherance of the reliability of their systems and efficient market operations, 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:

# 35.2 Abbreviations, Acronyms and Definitions

In this Agreement, the following words and terms shall have the meanings (such meanings to be equally applicable to both the singular and plural forms) ascribed to them in this Section 35.2.

# 35.2.1 Abbreviations and Acronyms.

"ATC" shall mean Available Transfer Capability.

"AFC" shall mean Available Flowgate Capability.

"BAAL" shall mean Balancing Authority Area Control Error Limit,

"CIM" -shall mean Common Infrastructure Model.

"CPS" shall mean Control Performance Standard.

"DCS" shall mean Disturbance Control Standard.

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

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

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

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

"IROL" shall mean Interconnected Reliability Operating Limit.

# "ISN" shall mean [PLEASE PROVIDE THE DEFINITION FOR THIS ACRONYM]

"ISO" shall mean Independent System Operator.

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

"MVAR" shall mean megavolt ampere of reactive power.

"MW" shall mean megawatt of capacity.

"NERC" shall mean the North American Electricity Reliability Corporation or its successor organization.

"NPCC" shall mean the Northeast Power Coordinating Council, Inc., including the NPCC Cross Border Regional Entity (CBRE), or their successor organizations.

"NYISO" shall have the meaning stated in the preamble of this Agreement.

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

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"OATT" shall mean the applicable Open Access Transmission Tariff on file with FERC for PJM and NYISO.

"PJM" shall have the meaning stated in the preamble of this Agreement.

"RFC" shall mean Reliability First Corporation.

"RTO" shall mean Regional Transmission Organization.

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

"SERC" SERC Reliability Corporation or its successor organization.

"SOL" shall mean System Operating Limit.

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

"TTC" shall mean Total Transfer Capability.

#### 35.2.2 Definitions.

Any undefined, capitalized terms used in this Agreement shall have the meaning given under industry custom and, where applicable, in accordance with good utility practices or the meaning given to those terms in the tariffs of PJM and NYISO on file at FERC.

"Agreement" shall have the meaning stated in the preamble preamblemean this document, as amended from time to time, including all attachments, appendices, and schedules.

"Area Control Error" means the instantaneous difference between a Balancing Authority's net actual and scheduled interchange, taking into account the effects of Frequency Bias and correction for meter error.

"Available Transfer Capability" means a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses.

**"Balancing Authority Area"** shall mean an electric system or systems, bounded by Interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Balancing Authority Areas and contributing to frequency regulation of the Interconnection Facilities as set forth by NERC.

# "Balancing Authority Area Control Error Limit" [ADD DEFINITION]

**"Balancing Authority Operator"** shall mean the entity responsible for the secure operation of a Balancing Authority Area as set forth by NERC.

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# "Common Infrastructure Model" shall mean [ADD DEFINITION]

- "Confidential Information" shall have the meaning stated in Section 35.8.1.
- "Control Area(s)" shall mean an electric power system or combination of electric power systems to which a common automatic generation control scheme is applied.
- **"Control Performance Standard"** shall mean the reliability standard that sets the limits of a Balancing Authority's Area Control Error over a specified time period.
- **"Coordinated Flowgate"** shall mean a Flowgate impacted by the flows of a Party as determined by a mutually agreed upon study methodology identified in a congestion management process. A Coordinated Flowgate may be in the footprint of a Party or a third party.
- "Coordination Committee" shall mean the jointly constituted PJM and NYISO committee established to administer the terms and provisions of this Agreement pursuant to Article Three.
- **"Delivery Point"** shall mean the point at each of the points of direct Interconnection between PJM and the NYISO Balancing Authority Area. Such Delivery Point(s) shall include the Interconnection Facilities between the PJM and the New York Control Areas.
- "Dispute" shall have the meaning stated in Article Fourteen.
- "Disturbance Control Standard" shall mean the reliability standard that sets the time limit following a disturbance within which a balancing authority must return its Area Control Error to within a specified range.
- **"Economic Dispatch"** shall mean the sending of dispatch instructions to generation units to minimize the cost of reliably meeting load demands.
- "Effective Date" shall have the meaning stated in Section 35.18.1.
- "Emergency" shall mean any abnormal system condition that requires remedial action to prevent or limit loss of transmission or generation facilities that could adversely affect the reliability of the electricity system.
- "Emergency Energy" shall mean energy supplied from Operating Reserve or electrical generation available for sale in New York or PJM or available from another Balancing Authority Area. Emergency Energy may be provided in cases of sudden and unforeseen outages of generating units, transmission lines or other equipment, or to meet other sudden and unforeseen circumstances such as forecast errors, or to provide sufficient Operating Reserve. Emergency Energy is provided pursuant to this Agreement and the Inter Control Area Transactions Agreement dated May 1, 2000 and priced according to Section 35.6.4 of this agreement and said Inter Control Area Transactions Agreement.
- "Flowgate" shall mean a representative modeling of facilities or groups of facilities that may act as potential constraint points.

"Force Majeure" shall mean an event of force majeure as described in Section 35.19.1.

"Good Utility Practice" shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the North American 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 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 by NERC.

"Governmental Authority" shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power.

#### HOLD FOR DEFINITION OF FULL NAME FOR "ISN"

"Intellectual Property" shall mean (i) ideas, designs, concepts, techniques, inventions, discoveries, or improvements, regardless of patentability, but 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.

**"Intentional Wrongdoing"** shall mean an act or omission taken or omitted by a Party with knowledge or intent that injury or damage could reasonably be expected to result.

"Interconnected Reliability Operating Limit" or "IROL" 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.

**"Interconnection"** shall mean a connection between two or more individual Transmission Systems that normally operate in synchronism and have interconnecting Intertie(s).

"Interconnection Facilities" shall mean the Interconnection facilities described in SCHEDULE A.

"M2M" shall mean the market-to market coordination process as defined and set forth in Appendix to this Agreement.

"M2M Event" shall mean [ADD FULL DEFINITION].

"Market Participant" shall mean an entity that, for its own account, produces, transmits, sells, and/or purchases for its own consumption or resale capacity, energy, energy derivatives and ancillary services in the wholesale power markets. Market Participants include transmission

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service customers, power exchanges, Transmission Owners, load serving entities, loads, holders of energy derivatives, generators and other power suppliers and their designated agents.

- "Metered Quantity" shall mean apparent power, reactive power, active power, with associated time tagging and any other quantity that may be measured by a Party's Metering Equipment and that is reasonably required by either Party for Security reasons or revenue requirements.
- "Metering Equipment" shall mean the potential transformers, current transformers, meters, interconnecting wiring and recorders used to meter any Metered Quantity.
- **"Mutual Benefits"** shall mean the transient and steady-state support that the integrated generation and Transmission Systems in PJM and New York provide to each other inherently by virtue of being interconnected as described in Section 35.4 of this Agreement.
- "Network Resource" shall have the meaning as provided in the NYISO OATT, for such resources located in New York, and the meaning as provided in the PJM OATT, for such resources located in PJM.
- "Notice" shall have the meaning stated in Section 35.19.21
- "NYISO Tariffs" means the NYISO OATT and the NYISO Market Administration and Control Area Services Tariff ("Services Tariff"), collectively.
- "NYSRC Reliability Rules" means the rules applicable to the operation of the New York Transmission System. These rules are based on reliability Standards adopted by NERC and NPCC, but also include more specific and more stringent rules to reflect the particular requirements of the New York Transmission System.
- "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.
- "Operating Instructions" shall mean the operating procedures, steps, and instructions for the operation of the Interconnection Facilities established from time to time by the Coordination Committee or the PJM and NYISO individual procedures and processes and includes changes from time to time by the Coordination Committee to such established procedures, steps and instructions exclusive of the individual procedures.
- "Operating Reserve" shall mean generation capacity or load reduction capacity which can be called upon on short notice by either Party to replace scheduled energy supply which is unavailable as a result of an unexpected outage or to augment scheduled energy as a result of unexpected demand or other contingencies.
- "Operational Control" shall mean Security monitoring, adjustment of generation and transmission resources, coordinating and approval of changes in transmission status for maintenance, determination of changes in transmission status for reliability, coordination with other Balancing Authority Areas and reliability Coordinators, voltage reductions and load

shedding, except that each legal owner of generation and transmission resources continues to physically operate and maintain its own facilities.

**"Outages"** shall mean the planned unavailability of transmission and/or generation facilities dispatched by PJM or the NYISO, as described in Article Nine of this Agreement.

"Party" or "Parties" refers to each party to this Agreement or both, as applicable.

"PJM" has the meaning stated in the preamble of this Agreement.

**"PJM Code of Conduct"** shall mean the code of ethical standards, guidelines and expectations for PJM's employees, officers and Board Members in their transactions and business dealings on behalf of PJM as posted on the PJM website and as may be amended from time to time.

"PJM Tariffs" means the PJM OATT and the PJM Amended and Restated Operating Agreement, collectively.

"Region" shall mean the Control Areas and transmission facilities with respect to which a Party serves as RTO or Reliability Coordinator under NERC policies and procedures.

"Reliability Coordinator" or "RC" shall mean the entity that is the highest level of authority who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.

**"Reliability Coordinator Area"** shall mean that portion of the bulk electric system under the purview of the Reliability Coordinator.

**"Reliability Standards"** shall mean the criteria, standards, rules and requirements relating to reliability established by a Standards Authority.

"Schedule" shall mean a schedule attached to this Agreement and all amendments, supplements, replacements and additions hereto.

**"Security"** shall mean the ability of the electric system to withstand sudden disturbances including, without limitation, electric short circuits or unanticipated loss of system elements.

"Security Limits" shall mean operating electricity system voltage limits, stability limits and thermal ratings.

"Shadow Prices" shall mean [ADD DEFINITION].

**"Standards Authority"** shall mean the North American Electric Reliability Council ("NERC"), and the NERC regional entities eouncils with governance over PJM and NYISO, any successor

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thereof, or any other agency with authority over the Parties regarding standards or criteria to either Party relating to the reliability of Transmission Systems.

"Standards Authority Standards" shall have the meaning stated in Section 35.5.2.

"State Estimator" shall mean a computer model that computes the state (voltage magnitudes and angles) of the transmission system using the network model and real-time measurements. Line flows, transformer flows, and injections at the busses are calculated from the known state and the transmission line parameters. The State Estimator has the capability to detect and identify bad measurements.

"System Operating Limit" or "SOL" 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.

"Transmission Owner" shall mean an entity that owns Transmission Facilities.

"Transmission System" shall mean the facilities controlled or operated by PJM or NYISO as designated by each in their respective OATTs.

**"Transmission Facility"** shall mean a facility for transmitting electricity, and includes any structures, equipment or other facilities used for that purpose as defined in the Parties respective OATTs.

"Voltage and Reactive Power Coordination Procedures" are the procedures under Article Eleven for coordination of voltage control and reactive power requirements.

#### 35.2.3 Rules of Construction.

# 35.2.3.1 No Interpretation Against Drafter.

In addition to their roles as RTOs/ISOs and Reliability Coordinators, and the functions and responsibilities associated therewith, the Parties agree that each Party participated in the drafting of this Agreement and was represented therein by competent legal counsel. No rule of construction or interpretation against the drafter shall be applied to the construction or in the interpretation of this Agreement.

#### 35.2.3.2 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.

# 35.2.3.3 Meanings of Certain Common Words.

The word "including" shall be understood to mean "including, but not limited to." 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.

# 35.2.3.4 Standards Authority Standards, Policies, and Procedures.

All activities under this Agreement will meet or exceed the applicable Standards

Authority standards, policies, or procedures as revised from time to time.

#### 35.2.3.5 Scope of Application.

Each Party will perform this Agreement in accordance with its terms and conditions with respect to each Control Area for which it serves as ISO or RTO and, in addition, each Control Area for which it serves as Reliability Coordinator.

