Attachment I

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 and 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
- Reduction of the 400 MW transaction
- Pro-rata load shed and reduction of the 600/400 MW transactions[1]

[1] 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 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.

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.

1.6 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.

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.

3. 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.[2]

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

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2 The ISO Secured Transmission System is defined in the NYISO's Transmission and Dispatching Operations Manual.
See <http://www.nyiso.com/services/documents/manuals/pdf/oper_manuals/trans_disp.pdf>.

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 Appendix 8.

11. PJM shall establish the distribution of flows for the PJM DAM in accordance with Appendix 8.

12. 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. 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 interface3.

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3 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 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. The Auto Correction Factor shall be the sole and exclusive remedy available to any person or entity for any under- or over-delivery of

18. 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.4

a) 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.

c) 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.

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power pursuant to the 600/400 MW transactions, unless such under- or over-delivery is the result of gross negligence or intentional misconduct.

4 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.

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.

1. 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[5] 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.

5 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:

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

$NYDF_{JK}$ = [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.
- The Auto Correction Factor shall not apply to under-deliveries over the A, B, and C Feeders that occur during the first hour following a thunderstorm alert.
- The Auto Correction Factor shall be the sole and exclusive remedy available to any person or entity for any under- or over-delivery of power pursuant to the 600/400 MW transactions, unless such under- or over-delivery is the result of gross negligence or intentional misconduct.

A	13 %	Adjustment for NYISO-PJM Schedule
B	0 %	Adjustment for OH-NYISO Schedule

C	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.

Except as provided in the last sentence of this paragraph with regard to distribution factor A, 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. Distribution factor A will apply only when steps taken by PJM and NYISO to coordinate tap changes on the PARs to control power flow on transmission lines between New York and New Jersey are unable to maintain the desired flow. If necessary, in order to maintain the desired flow after applying distribution factor A, PJM and NYISO may issue TLRs concerning third-party non-firm transmission service.

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:
  - The PJM Regional Transmission Expansion Planning Process, as revised from time to time;
  - The NYISO Comprehensive Reliability Planning Process, as revised from time to time; and
  - The Northeast ISO/RTO Planning Coordination Protocol executed by PJM, the NYISO and ISO-New England Inc., as revised from time to time.
- 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 MW[6] of firm delivery from the NYISO at Waldwick and 1,000 MW of re-delivery from PJM at

6 1,000 MW will also be included in the FTR simultaneous feasibility analysis.

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 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 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