# 35.3 Overview, Administration, and Relationship With Other Agreements

# 35.3.1 Purpose of This Agreement.

This Agreement provides for the reliable operation of the interconnected PJM and NYISO Transmission Systems in accordance with the requirements of the Standards Authority and efficient market operations through M2M coordination. This Agreement establishes a structure and framework for the following functions related to the reliability of interconnected operations between the Parties and efficient joint market operations:

- 35.3.1.1 Developing and issuing Operating Instructions and Security Limits;
- 35.3.1.2 Coordinating operation of their respective Transmission Systems;
- 35.3.1.3 Developing and adopting operating criteria and standards;
- 35.3.1.4 Conducting operating performance reviews of the Interconnection Facilities;

- 35.3.1.5 Implementing each Party's respective Standards Authority requirements with regard to the PJM and NYISO Transmission Systems;
- 35.3.1.6 Exchanging information and coordination regarding system planning;
- 35.3.1.7 Providing mutual assistance in an Emergency and during system restoration;
- 35.3.1.9 Performance of certain other arrangements among the Parties for coordination of their systems, including, but not limited to performance consistent with the arrangements set forth in the existing agreements listed in Section 35.20 and the M2M transmission congestion coordination process that is set forth in the attached Market-to-Market Coordination Appendix and Section 35.12 below;

Performance of certain other arrangements among the Parties for administration of this Agreement; and

The Parties shall, consistent with Standards Authority requirements and the Parties' respective tariffs, rules and standards, including with respect to the NYISO, the NYSRC Reliability Rules, to the maximum extent consistent with the safe and proper operation of their respective Reliability Coordinator Area and Balancing Authority Area and necessary coordination with other interconnected systems, operate their systems in accordance with the procedures and principles set forth in this Agreement.

# 35.3.2 Establishment and Functions of Coordination Committee.

To administer the arrangements under this Agreement, the Parties shall establish a Coordination Committee. The Coordination Committee shall undertake to jointly develop and authorize Operating Instructions to implement the intent of this Agreement with respect to reliable Transmission System operations.

# 35.3.2.1 The Coordination Committee shall have the following duties and responsibilities:

- 35.3.2.1.1 Determine the date(s) for implementing the various parts of this

  Agreement and undertake to jointly develop and authorize Operating Instructions
  to implement the intent of this Agreement;
- 35.3.2.1.2 Meet <u>periodically no less than twice yearly</u> 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;
- 35.3.2.1.3 The matters to be addressed at all meetings shall be specified in an agenda, which shall contain items specified by either Party in advance of the meeting and sent to the representatives of the other Party. All decisions of the Coordination Committee must be unanimous;
- 35.3.2.1.4 Conduct additional meetings upon Notice given by any Party, provided that the Notice specifies the reason(s) for requesting the meeting;
- 35.3.2.1.5 Conduct dispute resolution in accordance with Article Fourteen of this Agreement;
- 35.3.2.1.65 Initiate process reviews at the request of any Party for activities undertaken in the performance of this Agreement;
- 35.3.2.1.7 Continue the process to define a congestion management process mutually agreed upon by NYISO and PJM; and
- 35.3.2.1.67 In its discretion, take other actions, including the establishment of subcommittees and/or task forces, to address any issues that the Coordination

Committee deems necessary <u>consistent with</u> in the implementation of this Agreement.

# 35.3.2.2 Coordination Committee Representatives.

Within 30 days of the Effective Date, each Party shall designate a primary and alternate representative to the Coordination Committee and shall inform the other Parties of its designated representatives by Notice. A Party may change its designated Coordination Committee representatives at any time, provided that timely Notice is given to the other Parties. Each designated Coordination Committee 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 Coordination Committee representatives shall be the responsibility of the designating Party.

# 35.3.2.3 Limitations Upon Authority of Coordination Committee.

The Coordination Committee is not authorized to modify or amend any of the terms of this Agreement. The Coordination Committee is also not authorized to excuse any obligations under this Agreement or waive any rights pertaining to this Agreement. The Coordination Committee has no authority to commit either Party to any expenditure that is beyond those expenses described in this Agreement.

- 35.3.2.4 Subject to the limitations on its authority as described in Section 35.3.2.3

  of this Agreement, the Coordination Committee has the responsibility and
  authority to take action on all aspects of this Agreement, including, but not
  limited to the following:
- 35.3.2.4.1 Amending, adding or canceling Schedules, or Operating Instructions and providing written notice in accordance with Section 35.19.21 of this Agreement;

35.3.2.4.2 Assessment of non-compliance with this Agreement and, subject to Section 35.14 of this Agreement, the taking of appropriate action in respect thereto;

35.3.2.4.3 Documentation of decisions related to the initial resolution of Disputes as set out in Section 35.14 of this Agreement, or in cases of unresolved Disputes, the circumstances relevant to the Dispute in question as contemplated by the requirements of Section 35.14 of this Agreement; and

35.3.2.4.4 Preparation, documentation, retention and distribution of Coordination

Committee meeting minutes and agendas.

#### 35.3.3 Ongoing Review and Revisions.

As set forth in Section 35.7, the Parties have agreed to the coordination and exchange of data and information under this Agreement to enhance system reliability and efficient market operations as systems exist and are contemplated as of the Effective Date. The Parties expect that these systems and the technology applicable to these systems and to the collection and exchange of data will change from time to time throughout the term of this Agreement. The Parties agree that the objectives of this Agreement can be fulfilled efficiently and economically only if the Parties, from time to time, review and, as appropriate, revise the requirements stated herein in response to such changes, including deleting, adding, or revising requirements and protocols. Each Party will negotiate in good faith in response to such revisions the other Party 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.

#### 35.4 Mutual Benefits

#### 35.4.1 No Charge for Mutual Benefits of Interconnection.

The PJM Transmission System and the New York Transmission System, by virtue of being connected with a much larger Interconnection, share Mutual Benefits such as transient and steady-state support. PJM and NYISO shall not charge one another for such Mutual Benefits.

#### 35.4.2 Maintenance of Mutual Benefits.

The Parties shall endeavor to operate or direct the operation of the Interconnection Facilities to realize the Mutual Benefits. The Parties recognize circumstances beyond their control, such as a result of operating configurations, contingencies, maintenance, or actions by third parties, may result in a reduction of Mutual Benefits.

# 35.5 Interconnected Operation

# 35.5.1 Obligation to Remain Interconnected.

The Parties shall at all times during the term of this Agreement operate or direct the operation of their respective Transmission Systems so that they remain interconnected except:

- 35.5.1.1 During the occurrence of an event of Force Majeure which renders a Party unable to remain interconnected;
- 35.5.1.2 When an Interconnection is opened in accordance with the terms of an Operating Instruction or, if the Operating Instruction does not anticipate a particular circumstance where there is an imminent risk of equipment failure, or of danger to personnel or the public, or a risk to the environment, or a risk to system Security or reliability of a Transmission System, which cannot be avoided through Good Utility Practice; or
- 35.5.1.3 During planned maintenance where notice has been given in accordance with outage procedures as implemented by the Coordination Committee.

#### 35.5.2 Adherence to Standards Authority Standards, Policies and Procedures.

The Parties are participants in multiple Standard Authorities NERC Regional Councils (RFC, NPCC, SERC, etc.), and are required to comply with specified standards, criteria, guides and procedures ("Standards Authority Standards"). Such Standards Authority Standards detail the many coordinating functions carried out by the parties, and this Agreement is intended to enhance those arrangements. Such Standards Authority Standards include, and the Parties agree to, the provision of "maximum reasonable assistance" to a neighboring Balancing Authority Area. Such maximum reasonable assistance will not normally require the shedding of firm load.

#### 35.5.3 Notification of Circumstances.

In the event that an Interconnection Facility is opened or if the Interconnection Facility transfer capability is changed, or if a Party plans to initiate the opening of an Interconnection Facility, or to change the transfer capability of the Interconnection Facilities, such Party shall immediately provide the other Party with notification indicating the circumstances of the opening or transfer capability change and expected restoration time, in accordance with procedures implemented by the Coordination Committee.

#### 35.5.4 Compliance with Decisions of the Coordination Committee Direction.

PJM shall direct the operation of the PJM Transmission System and the NYISO shall direct the operation of the NYISO Transmission System in accordance with the obligations of their respective tariffs, rules and standards and applicable directions of the Coordination Committee that conform with their respective tariffs, rules and standards, except where prevented by Force Majeure. The Coordination Committee's scope includes making decisions and jointly developing and approving Operating Instructions for many expected circumstances within the provisions of the Parties' respective tariffs, rules and standards. If decisions of the

Coordination Committee do not anticipate a particular circumstance, the Parties shall act in accordance with Good Utility Practice.

#### 35.5.5 Control and Monitoring.

Each Party shall provide or arrange for 24-hour control and monitoring of their portion of the Interconnection Facilities.

#### 35.5.6 Reactive Transfer and Voltage Control.

The Parties agree to determine reactive transfers and control voltages in accordance with the provisions of their respective Standards Authority Standards. Real and reactive power will be transferred over the Interconnection Facilities as described in Section 35.11.

#### 35.5.7 Inadvertent Exchanges.

Inadvertent power transfers on all Interconnection Facilities shall be controlled and accounted for in accordance with the standards and procedures developed by <a href="mailto:the Standards">the Standards</a>
<a href="Mailto:Authorities">Authorities</a> NERC and its Regional Councils and implemented by the Coordination Committee and the system operators of each Party to this Agreement.

# 35.5.8 Adoption of Standards.

The Parties hereby agree to adopt, enforce and comply with all applicable requirements and standards that will safeguard the reliability of the interconnected Transmission Systems.

Such reliability requirements and Reliability Standards shall be:

- 35.5.8.1 Adopted and enforced for the purpose of providing reliable service;
- 35.5.8.2 Not unduly discriminatory in substance or application;
- 35.5.8.3 Applied consistently to both Parties with the exception of subsection 35.5.8.5 below;
- 35.5.8.4 Consistent with the Parties' respective obligations to applicable Standards

  Authorities including, without limitation, any relevant requirements or guidelines

from each of NERC, or its Regional Councils' or any other Standards Authority or regional transmission group to which either of the Parties is required to adhere; and

35.5.8.5 With respect to the NYISO, consistent with the NYSRC Reliability Rules.

# 35.5.9 New York - PJM IROL Interface.

The Parties share a joint IROL related to transfers related to the interconnecting transmission lines between their respective Reliability Coordinator Areas and Balancing Authority Areas. This IROL is adhered to in order to maintain acceptable steady-state and transient performance of the NYISO and PJM Transmission Systems. Both Parties will monitor this limit in accordance with this Agreement and independently determine the applicable import and export transfer limits. Both Parties agree to operate the interface to the most conservative limits developed in real-time and the day-ahead planning process. These operating limits shall be determined in accordance with Standards Authority Standards. Both Parties will take coordinated corrective actions to avoid a violation of the IROL. If a violation occurs, actions will be taken to clear the violation as soon as possible, and in accordance with Standards Authority Standards.

# 35.5.10 Coordination and Exchange of Information Regarding System Planning.

The Parties shall exchange information and coordinate regarding system planning and inter-regional planning activities in a manner consistent with Standards Authority Standards and consistent with the requirements of confidentiality agreements or rules binding upon either of the Parties.

# 35.6 Emergency Assistance

#### 35.6.1 Emergency Assistance.

Both Parties shall exercise due diligence to avoid or mitigate an Emergency to the extent practical in accordance with applicable requirements imposed by the Standards Authority or contained in the PJM Tariff and NYISO Tariffs. In avoiding or mitigating an Emergency, both Parties shall strive to allow for commercial remedies, but if commercial remedies are not successful or practical, the Parties agree to be the suppliers of last resort to maintain reliability on the system. For each hour during which Emergency conditions exist in a Party's Balancing Authority Area, that Party (while still ensuring operations within applicable Reliability Standards) shall determine what commercial remedies are available and make use of those that are practical and needed to avoid or mitigate the Emergency before any Emergency Energy is scheduled in that hour.

# 35.6.2 Emergency Operating Guides.

The Parties agree to jointly develop, maintain, and share operating guides to address credible Emergency conditions.

#### 35.6.3 Emergency Energy.

Each Party shall, to the maximum extent it deems consistent with the safe and proper operation of its respective Transmission System, provide Emergency Energy to the other Party in accordance with the provisions of the Inter Control Area Transactions Agreement.

#### 35.6.4 Costs of Compliance.

Each Party shall bear its own costs of compliance with this Article except that the cost of Emergency Energy purchased by one Party at the request of the other Party shall be reimbursed in accordance with the Inter Control Area Transaction Agreement. Nothing in this Agreement NYISO Tariffs – OATT 35, Attachment CC – Joint Operating Agreement Among and Between New York Independent System Operator Inc. and PJM Interconnection shall require a Party to purchase Emergency Energy if the Party cannot recover the costs under an OATT or other agreement or lawful arrangement.

# 35.7 Exchange of Information

#### 35.7.1 Exchange of Operating Data.

PJM and NYISO agree to exchange and share such information as may be required from time to time for the Parties Coordination Committee to perform itstheir duties and for the Parties to fulfill their obligations under this Agreement including the appendices hereto, subject to the requirements of existing confidentiality agreements or rules binding upon either of the Parties, including the NYISO Code of Conduct as set forth in Attachment F to the NYISO OATT.

Article 6 of the NYISO Services Tariff, the PJM Code of Conduct and PJM Data Confidentiality Regional Stakeholder Group. The types of data to be exchanged will be maintained and posted by the Parties to this Agreement on their respective OASIS web sites. Such information willmay consist of the following:

- 35.7.1.1 Information required to develop Operating Instructions;
- 35.7.1.2 Transmission System facility specifications and modeling data required to perform Security analysis;

format or another mutually agreed upon electronic format, and include the

ICCP/ISN mapping files, identification of individual bus loads, seasonal
equipment ratings and one-line drawings to expedite the model conversion
process, upon request. The Parties will also exchange updates that
represent the incremental changes that have occurred to the EMS model
since the most recent update in an agreed upon electronic format.

The Parties will exchange their detailed EMS models in CIM

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- 35.7.1.3 Functional descriptions and schematic diagrams of Transmission System protective devices and communication facilities;
- 35.7.1.4 Ratings data and associated ratings methodologies for the Interconnection Facilities;
- 35.7.1.5 Telemetry points, equipment alarms and status points required for realtime monitoring of Security dispatch;
- 35.7.1.6 Data required to reconcile accounts for inadvertent energy, and for Emergency Energy transactions;
- 35.7.1.7 Transmission System information that is consistent with the information sharing requirements imposed by the Standards Authority; and
- 35.7.1.8 Such other information as may be required for the Parties to maintain the reliable operation of their interconnected Transmission Systems and fulfill their obligations under this Agreement and to any Standards Authority of which either Party is a member, provided, however, that this other information will be exchanged only if that can be done in accordance with applicable restrictions on the disclosure of information to any Market Participant.
- 35.7.1.9 Additional information required for the Parties to administer the M2M coordination process set forth in the Appendix \_\_ to this Agreement, including:
  - a. actual M2M Flowgate Fflows;
  - b. actual limits for M2M Flowgate limits;
  - c. ex ante Sshadow Pprices on constrained M2M Flowgates;
  - d. requested relief during an M2M eEvent;
  - e. Market Flows on M2M Flowgates; and
  - f. binding constraint thresholds [WE MAY NEED TO DEFINE].

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#### 35.7.2 Confidentiality.

The Party receiving information pursuant to this Section 35.7 shall treat such information as confidential subject to the terms and conditions of set forth in Section 35.8 of this Agreement. The obligation of each Party under this Section 35.7.2 continues and survives the termination of this Agreement by seven (7) years.

#### 35.7.3 Data Exchange Contact.

To facilitate the exchange of all such data, each Party will designate to the other Party's Vice President of Operations 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 Vice President of Operations.

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. Each Party shall provide notification to the other Party thirty (30) days prior to modifying an established data exchange format.

# 35.7.4 Cost of Data and Information Exchange.

Each Party shall bear its own cost of providing information to the other Party.

# 35.7.5 Other Data.

The Parties may share other data not listed in this Section 35.7 as mutually agreed upon by the Parties.

#### 35.8 Confidential Information

#### 35.8.1 Definition.

The term "Confidential Information" shall mean: (a) all information, whether furnished before or after the mutual 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 other information of a Party hereto which are based on, contain or reflect any Confidential Information; (d) applicable material deemed Confidential Information pursuant to the PJM Data Confidentiality Regional Stakeholder Group, the PJM Code of Conduct, the NYISO Code of Conduct, or Article 6 of the NYISO's Services Tariff; (e) Protected Information under the NYISO Market Monitoring Plan; and (f) any 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. § 37 et. seq. and the Parties' Standards of Conduct on file with the FERC.

# 35.8.2 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 Party supplying such Confidential Information (Supplying Party). In addition, each Party shall require that its employees, its subcontractors and its subcontractors' employees and agents to whom Confidential Information

is exposed agree to be bound by the terms and conditions contained herein. Each Party shall be <a href="https://linear.com/linear.co

#### 35.8.3 Treatment of Confidentiality.

The Party receiving the Confidential Information shall treat the information in the same confidential manner as its governing documents require it to treat the confidential information of its own members and market participants, or if more restrictive, the governing documents of the Supplying Party sending the Confidential Information. [NYISO WOULD LIKE TO GET RID OF THE STATEMENT THAT THE ISOS WILL APPLY THE MORE RESTRICTIVE TARIFF PROVISIONS TO PROTECT DATA. CHANGING THIS LANGUAGE COULD DRAW PROTESTS. THE NYISO AND PJM WOULD HAVE TO RESPOND THAT THEIR OBLIGATIONS TO PROTECT CONFIDENTIAL INFORMATION ARE, LARGELY, SYMMETRICAL, AND IT DOES NOT MAKE SENSE TO EXPECT EACH RTO TO IDENTIFY AND FOLLOW EVERY NUANCE OF THE OTHER RTO'S TARIFF(S). WHAT ARE PJM's THOUGHTS ON THIS ISSUE?

#### 35.8.4 Statute of Limitations.

The receiving Party shall not release the Supplying Party's Confidential Information until expiration of the time period controlling the Supplying Party's disclosure of the same information, as such period is described in the Supplying Party's governing documents from time to time. As of the Effective Date, this period is <a href="mailto:six-three">six-three</a> (63) months with respect to bid or pricing data and seven (7) calendar days for transmission data after the event ends. The obligation of each Party under this Section 35.8 continues and survives the termination of this Agreement by seven (7) years.

#### 35.8.5 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.

#### 35.8.6 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 an RTO or an ISO, eEach 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, (b) OASIS posting requirements in 18 C.F.R. § § 37.1-37.8 and, (c) if more restrictive, 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.

# 35.8.7 Required Disclosure.

If a Governmental Authority requests or requires a Party to disclose any Confidential Information ("Disclosing Party"), such Disclosing Party shall provide the Party that supplied the Confidential Information ("Supplying Party") with prompt written notice of such request or requirement so that the and will assist any efforts by the Supplying Party may to contest disclosure, or seek an appropriate protective order or other appropriate remedy. or The Supplying Party may also choose to waive compliance with the provisions of this Agreement.

Notwithstanding the presence or absence of a protective order or a waiver, a Disclosing Party

shall disclose only such Confidential Information which as 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 Disclosing Party is required to disclose any Confidential Information under this section, a 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.

#### 35.8.8 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.

#### 35.8.9 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.

# 35.8.10 Existing Confidential Information Obligations.

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 or NYISO Amended and Restated Operating Agreement, either Party's OATTOpen Access Transmission Tariff, any other agreement, or applicable state or federal regulation or law. The obligation of each Party under this section continues and survives the termination of this Agreement by seven (7) years.

# 35.9 Coordination of Scheduled Outages

#### 35.9.1 Coordinating Outages Operating Protocols.

The Parties will jointly develop protocols for coordinating transmission and generation

Outages to maintain reliability. The Parties agree to the following with respect to transmission and generation Outage coordination.

# 35.9.1.1 Exchange of Transmission and Generation Outage Schedule Data.

Upon a Party's request, the projected status of generation and transmission availability will be communicated between the Parties, subject to data confidentiality agreements. The Parties shall exchange the most current information on proposed Outage information and provide a timely response on potential impacts of proposed Outages. The Parties shall select a mutually agreeable common format for the exchange of this information.

# 35.9.1.2 Evaluation and Coordination of Transmission and Generation Outages.

The Parties analyze planned critical facility maintenance to determine its effects on the reliability of the transmission system. The Parties will work together to resolve Outage conflicts and work with the facility owner(s), as necessary, to provide remedial steps.

The Parties will notify each other of emergency maintenance and forced outages as soon as possible after these conditions are known. The Parties will evaluate the impact of emergency and forced outages on the Parties' systems to develop remedial steps as necessary.

Unforeseen changes in scheduled outages 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 to develop remedial steps as necessary.

# 35.10 Coordination of Transmission Planning Studies

#### 35.10.1 Scope of Activities:

Transmission planning activities will be coordinated in accordance with the Northeast ISO/RTO Coordination of Planning Protocol Agreement, between and among PJM Interconnection, L.L.C., the New York Independent System Operator, Inc. and ISO New England Inc., effective as of December 12, 2004.

# 35.11 Voltage Control and Reactive Power Coordination

#### 35.11.1 Specific Voltage and Reactive Power Coordination Procedures.

The Parties will utilize the following procedures to coordinate the use of voltage control equipment to maintain a reliable bulk power transmission system voltage profile on their respective systems.

35.11.1.1 Under normal conditions, each Party shall provide for the supply and control of the reactive regulation requirements in its own area, including reactive reserve, so that applicable emergency voltage levels can be maintained following any of the set of contingencies that are observed under normal conditions.

- 35.11.1.2 Under normal conditions, each Party will anticipate voltage trends and initiate corrective action in advance of critical periods of heavy and light loads.
- 35.11.1.3 Under an abnormal condition, either Party experiencing rapid voltage decay will immediately implement all possible actions, including the shedding of firm load, to correct the problem until such time that the decay has been corrected.

#### 35.12 M2MMarket-to-Market Coordination Process

The fundamental philosophy of the M2M market to market transmission congestion coordination process that is set forth in the attached Market-to-Market Coordination Appendix greement-is to allow any transmission constraints that are significantly impacted by generation dispatch changes in both the NYISOew York and PJM markets to be jointly managed in the real-time security-constrained economic dispatch models of both Parties. This joint real-time management of transmission constraints near the market borders will provide a more efficient and lower cost transmission congestion management solution and will also provide coordinated pricing at the market boundaries.

Under normal system operating conditions, the Parties shall utilize the M2M market tomarket coordination process on all defined M2M arket to Market Flowgates that experience
congestion. The Party that is responsible for monitoring a M2MMarket to Market Flowgate will
initiate and terminate the market-to-market coordination process. The Party that is responsible
for monitoring a Market to Market M2M Flowgate is expected to bind that Flowgate when it
becomes congested, and to initiate market-to-market coordination to utilize the more cost
effective generation between the two markets to manage the congestion.

The Market-to-Market Coordination Appendix greement includes a settlement process that applies when the M2Mmarket-to-market coordination process is invoked.