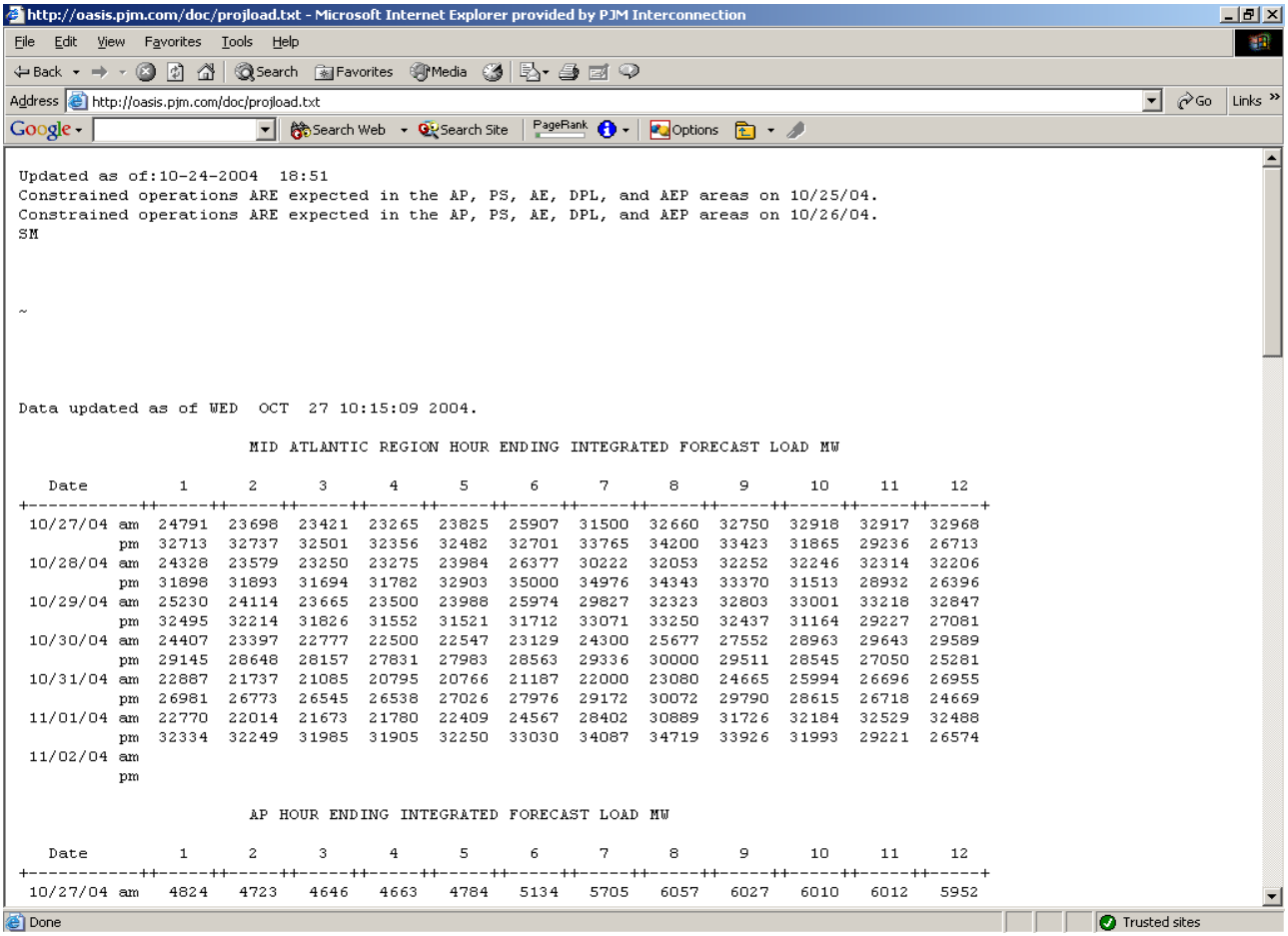

Figure 1 - PJM Constraints

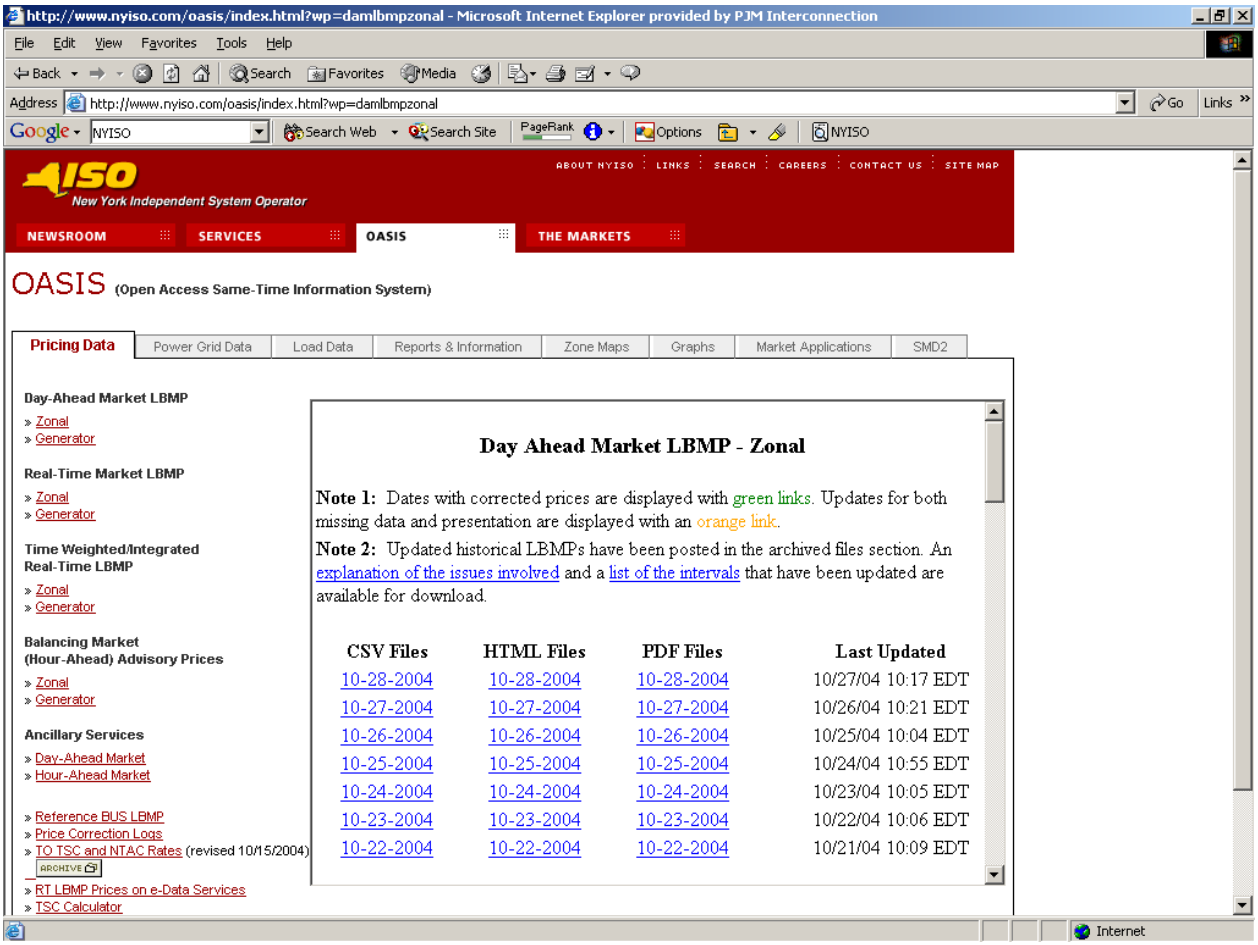

Figure 2 - NYISO Day Ahead Results

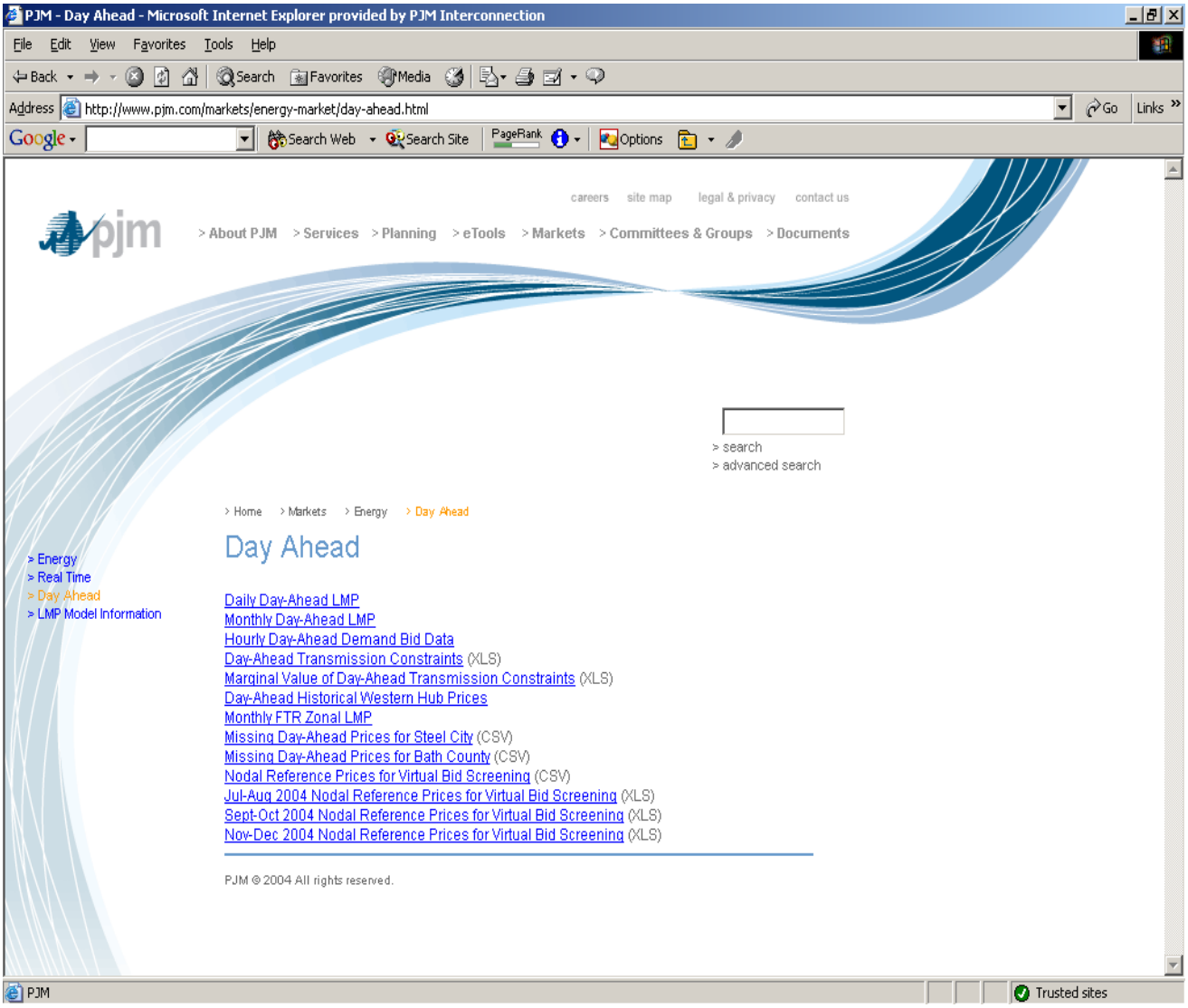

Figure 3 - PJM Day Ahead Market Results

Appendix 8 – Definitions

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).

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.

Emergency Load Response: Emergency Load Response is the reduction of a load by participants in the PJM Emergency Load Response Program in response to a request by PJM for load reduction following the declaration of Maximum Emergency Generation.

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.

28 Attachment M-1 – Operating Protocol For The Implementation Of Commission Opinion No. 476 - (DOCKET NO. EL02-23-000 (Phase II))

28.1.1 This "Operating Protocol" establishes procedures for the planning, operation, control, and scheduling of energy by the New York Independent System Operator, Inc. (NYISO), PJM Interconnection, LLC (PJM), Consolidated Edison Company of New York (ConEd) and Public Service Electric and Gas Company (PSE&G) (collectively, the "parties"), pursuant to contracts dated May 22, 1975 (as amended May 9, 1978) and May 8, 1978 between ConEd and PSE&G. The 1975 contract is referred to herein as the 400 MW contract and the 1978 contract is referred to as the 600 MW contract. The two contracts are referred to collectively as the "600/400 MW contracts."

28.1.2 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 contracts as established by this Operating Protocol.

28.1.3 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 dispatchers 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 contract reductions when there is an emergency on the PJM system will be:

- Reduction of the 400 MW contract[1]

[1] If ConEd converts the 400 MW contract to firm transmission service (by purchasing PJM firm transmission service**,** with a credit for payments ConEd has made to PSE&G for non-firm transmission service), then the 400 MW contract will be treated in the same manner as the 600 MW contract.