# 35.12 Joint Checkout Procedures

# 35.12.1 Scheduling Checkout Protocols.

- 35.12.1.1 Both Parties shall require all transaction schedules to be tagged in accord with the NERC tagging standard. For reserve sharing and other emergency schedules that are not tagged, the Parties will enter manual schedules after the fact into their respective scheduling systems.
- 35.12.1.2 When there is a transaction scheduling conflict, the Parties will work to modify the schedule as soon as practical.
- 35.12.1.3 The Parties will perform the following types of checkouts. Checkouts will be consistent with 35.12.1.1 and 35.12.1.2.
- (a) Day-ahead checkout shall be performed daily on the day before the transaction is to flow. Day-ahead checkout includes the verification of import and export totals and individual transaction schedules.
- (b) Real-time checkout shall be performed hourly during the hour before the transaction is to flow. Real-time checkout includes the verification of import and export totals and individual transaction schedules.
- (c) After-the-fact checkout of transactions shall be performed the next business day following the day of the transactions.
- (d) After-the-fact reporting of hourly scheduled energy interchanged and hourly actual energy interchanged shall be updated by each Party each day and exchanged with the other Party. Each day, month to date data shall be exchanged. Parties shall resolve discrepancies within ten (10) business days of the end of each month.

# 35.13 TTC/ATC/AFC Calculations

## 35.13.1 TTC/ATC/AFC Protocols.

In accordance with Section 35.9, the Parties will exchange scheduled Outages of all interconnections and other transmission facilities.

# 35.13.1.1 Scheduled Outages of Transmission Resources.

Each Party will provide the projected status of scheduled Outages of transmission facilities for a minimum of eighteen (18) months or more if available.

# 35.13.1.2 Transmission Interchange Schedules.

Each Party will make available its interchange schedules to permit accurate calculation of TTC and ATC/AFC values.

# 35.13.2 Configuration/Facility Changes.

Transmission configuration changes and generation additions (or retirements) shall be communicated via the NERC MMWG process.

# 35.13.3 Transmission System Impacts.

- 35.13.3.1 The Parties shall coordinate with each other as needed and with other

  Reliability Coordinators, Balancing Authorities, and Generator Operators as

  needed to develop and implement action plans to mitigate potential or actual SOL,

  IROL, CPS, or DCS violations.
- 35.13.3.2 Each Party shall operate to prevent the likelihood that a disturbance, action, or non-action in its area will result in a SOL or IROL violation for the other Party. In instances where there is a difference in derived limits, Parties shall respect the most limiting parameter.

- 35.13.3.3 A Party who foresees a transmission problem (such as an SOL or IROL violation, loss of reactive reserves, etc.) that impacts the other Party shall issue an alert to the other Party without unreasonable delay.
- 35.13.3.4 Each Party shall confirm reliability assessment results and determine the effects within its own and the other Party's areas. The Parties shall discuss options to mitigate potential or actual SOL or IROL violations and take actions as necessary to always act in the best interests of the Interconnection at all times.

# 35.14 Dispute Resolution Procedures

#### 35.14.1 Good Faith Negotiation.

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 either 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.

#### 35.14.2 Dispute Resolution.

In the event of a Dispute arising out of or relating to this Agreement that is not resolved by the representatives of the Parties who have been designated under Section 35.3.2.2 of this Agreement within 7 days of the reference to such representatives of such Dispute, each Party shall, within 14 days' written notice by either Party to the other, designate a senior officer with authority and responsibility to resolve the Dispute and refer the Dispute to them. The senior officer designated by each Party shall have authority to make decisions on its behalf with respect to that Party's rights and obligations under this Agreement. The senior officers, once designated, shall promptly begin discussions in a good faith effort to agree upon a resolution of the Dispute. If the senior officers do not agree upon a resolution of

the Dispute within 14 days of its referral to them, or do not within the same 14 day period agree to refer the matter to some individual or organization for alternate Dispute resolution, then either Party shall have the right to pursue any and all remedies available to it at law or in equity. If the senior officers are not able to resolve a Dispute that has been referred to them within 14 days, or within such longer period as the senior officers mutually agree to in writing, then the Dispute shall be referred to the Market Monitoring Units of both Parties for a recommendation. The Market Monitoring Units shall work together to develop a joint recommendation for resolving the Dispute. If the Market Monitoring Units agree on a proposed resolution, they shall present their joint, written, recommendation to the Parties within 14 days of receiving the Parties' referral. If the Market Monitoring Units are not able to reach agreement on a joint recommendation, they shall each prepare a written recommendation and provide their recommendations to both Parties within 14 days of receiving the Parties' referral.

If the Parties are not able to agree to resolve the Dispute based on their negotiations or the Market Monitoring Units' recommendation or recommendations, then the Parties shall request that FERC's Dispute Resolution Service mediate their efforts to resolve the Dispute.

Copies of all recommendations prepared by the Parties' Market Monitoring Units shall be provided to the FERC Dispute Resolution Service Staff. 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 before the FERC.

Neither the giving of notice of a Dispute, nor the pendency of any Dispute resolution process as described in this section shall relieve a Party of its obligations under this Agreement, extend any notice period described in this Agreement or extend any period in which a Party must act as described in this Agreement. Notwithstanding the requirements of this section, either

Party may terminate this Agreement in accordance with its provisions, or pursuant to an action at equity. The issue of whether such a termination is proper shall not be considered a Dispute hereunder.

# 35.14.3 Market to Market Dispute Resolution.

Section 35.14.2 above does not apply to any Disputes that arise from, out-of, or under the

Market to Market Coordination Agreement (including the associated settlement obligations).

The Market to Market Dispute Resolution Process set forth in [Section 11] of the Market to

Market Coordination Agreement addresses the resolution of market to market coordination

process Disputes,

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# 35.15 Interconnection Revenue Metering

#### 35.15.1 Obligation to Provide Inadvertent Energy Accounting Metering.

The Parties shall require appropriate electric metering devices to be installed as required to measure electric power quantities for determining Interconnection Facilities inadvertent energy accounting.

# 35.15.2 Standards for Metering Equipment.

The parties shall cause any Metering Equipment used to meter Metered Quantities for inadvertent energy accounting to be designed, verified, sealed and maintained in accordance with the Party's respective metering standards or as otherwise agreed upon by the Coordination Committee.

# 35.15.3 Meter Compensation to the Point of Interconnection.

The metering compensation for transmission line losses to the Interconnection Facilities

Delivery Point shall be determined by the Party's respective standards or otherwise agreed to by
the Coordination Committee.

# 35.15.4 Metering Readings.

The Parties shall require that integrated meter readings are provided at least once each hour for Interconnection Facilities accounting purposes and meter registers are read at least monthly, as close as practical to the last hour of the month. An appropriate adjustment shall be made to register readings not taken on the last hour of the month.

## 35.16 Retained Rights of Parties

# 35.16.1 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.

#### 35.17 Representations

# 35.17.1 Good Standing.

Each Party represents and warrants that it is duly organized, validly existing and in good standing under the laws of the state or province in which it is organized, formed, or incorporated, as applicable.

# 35.17.2 Authority to enter Into Agreement.

Each Party represents and warrants that it has the right, power, and authority to enter into this Agreement, to become a Party hereto and to perform its obligations hereunder. This Agreement is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.

# 35.17.3 Organizational Formation Documents.

Each Party represents and warrants that the execution, delivery and performance of this Agreement does not violate or conflict with its organizational or formation documents.

# 35.17.4 Regulatory Authorizations.

Each Party represents and warrants that it has, or applied for, all regulatory authorizations necessary for it to perform its obligations under this Agreement.

# 35.18 Effective Date, Implementation, Term and Termination

#### 35.18.1 Effective Date; Implementation.

This Agreement shall become effective as of the date that all of the following have occurred: (i) upon the execution hereof by both Parties, and (ii) acceptance or approval by the Federal Energy Regulatory Commission. Commencing with the Effective Date, the Parties shall commence and continue efforts to implement other provisions of this Agreement on dates determined by the Coordination Committee, which dates shall be the earliest dates reasonably feasible for both Parties.

#### 35.18.2 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.

# 35.18.3 Right of a Party to Terminate.

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

35.18.3.3 This Agreement may be terminated at anytime by mutual agreement in writing.

#### 35.18.4 Survival.

The applicable provisions of this Agreement shall continue in effect after any termination of this Agreement to provide for adjustments and payments under Section 35.15, dispute resolution, determination and enforcement of liability, and indemnification, arising from acts or events that occurred during the period this Agreement was in effect. In addition, Sections 35.8.4 and 35.8.10 of this Agreement provides that the obligation to safeguard Confidential Information continues in effect for a period of seven years after any termination of this Agreement.

# 35.18.5 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.

#### 35.19 Additional Provisions

# 35.19.1 Force Majeure.

A Party shall not be considered to be in default or breach of this Agreement, and shall be excused from performance or liability for damages to any other party, if and to the extent it shall be delayed in or prevented from performing or carrying out any of the provisions of this Agreement, arising out of or from any act, omission, or circumstance by or in consequence of any act of God, labor disturbance, sabotage, failure of contractors or suppliers of materials, act of the public enemy, war, invasion, insurrection, riot, fire, storm, flood, ice, earthquake, explosion, epidemic, breakage or accident to machinery or equipment or any other cause or causes beyond such Party's reasonable control, including any curtailment, order, regulation, or restriction imposed by governmental, military or lawfully established civilian authorities, or by making of

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New York Independent System Operator Inc. and PJM Interconnection repairs necessitated by an emergency circumstance not limited to those listed above upon the property or equipment of the Party or property or equipment of others which is deemed under the Operational Control of the Party. A Force Majeure event does not include an act of negligence or Intentional Wrongdoing by a Party. Any Party claiming a Force Majeure event shall use reasonable diligence to remove the condition that prevents performance and shall not be entitled

NYISO Tariffs - OATT 35, Attachment CC - Joint Operating Agreement Among and Between

required by the Force Majeure event. Each Party shall use its best efforts to mitigate the effects

to suspend performance of its obligations in any greater scope or for any longer duration than is

of such Force Majeure event, remedy its inability to perform, and resume full performance of its

35.19.2 Force Majeure Notification.

obligations hereunder.

A Party suffering a Force Majeure event ("Affected Party") shall notify the other Party ("Non-Affected Party") in writing ("Notice of Force Majeure Event") as soon as reasonably practicable specifying the cause of the event, the scope of commitments under the Agreement affected by the event, and a good faith estimate of the time required to restore full performance. Except for those commitments identified in the Notice of Force Majeure Event, the Affected Party shall not be relieved of its responsibility to fully perform as to all other commitments in the Agreement. If the Force Majeure Event continues for a period of more than 90 days from the date of the Notice of Force Majeure Event, the Non-Affected Party shall be entitled, at its sole discretion, to terminate the Agreement.

#### 35.19.3 Indemnification.

"Indemnifying Party" means a Party who holds an indemnification obligation hereunder.

An "Indemnitee" means a Party entitled to receive indemnification under this Agreement as to any Third Party claim. 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 other Party, only to the extent that such Losses arise directly from:

- (a) Gross negligence, recklessness, or willful misconduct of the Indemnifying 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 Indemnitee or such Indemnitee's agents or employees, or (ii) as a consequence of strict liability imposed as a matter of law upon the Indemnitee, or such Indemnitee's agents or employees;
  - (b) Any claim arising from the transfer of Intellectual Property in violation of Section 35.19.8; or
  - (c) Any claim that such Indemnitee caused bodily injury to an employee of Third Party due to gross negligence, recklessness, or willful conduct of the Indemnifying Party.
  - (d) The Indemnitee shall give Notice to the Indemnifying Party as soon as reasonably practicable after the Indemnitee becomes aware of the Indemnifiable Loss or any claim, action or proceeding that may give rise to an indemnification. Such notice shall describe the nature of the loss or proceeding in reasonable detail and shall indicate, if practicable, the estimated amount of the loss that has been sustained by the Indemnitee. A delay or failure of the Indemnitee to provide the required notice shall release the Indemnifying Party (a) from any indemnification obligation to the extent that such delay or failure materially and adversely affects the Indemnifying Party's ability to defend such claim or materially and adversely

increases the amount of the Indemnifiable Loss, and (b) from any responsibility for any costs or expenses of the Indemnitee in the defense of the claim during such period of delay or failure.

(e) The indemnification by either Party shall be limited to the extent that the liability of a Party seeking indemnification would be limited by any applicable law and arises from a claim by a Party acting within the scope of this Agreement as to obligations of the other Party under this Agreement.

# **35.19.4** 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.

# 35.19.5 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.

# 35.19.6 Liability Between Parties.

The Parties' duties and standard of care with respect to each other, and the benefits and rights conferred on each other shall be no greater than as expressly stated herein. Neither Party, its directors, officers, trustees, employees or agents, shall be liable to the other Party for any loss, damage, claim, cost, charge or expense, whether direct, indirect, incidental, punitive, special, exemplary or consequential, arising from the other Party's performance or nonperformance under this Agreement, except to the extent that a Party, is found liable for gross negligence or willful misconduct, in which case the Party responsible shall be liable only for direct and ordinary

damages and not for any <u>lost goodwill</u>, incidental, consequential, punitive, special, exemplary or indirect damage.

This section shall not limit amounts required to be paid under this Agreement, or any of the appendices to this Agreement. This section shall not apply to adjustments or corrections for errors in invoiced amounts due under this Agreement or any of the appendices to this Agreement.

#### 35.19.6.1 Limitation on Claims

No claim seeking an adjustment in the billing for any service, transaction, or charge under this Agreement may be asserted with respect to a week or month, if more than one year has elapsed (a) since the first date upon which the invoice was rendered for the billing for that week or month, or (b) since the first date upon which a changed or modified invoice was rendered for that week or month. A Party shall make no adjustment to billing with respect to a week or month for any service, transaction, or charge under this Agreement, if more than one year has elapsed since the first date upon which the invoice was (a) rendered for the billing for that week or month or (b) since a changed or modified invoice was rendered for that week or month, unless a claim seeking such adjustment had been received by the Party prior thereto.

#### 35.19.7 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.

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# 35.19.8 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.

# 35.19.9 Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the State of Delaware's conflict of law principles.

#### 35.19.10 License and Authorization.

The agreements and obligations expressed herein are subject to such initial and continuing governmental permission and authorization as may be required. Each Party shall be responsible for securing and paying for any approvals required by it from any regulatory agency of competent jurisdiction relating to its participation in this Agreement and will reasonably cooperate with the other Party in seeking such approvals.

# 35.19.11 Assignment.

This Agreement shall inure to the benefit of, and be binding upon and may be performed by, the successors and assigns of the Parties hereto respectively, but shall not be assignable by either Party without the written consent of the other.

#### **35.19.12** Amendment.

# 35.19.12.1 Authorized Representatives.

No amendment of this Agreement shall be effective unless by written instrument duly executed by the Parties' authorized representatives. For the purposes of this section, an authorized person refers to individuals designated as such by Parties in their respective corporate by-laws.

# 35.19.12.2 Review of Agreement.

The terms of this Agreement are subject to review for potential amendment at the request of either Party. If, after such review, the Parties agree that any of the provisions hereof, or the practices or conduct of either Party impose an inequity, hardship or undue burden upon the other Party, or if the Parties agree that any of the provisions of this Agreement have become obsolete or inconsistent with changes related to the Interconnection Facilities, the Parties shall endeavor in good faith to amend or supplement this Agreement in such a manner as will remove such inequity, hardship or undue burden, or otherwise appropriately address the cause for such change.

#### 35.19.12.3 Mutual Agreement.

The Parties may amend this Agreement at any time by mutual agreement in accordance with Section 35.19.12.1 above.

#### 35.19.13 Performance.

The failure of a Party to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any right held by such Party. Any waiver on any specific occasion by either Party shall not be deemed a continuing waiver of such right, nor shall it be deemed a waiver of any other right under this Agreement.

# 35.19.14 Rights, Remedies or Benefits.

This Agreement is not intended to and does not create any rights, remedies, or benefits of any kind whatsoever in favor of any entities other than the Parties, their principals and, where permitted, their assigns.

# **35.19.15** Agreement.

This Agreement, including all Attachments attached hereto, is the entire agreement between the Parties with respect to the subject matter hereof, and supersedes all prior or

NYISO Tariffs – OATT 35, Attachment CC – Joint Operating Agreement Among and Between New York Independent System Operator Inc. and PJM Interconnection contemporaneous understandings or agreements, oral or written, with respect to the subject matter of this Agreement.

#### 35.19.16 Governmental Authorizations.

This Agreement, including its future amendments is subject to the initial and continuing governmental authorizations, including approval of the <a href="FERCFederal Energy Regulatory">FERCFederal Energy Regulatory</a>
<a href="Commission">Commission</a>, required to establish, operate and maintain the Interconnection Facilities as herein specified. Each Party shall take all actions necessary and reasonably within its control to maintain all governmental rights and approvals required to perform its respective obligations under this Agreement.

# 35.19.17 Unenforceable Provisions.

If any provision of this Agreement is deemed unenforceable, the rest of the Agreement shall remain in effect and the Parties shall negotiate in good faith and seek to agree upon a substitute provision that will achieve the original intent of the Parties.

# 35.19.18 Execution.

This Agreement may be executed in multiple counterparts, each of which shall be considered an original instrument, but all of which shall be considered one and the same Agreement, and shall become binding when all counterparts have been signed by each of the Parties and delivered to each Party hereto. Delivery of an executed signature page counterpart by telecopier or e-mail shall be as effective as delivery of a manually executed counterpart.

# 35.19.19 <u>Billing and Payment Procedures Payments.</u>

Unless otherwise indicated in writing by the parties, all payments due under this

Agreement will be effected in immediately available funds of the United States of America.

[THE NYISO INTENDS TO PROPOSE A CONSOLIDATED SET OF BILLING

PROCEDURES THAT ARE EXPECTED TO APPLY TO ALL CHARGES BETWEEN

NYISO AND PJM (RAMAPO PAR CONTRIBUTIONS, CHARGES FOR EMERGENCY

ENERGY AND PAYMENTS/CREDITS DUE UNDER THE M2M AGREEMENT—WHICH

WILL ENCOMPASS CHARGES FOR OVERUSE OF THE RAMAPO PARS). THE NYISO

EXPECTS TO BE ABLE TO INCLUDE PROPOSED CONSOLIDATED BILLING RULES IN

THE NEXT DRAFT OF THE JOA THAT IT SHARES WITH PJM.]

# 35.19.20 Regulatory Authority.

If any regulatory authority having jurisdiction (or any successor boards or agencies), a court of competent jurisdiction or other Governmental Authority with the appropriate jurisdiction (collectively, the "Regulatory Body") issues a rule, regulation, law or order that has the effect of cancelling, changing or superseding any term or provision of this Agreement (the "Regulatory Requirement"), then this Agreement will be deemed modified to the extent necessary to comply with the Regulatory Requirement. Notwithstanding the foregoing, if a Regulatory Body materially modifies the terms and conditions of this Agreement and such modification(s) materially affect the benefits flowing to one or both of the Parties, as determined by either of the Parties within twenty (20) business days of the receipt of the Agreement as materially modified, the Parties agree to attempt in good faith to negotiate an amendment or amendments to this Agreement or take other appropriate action(s) so as to put each Party in effectively the same position in which the Parties would have been had such modification not been made. In the event that, within sixty (60) days or some other time period mutually agreed upon by the Parties after such modification has been made, the Parties are unable to reach agreement as to what, if any, amendments are necessary and fail to take other appropriate action to put each Party in effectively the same position in which the Parties would have been had such modification not

been made, then either Party shall have the right to unilaterally terminate this Agreement forthwith.

#### 35.19.21 Notices.

Except as otherwise agreed from time to time, any Notice, invoice or other communication which is required by this Agreement to be given in writing, shall be sufficiently given at the earlier of the time of receipt or deemed time of receipt if delivered personally to a senior official of the Party for whom it is intended or electronically transferred or sent by registered mail, addressed as follows:

# [Update names/titles]

PJM: <u>Terry BostonPhillip G. Harris</u>

President & CEO

PJM Interconnection L.L.C. 955 Jefferson Avenue

Valley Forge Corporate Center Norristown, PA 19403-4501 Tel: (610) 666-4<mark>3778263</mark> Fax: (610) 666-4281

NYISO: New York System Operator

10 Krey Boulevard

Rensselaer, New York 12144

Attention: Vice President Operations & Reliability

or delivered to such other person or electronically transferred or sent by registered mail to such other address as either Party may designate for itself by Notice given in accordance with this section or delivered by any other means agreed to by the Parties hereto.

Any Notice, or communication so mailed shall be deemed to have been received on the third business day following the day of mailing, or if electronically transferred shall be deemed to have been received on the same business day as the date of the electronic transfer, or if

delivered personally shall be deemed to have been received on the date of delivery or if delivered by some other means shall be deemed to have been received as agreed to by the Parties hereto.

The use of a signed facsimile of future Notices and correspondence between the Parties related to this Agreement shall be accepted as proof of the matters therein set out. Follow-up with hard copy by mail will not be required unless agreed to by the Coordination Committee.

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

**IN WITNESS WHEREOF**, the signatories hereto have caused this Agreement to be executed by their duly authorized officers.

PJM INTERCONNECTION, L.L.C.

Βv	: Michael J	<ul> <li>Kormos.</li> </ul>	Senior	VP -	Reliability	Services
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Date:
NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.
By: Mark S. Lynch, President and CEO
Date:

# [THERE SHOULD NOT BE ANY CHANGES BELOW THIS POINT.]

# 35.20 Schedules A and B

# Schedule A - Description Of Interconnection Facilities

The NYISO – PJM Coordination Agreement covers the PJM – NYISO *Interconnection Facilities* under the *Operational Control* of the NYISO and PJM. For *Operational Control* purposes, the point of demarcation for each of the *Interconnection Facilities* listed below is the point at which each *Interconnection Facility* crosses the PJM-New York State boundary, except as noted below.

The PJM-NYISO Interconnection contains twenty-three (23) alternating current ("AC") Interconnection Facilities, seven (7) of which form one (1) AC pseudo-tie<sup>1</sup>; and further contains one (1) HVDC Interconnection Facility as well as one (1) Variable Frequency Transformer (VFT). These are tabulated below:

NY/PJM AC Interconnection Facilities:

PJM	NYISO	Designated	(kV)	Common Meter Point
Branchburg	Ramapo	5018	500	Ramapo
Cresskill	Sparkill	751	69	Cresskill
E. Sayre	N. Waverly	956	115	E. Sayre
E. Towanda	Hillside	70	230	Hillside
Erie East	South Ripley	69	230	South Ripley
Harings Corners	Burns	702	138	Harings
Harings Corners	Pearl River	45	34	Harings
Harings Corners	W. Nyak	701	69	Harings
Homer City	Watercure	30	345	Homer
Homer City	Stolle Road	37	345	Homer
Hudson	Farragut	C3403	345	Farragut
Hudson	Farragut	B3402	345	Farragut

WEQ-007 "Inadvertent Interchange Payback Standards," North American Energy Standards Board (NAESB), on-line at www.naesb.org.