- Calling of Emergency Load Response
- Voltage reduction
- Reduction of the 600 MW contract[2]
- Load shedding

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.

28.1.4 All aspects of this Operating Protocol are subject to the dispute resolution procedures of PJM and the NYISO.

28.1.5 Because the procedures in this Operating Protocol are new, the parties will review all aspects of this Operating Protocol on a periodic basis, initially monthly and, after a six month period, annually, to determine if modifications are required to effectuate the Commission's Opinion No. 476 in Docket No. EL02-23-000 (Phase II).

28.1.6 All aspects of this Operating Protocol are subject to, and this Operating Protocol may need to be revised or extinguished in order to accommodate, the outcome of ongoing Commission and Federal court proceedings addressing FERC Docket No. EL02-23, including all sub-dockets thereof. This Operating Protocol implements the directives set forth in the Commission Opinion No. 476 without resolving issues that are still pending before the Commission or that have been appealed to the Federal courts.

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[2] The 600 MW contract shall be reduced in the same manner as all other firm transactions in PJM.

28.1.7 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	Market Monitoring Procedures and Information Sharing Procedures
Appendix 5	Impairments Impacting Delivery
Appendix 6	Operation of the PARs
Appendix 7	Distribution of Flows Associated with Implementation of Day-Ahead and Real-Time Market Desired Flows
Appendix 8	References
Appendix 9	Comparison of Contracts
Appendix 10	Definitions

Appendix 1- Process Flow

Two Day-ahead Actions:

1. PJM shall post constraint forecast information indicating if there is the potential for off-cost operations, two days prior to the operating day by 9 pm. (http://oasis.pjm.com/doc/projload.txt - sample at Figure 1 in Appendix 8) or a comparable website.
2. PJM shall analyze transmission and generation outages in accordance with Appendix 2B to determine if the 600/400 MW contract 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.
3. 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 contracts prior to 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 (Ramapo), BC (Farragut) and A (Goethals) pricing points on the NYISO OASIS, or a comparable website. (http://www.nyiso.com/oasis/index.html - sample at Figure 2 in Appendix 8).
9. ConEd shall submit a contract election (PJM-DAE) in the PJM Day Ahead Market prior to 12 noon:

    a) ConEd shall submit a contract election for the 600 MW contract.

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[3] The ISO Secured Transmission System is defined in the NYISO's Transmission and Dispatching Operations Manual.
See <http://www.nyiso.com/services/documents/manuals/pdf/oper_manuals/trans_disp.pdf>.

b) ConEd shall submit a contract election for the 400 MW contract. For the 400 MW contract, ConEd shall specify whether it is willing to pay congestion (WPC) under the following options:[4]

i) ConEd is not willing to pay congestion for any portion of the 400 MW
ii) ConEd willing to pay congestion up to $25
iii) ConEd willing to pay congestion with no redispatch cost limit

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.

12. 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). The PJM-DAS may be reduced from the PJM-DAE based on ConEd's WPC specification or infeasibility under the PJM security-constrained dispatch.

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, or a comparable website. (https://esuite.pjm.com/mui/index.htm - sample at Figure 3 in Appendix 8.)

If there is congestion in the PJM Day Ahead Market:

14. If there is congestion in PJM that affects the portion of the wheel that is associated with the 600 MW contract, PJM shall re-dispatch and PSE&G shall pay for re-dispatch. PSE&G shall be provided Fixed Transmission Rights (FTRs) in an amount equal to the PJM-DAS.

15. If there is congestion in PJM that affects the portion of the wheel that is associated with the 400 MW contract, PJM shall re-dispatch for the portion of the 400 MW contract for which ConEd specified it was willing to pay congestion, and ConEd shall pay for the re-dispatch.[5] ConEd will be credited back for any congestion charges paid in the hour to the extent of any excess congestion revenues collected by PJM that remain after congestion credits are paid to all other firm transmission customers. Such credits to ConEd shall not exceed congestion payments owed or made by it.[6]

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4 ConEd may submit a series of bids totaling up to 400 MW that employ several or all of the pricing options described in (9).