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Linden	Goethals	A2253	230	Goethals
Linden VFT	Linden Cogen	VFT	345	Linden VFT
Montvale	Pearl River	491	69	Montvale
Montvale	Blue Hill	44	69	Montvale
Montvale	Blue Hill	43	69	Montvale
RECO	NYISO	AC Pseudo-Tie	Various	O&R EMS
Sayerville	Newbridge	HVDC-Tie	500	New Bridge
S. Mahwah	Hilburn	65	69	S. Mahwah
S. Mahwah	S. Mahwah	BK 258	138/345	S. Mahwah
S. Mahwah	Ramapo	51	138	S. Mahwah
S. Mahwah	Waldwick	J3410	345	Waldwick
S. Mahwah	Waldwick	K3411	345	Waldwick
Tiffany	Goudey	952	115	Goudey
Warren	Falconer	171	115	Warren

# **Schedule B - Other Existing Agreements:**

- 1.0 Lake Erie Emergency Redispatch (LEER)
- 2.0 RAMAPO PHASE ANGLE REGULATOR OPERATING PROCEDURE prepared by the NYPP/PJM Circulation Study Operating Committee.
- 3.0 Operating Protocol for the Implementation of Commission Opinion No. 476, Docket No. EL02-23-000 (Phase II), New York Independent System Operator, Inc., FERC Electric Tariff, Original Vol. No. 2, Attachment M-1.
- 4.0 Northeastern ISO/RTO Coordination of Planning Protocol
- 5.0 Inter Control Area Transaction Agreement.
- 6.0 Procedures to Protect for Loss of Phase II Imports (effective January 16, 2007, pursuant to Order issued January 12, 2007, in FERC Docket No. ER07-231-000).
- 7.0 Unscheduled Transmission Service Agreement, PJM Interconnection L.L.C, Rate Schedule No. 30, Effective Date January 1, 2001.

8.0 Joint Emergency Operating Protocol dated September 10, 2009, among PJM Interconnection, L.L.C., New York Independent System Operator, Inc., and Linden VFT, LLC (Filed by PJM on October 1, 2009, in FERC Docket No. ER09-996-000).

# 35.21 Schedule C - Operating Protocol for the Implementation Of Con Ed - PJM Transmission Service Agreements

- 1.1 This "Operating Protocol" establishes procedures for the planning, operation, control, and scheduling of energy between the New York Independent System Operator, Inc. ("NYISO") and PJM Interconnection, L.L.C. ("PJM") (collectively, the "Parties"), associated with two Long-term Firm Point-to-Point Transmission Service Agreements ("TSAs") entered into by Consolidated Edison Company of New York ("ConEd") and PJM, dated April 18, 2008, executed in connection with the rollover of contracts dated May 22, 1975 (as amended May 9, 1978) and May 8, 1978 between ConEd and Public Service Electric & Gas Company ("PSE&G"). The TSA designated Original Service Agreement No. 1874 is referred to herein as the 400 MW transaction and the TSA designated Original Service Agreement No. 1873 is referred to as the 600 MW transaction. The two contracts are referred to collectively as the "600/400 MW transactions."
  - 1.1.1 The 400 MW transaction. The 400 MW transaction has the same level of firmness as other firm transactions, except as provided in section 1.3 of this Operating Protocol.
  - 1.1.2 The 600 MW transaction. The 600 MW transaction shall have the same level of firmness as other firm transactions.
- 1.2 This Operating Protocol shall be used by the NYISO and PJM in preparing to operate, and operating in real-time, to the hourly flow of energy between them pursuant to the 600/400 MW transactions as established by this Operating Protocol.
- 1.3 During system emergencies, the appropriate emergency procedures of the NYISO and PJM, if necessary, shall take priority over the provisions of this Operating Protocol. The NYISO and PJM shall have the authority to implement their respective emergency procedures in whatever order is required to ensure overall system reliability. Without limiting the foregoing, the order of load relief measures and transaction reductions when there is an emergency in the PJM Mid-Atlantic Area will be:
  - Calling of Emergency Load Response
  - Voltage reduction
  - Pro-rata load shed and reduction of the 600/400 MW transactions<sup>2</sup>

In a maximum generation emergency in the PJM Mid-Atlantic Area where PSE&G load needs to be curtailed, the PSE&G load would be curtailed pro-rata with curtailment of the ConEd requested service (and other firm service on the system). But, if NYISO is not also in a capacity emergency, the desired flow on ABC will be reduced by up to 400 MW to the extent necessary to avoid a PSEG load curtailment. ConEd may upgrade the transmission service for the 400 MW transaction to eliminate the reduction of the 400 MW transaction prior to

In addition, if PJM declares an emergency condition that arises from outages on the PSE&G system, the NYISO and PJM may agree to deliver up to 400 MW to Goethals for re-delivery to Hudson via the NYISO's system. Such emergency re-deliveries shall not be considered in the calculation of the Real-Time Market Desired Flow under Appendices 1 and 3 of this Operating Protocol.

- 1.4 All aspects of this Operating Protocol are subject to the dispute resolution procedures set forth in the Joint Operating Agreement Among and Between New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.
- 1.5 The Parties will review all aspects of this Operating Protocol annually.
- Attached and included as part of this Operating Protocol are the following appendices: Appendix 1 – Process Flow, Appendix 2 – Transmission Constraints and Outages Associated with the Contracts, Appendix 3 – The Day-Ahead Market and Real-Time Market Desired Flow Calculation, Appendix 4 – Planning Procedures, Appendix 5 – Operation of the PARs, Appendix 6 – Distribution of Flows Associated with Implementation of Day-Ahead and Real Time Market Desired Flows, Appendix 7 – References, and Appendix 8 – Definitions.

load shed as described above by requesting such upgraded service and funding all necessary transmission upgrades as required by Part II and Part VI of the PJM OATT. The 600 MW transaction shall be reduced in the same manner as all other firm transactions in PJM.

#### **Schedule C Appendices**

# **Appendix 1- Process Flow**

# Two Day-ahead Actions:

- 1. PJM shall post constraint forecast information on its OASIS, or a comparable website, indicating if there is the potential for off-cost operations, two days prior to the operating day by 9 pm (sample at Figure 1 in Appendix 7).
- 2. PJM shall analyze transmission and generation outages in accordance with Appendix 2B to determine if the 600/400 MW transaction flow is expected to be feasible under a security constrained dispatch in PJM. If any portion of the flow is not expected to be feasible under a security-constrained dispatch, PJM will determine what portion of the flow is expected to be feasible and post that information on the PJM OASIS. This advance notification is not binding on any party.
- The NYISO shall post transmission outages on its OASIS, or a comparable website, to identify outages that impact the transfer capability of the ISO Secured Transmission System.3

#### **Day Ahead Scheduling:**

- 4. ConEd shall submit a contract election (NY-DAE) in the NYISO's Day-Ahead Market for the 600/400 MW transactions prior to the NYISO Day Ahead Market (DAM) deadline (currently 5:00 a.m.).
- 5. The NYISO shall establish New York (aggregate ABC interface and aggregate JK interface) Desired Flow (NYDF) schedules for NYISO Day Ahead Market using the NY-DAE identified in (4).
- 6. The NYISO shall establish the distribution of flows for the NYISO DAM in accordance with Appendix 7.
- 7. The NYISO shall run the New York Day Ahead Market with NYDF schedules determined in (5 and 6).
- 8. The NYISO shall post DAM results by the deadline established in its market rules (currently prior to 11:00 a.m.). The NYISO shall provide NYDF schedules and post nodal prices for the JK

<sup>3</sup> The ISO Secured Transmission System is defined in the NYISO's Transmission and Dispatching Operations Manual.

(Ramapo), BC (Farragut) and A (Goethals) pricing points on the NYISO OASIS, or a comparable website (sample at Figure 2 in Appendix 7).

- 9. ConEd shall submit a transaction election (PJM-DAE) in the PJM Day Ahead Market prior to the PJM Day Ahead Market deadline (currently 12 noon):
  - a) ConEd shall submit a transaction election for the 600 MW transaction.
  - b) ConEd shall submit a transaction election for the 400 MW transaction.
- 10. PJM shall establish the PJM (aggregate ABC interface and aggregate JK interface) Desired Flow (PJMDF) schedules for PJM Day Ahead Market using PJM-DAE identified in (9).
- 11. PJM shall establish the distribution of flows for the PJM DAM in accordance with Appendix 7.
- PJM shall run the PJM Day Ahead Market with the PJMDF schedules determined in (11). The amount of the PJM-DAE which clears will become the PJM Day Ahead Schedule amount (PJM-DAS).
- 13. PJM Day Ahead results shall be posted by the deadline established in PJM's market rules (currently at 4:00 p.m.), and shall identify the PJM-DAS. The PJM posting will include nodal prices for the JK (Waldwick), BC (Hudson) and A (Linden) pricing points on https://esuite.pjm.com/mui/index.htm or a comparable website (sample at Figure 3 in Appendix 7).

# If there is congestion in the PJM Day Ahead Market:

14. If there is congestion in PJM that affects the 600/400 MW transaction, PJM shall re-dispatch.

#### In Day Operations:

- 15. Aggregate ABC and aggregate JK Real-Time Market Desired Flow (RTMDF) calculations shall be made in real time, continuous throughout the operating day, by the NYISO and PJM.
- 16. The desired distribution of flows on the A, B, C, J, and K lines for the in-day markets shall be established by PJM and the NYISO in accordance with Appendix 6.
- 17. If neither PJM nor the NYISO are off-cost, or if both are off-cost, aggregate actual ABC interface flows shall be within +/- 100 MW of the aggregate RTMDF for the ABC interface and aggregate actual JK interface flows shall be within +/- 100 MW of the aggregate RTMDF for the JK interface4.

<sup>4</sup> PJM and NYISO will operate in accordance with the bandwidth requirements of Step 17 to the extent practicable (utilizing PARs, curtailment of third party transactions, and re-dispatch, consistent with the other provisions of the Operating Protocol) recognizing relevant operating conditions that are beyond the control of PJM

- ConEd shall have the option to request a modification in the Real-Time Market from its Day Ahead Market election (NY\_DAE and PJM\_DAE) for each hour.5
  - ConEd must request a Real-Time election (RTE) modification through NYISO at least 75 minutes prior to the dispatch hour (or a shorter notice period that is agreed upon by the NYISO and PJM.).
  - b) The NYISO shall notify PJM of the RTE.
  - ConEd shall settle with PJM for the balancing market costs for deviations between PJM-DAS and RTE pursuant to the TSAs described in Section 35.1 of this Operating Protocol.
     ConEd shall settle with the NYISO for balancing market costs for deviations between NY-DAE and RTE. ConEd shall not be responsible for NYISO balancing market costs resulting from NYISO-directed deviations between NY DAE and RTE.

Note - Actions identified in steps 17 and 18 that are taken will be logged, and PSE&G and ConEd will be notified of PAR moves related to these steps.

#### If there is In-Day congestion:

- 19. If PJM is off-cost or is expected to go off-cost for two or more consecutive hours in maintaining the RTMDF, and the NYISO is not off-cost, then PJM and NYISO shall consult with each other and shall use reasonable efforts to redirect up to 300 MW (in a mutually agreed upon amount and in mutually agreed upon increments) from the PJM system onto the NYISO system; provided, however, that PJM and the NYISO verify that allowing actual aggregate interface flows to deviate from the RTMDF will not result in violation of applicable PJM or NYISO reliability criteria. PJM and the NYISO shall continue to use reasonable efforts to modify actual interface flows in incremental adjustments until
  - a) PJM is no longer off-cost, or
  - b) The NYISO is about to go off-cost (i.e., the NYISO expects that it will have to redispatch in response to transmission constraints in order to maintain the RTMDF), or
  - c) 300 MW have been redirected.

and NYISO or that are not anticipated by this Operating Protocol. Deviations will be accounted for with in-kind payback using the Auto Correction Factor described in Appendix 3 to this Operating Protocol.

5 At all times, however, the ConEd election under the 600/400 MW transactions must be the same in PJM and NYISO in In-Day Operations. Absent an in-day change in the election by ConEd, the ConEd Real-Time election shall be the PJM-DAS.

- 20. If the NYISO is off-cost or expected to go off-cost for two or more consecutive hours in maintaining the RTMDF, and PJM is not off-cost, then PJM and the NYISO shall consult with each other and shall use reasonable efforts to redirect up to 300 MW (in a mutually agreed upon amount and in mutually agreed upon increments) from the NYISO system onto the PJM system; provided, however, that PJM and NYISO verify that allowing actual aggregate interface flows to deviate from the RTMDF will not result in violation of applicable PJM or NYISO reliability criteria. PJM and the NYISO shall continue to use reasonable efforts to modify actual interface flows in incremental adjustments until:
  - a) The NYISO is no longer off-cost, or
  - b) PJM is about to go off-cost (*i.e.*, PJM expects that it will have to redispatch in response to transmission constraints in order to maintain the RTMDF), or
  - c) 300 MW have been redirected

# Appendix 2 - Transmission Constraints and Outages - Associated with the Contracts

#### A. Constraints

A list of constraints identified as potential constraints that may result in off-cost operation due to transfers associated with the 600/400 MW transactions will be posted on the PJM and NYISO OASIS or web page. The constraints included in the listing should be considered representative of the kinds of constraints that may exist within PJM or the NYISO. If such transmission constraints are limiting, then the affected ISO/RTO may be subject to off-cost operation due to transfers associated with the 600/400 MW transactions. Other constraints, not listed on the web site, may arise that could cause either ISO/RTO to operate off-cost. The list may be revised by NYISO/PJM to reflect system changes or security monitoring technique changes in their respective Control Areas.

#### B. Outages

The NYISO and PJM will identify critical outages that may impact redispatch costs incurred for the delivery of energy, under the 600/400 MW transactions. Identified outages may have the following consequences:

The outage of any A, B, C, J, or K facility will result in the NY-DAE, PJM-DAE, and/or RTE (as appropriate) being limited to a value no greater than the remaining thermal capability of the most limiting of the ABC interface or the JK interface. The remaining thermal capability of either the ABC interface or the JK interface may be limited by other facilities directly in series with the A, B, C, J, or K lines.

 It is not anticipated that one primary facility outage will preclude PJM from providing redispatch for the 600 MW or 400 MW transaction. However, combinations of two or more outages of the facilities, listed on the PJM OASIS or web page, could preclude PJM from accommodating all or part of the delivery, even with redispatch. In this case, PJM will provide notification to NYISO.

PJM will provide notification 6 of all outages by posting these outages (transmission only) on the PJM OASIS or web site.

NYISO will provide notification of all outages by posting these outages (transmission only) on the NYISO OASIS or web site.

PJM and the NYISO will review and revise, as necessary, the list of primary and secondary facilities on an annual basis.

<sup>6</sup> PJM can also provide the option of automated email outage notification through the PJM eDart tool.

# Appendix 3 - The Day-Ahead Market and Real-Time Market - Desired Flow Calculation

The following shall be the formula for calculating Day-Ahead Market (DAM) and Real-Time Market (RTM) desired flows:

 $NYDF_{JK} = [NY-DAE] - [A]*[PJM-NYISO DAM Schedule] - [B] *[OH-NYISO DAM Schedule] - [C] *[West-PJM DAM Schedule] - [D]*[DAM Lake Erie Circulation]$ 

 $PJMDF_{ABC} = [PJM-DAE] + [A]*[PJM-NYISO DAM Schedule] + [B]*[OH-NYISO DAM Schedule] + [C]*[West-PJM DAM Schedule] + [D]*[ DAM Lake Erie Circulation]$ 

 $PJMDF_{JK} = [PJM-DAE] - [A]*[PJM-NYISO DAM Schedule] - [B]*[OH-NYISO DAM Schedule] - [C]*[West-PJM DAM Schedule] - [D]*[DAM Lake Erie Circulation]$ 

RTMDFABC = [RTE] + [A]\*[PJM-NYISO RTM Schedule] + [B] \*[OH-NYISO RTM Schedule] + [C] \*[West-PJM RTM Schedule] + [D]\*[RTM Lake Erie Circulation] + Auto Correction Factor

RTMDFJK = [RTE] - [A]\*[PJM-NYISO RTM Schedule] - [B] \*[OH-NYISO RTM Schedule] - [C] \*[West-PJM RTM Schedule] - [D]\*[RTM Lake Erie Circulation] + Auto Correction Factor

- The DAM and RTM desired flows will be limited to the facility rating.
- The Auto Correction Factor component of the desired flow is the on-peak and off-peak aggregations of MW deviation in a calendar day to be included in a subsequent day's on-peak or off-peak period as applicable and agreed upon by PJM and NYISO. The Auto Correction Factor "pays-back" MW in kind during a subsequent day on-peak or off-peak period as agreed upon by NYISO and PJM. On-peak aggregation shall be paid back in a subsequent day on-peak period. Off-peak aggregation shall be paid back in a subsequent day off-peak period.

Α	13 %	Adjustment for NYISO-PJM Schedule
В	0 %	Adjustment for OH-NYISO Schedule
С	0 %	Adjustment for West-PJM Schedules
D	0 %	Adjustment for Lake Erie Circulation

Other impacts will be part of the real time bandwidth operation – not the desired flow calculation. These impacts will be reviewed by PJM and the NYISO on an annual basis.

The above distribution factors (A, B, C, D) will be used in the calculation unless otherwise agreed by PJM and the NYISO based upon operating analysis conducted in response to major topology changes or outages referenced in Appendix 2. Such modifications will be posted by PJM and the NYISO on the PJM and NY OASIS sites or web sites.

# **Appendix 4 - Planning Procedures**

The procedures for identifying and remedying impairments shall be handled on a planning basis. The impairment process is not directly applicable to DAM or RT operations under the 600/400 MW transactions.

#### **EXISTING IMPAIRMENTS**

 PJM and the NYISO are not aware of any existing impairments that would preclude provision of transmission service under the 600 MW / 400 MW transaction.

#### **NOTIFICATION PROCEDURES**

 ConEd and PSE&G shall notify the NYISO and PJM respectively under their existing ISO/RTO interconnection procedures when interconnecting new generation facilities to their transmission systems.

#### PROCEDURES FOR DETERMINATION OF FUTURE IMPAIRMENTS

- The procedures to be used by the NYISO and PJM for the determination of future impairments shall be in accordance with:
  - o The PJM Regional Transmission Expansion Planning Process;
  - o The NYISO Comprehensive Reliability Planning Process; and
  - The Northeast ISO/RTO Planning Coordination Protocol executed by PJM, the NYISO and ISO-New England Inc.
- The Northeast ISO/RTO Planning Coordination Protocol contains provisions for the coordination of interconnection requests received by one ISO/RTO that have the potential to cause impacts on an adjacent ISO/RTO to include the handling of firm transmission service.
- The Northeast ISO/RTO Planning Coordination Protocol has provisions for notification, development of screening procedures, and coordination of the study process between the ISO/RTOs.
- The Northeast ISO/RTO Planning Coordination Protocol also provides that all analyses performed to evaluate cross-border impacts on the system facilities of one of the ISOs/RTOs will be based on the criteria, guidelines, procedures or standards applicable to those facilities.
- Future planning studies by the ISOs/RTOs shall include 1,000 MW7 of firm delivery from
  the NYISO at Waldwick and 1,000 MW of re-delivery from PJM at the Hudson and Linden
  interface independent of the amount of off-cost operation that is required to meet
  reliability criteria. For PJM load deliverability planning studies, which simulate a
  capacity emergency situation, the system shall be planned to include 1,000 MW of firm

<sup>7 1,000</sup> MW will also be included in the FTR simultaneous feasibility analysis.

delivery from the NYISO at Waldwick and 600 MW of re-delivery from PJM at the Hudson and Linden interface.

# Appendix 5 - Operation of the PARs

#### General

This procedure outlines the steps taken to coordinate tap changes on the PARs in order to control power flow on selected transmission lines between New York and New Jersey. The facilities are used to provide transmission service and to satisfy the 600/400 MW transactions, other third party uses, and to provide emergency assistance as required. These tie-lines are part of the interconnection between the PJM and NYISO. These PAR operations will be coordinated with the operation of other PAR facilities including the 5018 PARs. The 5018 PAR will be operated taking into account this Operating Protocol. The ties are controlled by PARs at the following locations:

- Waldwick (F-2258, E-2257, O-2267)
- Goethals (A-2253)
- Farragut (C-3403, B-3402)

This appendix addresses the operation of the PARs at Waldwick, Goethals, and Farragut as these primarily impact the delivery associated with the 600/400 MW transactions .

PJM and the NYISO will work together to maintain reliable system operation, and to implement the RTMDF within the bandwidths established by this Operating Protocol while endeavoring to minimize the tap changes necessary to implement these contracts.

RTMDF calculations will be made for the 'ABC Interface', and the 'JK Interface'. Desired line flow calculations will be made for A, B, and C lines (initial assumption is balanced each 1/3 of the ABC Interface), and for the J and K lines (initial assumption is balanced each ½ of the JK Interface).

## **Normal Operations**

The desired flow calculation process is a coordinated effort between PJM and the NYISO. PJM and the NYISO have the responsibility to direct the operation of the PARs to ensure compliance with the requirements of the Operating Protocol. However, one of the objectives of this procedure is to minimize the movement of PARs while implementing the 600/400 MW transactions. PJM and the NYISO will employ a +/- 100 MW bandwidth at each of the ABC and JK Interfaces to ensure that actual flows are maintained at acceptable levels.

PJM and the NYISO have operational control of the PARs and direct the operation of the PARs, while PSE&G and ConEd have physical control of the PARs. The ConEd dispatcher sets the PAR taps at Goethals and Farragut at the direction of the NYISO. The PSE&G dispatchers set the PAR taps at Waldwick at the direction of PJM.

Tap movements shall be limited to 400 per month based on 20 operations (per PAR) in a 24-hour period. If, in attempting to maintain the desired bandwidth, tap movements exceed these limits, then the bandwidth shall be increased in 50 MW increments until the tap movements no longer exceed 20 per day, unless PJM and the NYISO agree otherwise.

#### **Emergency Operations**

If an emergency condition exists in either the NYISO or PJM, the NYISO dispatcher or PJM dispatcher may request that the ties between New York and New Jersey be adjusted to assist directing power flows in the respective areas to alleviate the emergency situation. The taps on the PARs at Waldwick, Goethals, and Farragut may be moved either in tandem or individually as needed to mitigate the emergency condition. Responding to emergency conditions in either the NYISO or PJM overrides any requirements of this Operating Protocol and the appendices hereto.

#### **PAR Movement Scenarios**

**Case 1** — Aggregate actual flow on the JK interface (at Waldwick) or the ABC interface (at Farragut and Goethals) is higher or lower than RTMDF, but within the bandwidth.

No action taken. Flows will continue to be monitored, but action will only be taken if the flows get above or below the bandwidth.

Case 2 — Aggregate actual flow on the JK interface (at Waldwick) or the ABC interface (at Farragut and Goethals) is higher or lower than the RTMDF, and outside the bandwidth.

PJM and the NYISO will coordinate the following procedures:

- PJM shall determine the Waldwick PAR tap change(s) that change the aggregate actual flow to be within the bandwidth, considering the impact that the proposed tap changes have on the NYISO. If the PJM analysis indicates that the tap changes can be made without causing an actual or contingency constraint in the NYISO that would result in NYISO off-cost operation, PJM will inform the NYISO of the proposed PAR moves, obtain the NYISO's concurrence, and direct PSE&G to implement the PAR tap changes.
- The NYISO shall determine the Farragut and Goethals PAR tap change(s) that change the aggregate actual flow to be within the bandwidth, considering the impact that the proposed tap changes have on PJM. If the NYISO analysis indicates that the tap changes can be made without an actual or contingency constraint in PJM that would result in PJM off-cost operation, the NYISO will inform PJM of the proposed PAR moves, obtain PJM concurrence, and direct ConEd to implement the PAR tap changes.
- If PJM is off-cost or expected to go off-cost in maintaining the RTMDF and the NYISO is not off-cost, then PJM/NYISO shall agree to allow actual aggregate interface flows to deviate from the RTMDF in order to re-direct up to 300 MW from the PJM system onto the NYISO system. PJM and the NYISO shall continue to use reasonable efforts to modify actual interface flows in incremental adjustments until 1) PJM is no longer off-cost; or 2) the NYISO is about to go off-cost (i.e., the NYISO expects that it will have to redispatch in response to transmission constraints in order to maintain the RTMDF).

If the NYISO is off-cost or expected to go off-cost and PJM is not off-cost in maintaining the RTMDF, then PJM/NYISO shall agree to allow actual aggregate interface flows to deviate from the RTMDF in order to re-direct up to 300 MW from the NYISO system onto the PJM system.

PJM and the NYISO shall continue to use reasonable efforts to modify actual interface flows in incremental adjustments until 1) NYISO is no longer off-cost; or 2) PJM is about to go off-cost (i.e., PJM expects that it will have to redispatch in response to transmission constraints in order to maintain the RTMDF).

- If the ABC actual interface flows cannot be maintained within the interface desired flow range due to the following system conditions: (1) insufficient PAR angle capability resulting from any of the A, B, C, J, or K PARs being at their maximum tap setting, and (2) PJM's inability to redispatch in response to transmission constraints to support ABC deliveries to New York, then PJM and the NYISO shall consider using other available facilities, including the other PARs, to create flow capability to permit the necessary tap changes to bring the actual flow within the tolerances of the desired flow calculation, provided that this can be done without creating additional redispatch costs in either the NYISO or PJM. If after such actions have been taken, including the use of other facilities, and ABC/JK actual interface flows still cannot be maintained within the interface desired flow range, then an adjustment to the desired flow calculation (a desired flow offset, with the amount agreed to by PJM and the NYISO) shall be made such that both the ABC and JK actual interface flows are within +/- 100 MW of the ABC and JK interface RTMDF respectively.
- If the JK actual interface flows cannot be maintained within the interface desired flow range due to the following system conditions: (1) insufficient PAR angle capability resulting from any of the A, B, C, J, or K PARs being at their maximum tap setting, and (2) the NYISO's inability to re-dispatch in response to transmission constraints to support JK deliveries to PJM then PJM and NYISO shall consider using other available facilities, including the other PARs to create flow capability to permit the necessary tap changes to bring the actual flow within the tolerances of the desired flow calculation, provided that this can be done without creating additional redispatch costs in either the NYISO or PJM. If after such actions have been taken, including the use of other facilities, and ABC/JK actual interface flows still cannot be maintained within the interface desired flow range, then an adjustment to the desired flow calculation (a desired flow offset, with the amount agreed to by PJM and NYISO) shall be made such that both the ABC and JK actual interface flows are within +/- 100 MW of the ABC and JK interface RTMDF respectively.

Case 3 — If PJM or NYISO analysis reveals that future system conditions (within the next several hours) may reasonably be expected to require that a PAR will need to change by more than 3 taps in order to remain within the bandwidth, then PJM and NYISO shall consider pre-positioning the system to address these future conditions. Both PJM and the NYISO must agree to any decision to re-position the taps to address expected future conditions.

PJM and the NYISO will coordinate with each other and may mutually agree to position the respective PARs on each system to be within two tap changes in anticipation of changes to RTMDF for the next several hours to ensure that the PARs are positioned such that they are able to meet the anticipated RTMDF.

# Appendix 6 – Distribution of Flows Associated with Implementation of Day-Ahead and Real Time Market Desired Flows

In general, the ability to maintain the ABC / JK actual interface flows at their corresponding ABC/JK Day-Ahead and Real Time Market Desired Flow (RTMDF) values should not be impacted by individual line flow constraints. The Operating Protocol will ordinarily be considered satisfied if the ABC/JK actual interface flows are each equal to the desired flow values plus or minus the 100 MW bandwidth.

The initial estimate of individual line flow distribution for the ABC / JK interfaces shall be based on an equal flow assumption among the lines comprising the interface. Under outage conditions of the A, B, C, J, or K lines, the initial estimate of individual line flow distribution shall be based on an assumption that flows should be equalized among those remaining lines comprising the interface. Further, the ISOs shall adjust (from RTMDF) the flow distribution for ABC (move flow from the A line to the B and C lines) upon the NYISO's request, provided that the adjustment shall not exceed 125 MW if PJM is off-cost or is expected to be off-cost. Con Ed shall not be responsible for balancing charges resulting from changes in the individual line flow distribution between the PJM Day-Ahead and Real-Time Markets.

# For example:

If the ABC interface RTMDF is 900 MW, then the initial estimate of line flow on A is 1/3 \* 900=300 MW, B is 1/3 \* 900=300 MW, and C is 1/3 \* 900=300 MW.

If the J, K interface RTMDF is 900 MW, then the initial estimate of line flow on J is 1/2 \* 900=450 MW, K is 1/2 \* 900=450 MW.

However, if the ABC/JK actual interface flows cannot be maintained within the 100 MW bandwidth of desired flows due to the following system conditions: 1) insufficient PAR angle capability and an inability to redispatch in response to transmission constraints in PJM; or 2) upon implementing a NYISO request to adjust the distribution of flow on the A line (move flow

from the A line to the B and C lines) in excess of 125 MW as described above, then the actual ABC and/or JK interface flow shall be adjusted to be as close as feasible to the interface desired flow values for each of the JK and ABC interfaces.

# For example:

Assume the ABC interface RTMDF = 900 MW, then the initial estimate of line flow on A is 1/3\*900=300 MW, B is 1/3\*900=300 MW, and C is 1/3\*900=300 MW. Further assume that the NYISO requests that the distribution of flow over the A line be limited to 100 MW, then the resulting system conditions are an actual ABC interface flow of 825 MW with individual PAR flows of A=100 MW, B=362.5 MW, C=362.5 MW.

In this example, the actual ABC interface flow is as close as feasible to the ABC RTMDF assuming off-cost operation in the PJM area and the NYISO request that the distribution of flow over the A line be limited to 100 MW, which is in excess of the 125 MW distribution adjustment (300 MW-100 MW = 200 MW). PJM and the NYISO's obligations under this Operating Protocol will be deemed to be satisfied even though the ABC/JK actual interface flows are not equal to the RTMDF plus or minus the 100 MW bandwidth.

# Appendix 7 - References

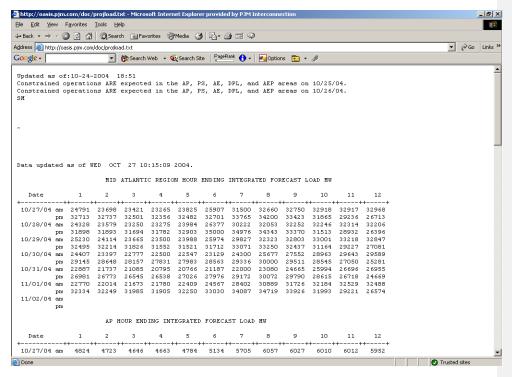


Figure 1 - PJM Constraints

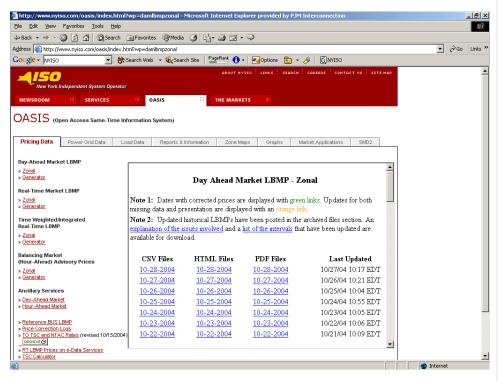


Figure 2 - NYISO Day Ahead Results

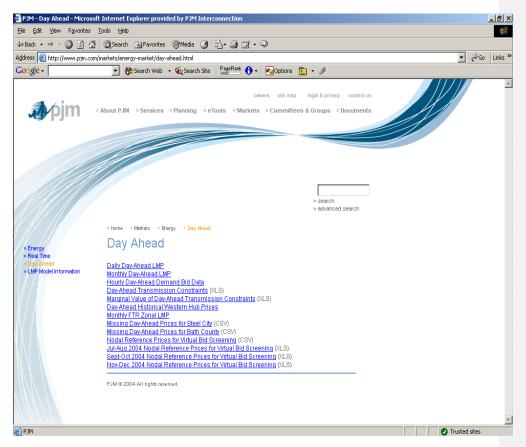


Figure 3 - PJM Day Ahead Market Results

# Appendix 8 – Definitions [CONSIDER MOVING AND MERGING THESE DEFINITIONS AND ACRONYMS WITH THE DEFINITIONS AT THE BEGINNING OF THE JOA]

**Off-cost:** the weighted LMP of JK is less than the weighted LMP of ABC by more than \$5 and/or the weighted nodal pricing of Ramapo is less than the weighted nodal pricing of the aggregate of Farragut and Goethals by more than \$5 (with a reasonable expectation of the appropriate cost differential continuing for at least two consecutive hours). However, for the evaluation of a PJM request for a redirect, the Off-cost value for PJM shall be more than \$5 (with a reasonable expectation of the appropriate PJM cost differential continuing for at least two consecutive hours) and the Off-cost value for the NYISO shall be \$0. For the evaluation of a NYISO request for a redirect, the Off-cost value for NYISO shall be more than \$5 (with a reasonable expectation of the appropriate NYISO cost differential continuing for at least two consecutive hours) and then Off-cost value for the PJM shall be \$0.

Mid-Atlantic Area: Atlantic City Electric Company, Baltimore Gas and Electric Company, Delmarva Power and Light Company, Jersey Central Power and Light Company, Metropolitan Edison Company, PECO Energy Company, PPL Electric Utilities Corporation, Pennsylvania Electric Company, Potomac Electric Power Company, Public Service Electric and Gas Company, and Rockland Electric Company.

**New York ISO Day Ahead Election (NY-DAE):** election by ConEd – submitted in the NYISO Day-Ahead Market prior to 5 a.m..

**NY Desired Flow (NYDF):** desired flow calculation by NYISO based on NY-DAE for input to NYISO Day Ahead Market.

**PJM Day Ahead Market Election (PJM-DAE):** election by the ConEd – submitted in the PJM Day Ahead Market prior to 12 noon.

**PJM Desired Flow (PJMDF):** desired flow calculation by PJM based on PJM-DAE for input to PJM Day Ahead Market.

**ConEd Real-Time election (RTE):** option by ConEd to request Real-Time Market modification from its Day Ahead Market election.

Real Time Market Desired Flow (RTMDF): Desired flow for real time operations.

**Impairments:** Conditions determined during the NYISO's and PJM's respective planning analyses that will cause implementation of the 600/400 MW transactions to result in violations of established reliability criteria.

**Active Load Management (ALM):** Active Load Management is end-use customer load which can be interrupted at the request of PJM. Such PJM request is considered an Emergency action and is implemented prior to a voltage reduction.

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**Pricing points:** aggregate nodal points for the ABC interface and JK interface at the respective locations in both PJM and NYISO regions. These points will be defined and posted.