5 Settlements will be based on the differences in prices between the JK and ABC pricing points.

6 If ConEd converts the 400 MW contract to firm transmission service (by purchasing PJM firm transmission service**,** with a credit for payments ConEd has made to PSE&G for non-firm transmission service), then ConEd congestion credits instead will be determined in the same manner as the credits provided to all other PJM firm transmission customers.

In Day Operations:

16. 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.

17. 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 7.

18. 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 interface.[7]

19. 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.[8]

    a) 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.
    c) ConEd shall settle with PJM for balancing market costs for deviations between PJM-DAS and RTE. Con Ed shall settle with the NYISO for balancing market costs for deviations between NY-DAE and RTE.

    Note - Actions identified in steps 18 and 19 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:

20. 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 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. The process of modifying actual interface flows in incremental adjustments will continue until

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7 PJM and NYISO will operate in accordance with the bandwidth requirements of Step 18 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 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. The Auto Correction Factor shall be the sole and exclusive remedy available to any person or entity for any under- or over-delivery of power pursuant to the 600/400 MW transactions, unless such under- or over-delivery is the result of gross negligence or intentional misconduct.

8 At all times, however, the ConEd election under the 600/400 MW contracts 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.

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.

21. 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 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. The process of modifying actual interface flows in incremental adjustments will continue 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

The following transmission constraints are identified as potential constraints that may result in off-cost operation due to transfers associated with the 600/400 MW contracts. The constraints included in this 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 contracts. Other constraints, not listed here, may arise that could cause either ISO/RTO to operate off-cost. This list may be revised by NYISO/PJM to reflect system changes or security monitoring technique changes in their respective Control Areas.

NYISO

- UPNY-Con Ed Interface
- Dunwoodie- South Interface
- Dunwoodie-Rainey 345kV
- Rainey-Farragut 345kV
- Sprainbrook-W49th Street 345kV
- W49th Street-Farragut 345kV
- Ramapo-Ladentown 345kV
- Ramapo-Buchanan 345kV
- Buchanan-Millwood 345kV
- Buchanan-Eastview 345kV
- Millwood-Eastview 345kV
- Eastview-Sprainbrook 345kV
- East Fishkill-Pleasantville 345kV
- Pleasantville-Dunwoodie 345kV
- Pleasant Valley-East Fishkill 345kV
- Linden - Goethals 230 kV A-2253 Par
- Farragut - Hudson 345kV B-3402 Par
- Farragut - Hudson 345 kV C-3403 Par
- Waldwick - South Mahwah 345 kV K-3411
- Waldwick - South Mahwah 345 kV J-3410

PJM

- ATHENIA 230 KV ATHENIA 220-2 XFORMER

- ATHENIA 230 KV ATHENIA 220-1 XFORMER
- BAYWAY 138 KV BAYWAY Z-1352
- BRANCHBU 500 KV BRANCHBU 500-1 XFORMER
- BRANCHBU 500 KV BRANCHBU 500-2 XFORMER
- DEANS 500 KV DEANS 500-1 XFORMER
- DEANS 500 KV DEANS 500-2 XFORMER
- DEANS 500 KV DEANS 500-3 XFORMER
- HUDSON 230 KV HUDSON HUDSON2 XFORMER
- INTERFACE EAST
- ATHENIA-ERUTHERF S-1345 138 KV
- BAYONNE-MARION L-1338 138 KV
- BAYONNE-PVSC I-1335 138 KV
- BERGEN-ERUTHERF R-1344 138 KV
- BERGEN-HOMESTEA F-1306 138 KV
- BRUNSWIC-EDISON H-1360 138 KV
- EDISON-MEADOWRD Q-1317 138 KV
- EDISON-MEADOWRD R-1318 138 KV
- LINDEN-NORTHAV T-1346 138 KV
- PLAINSBU-TRENTON D-1330 138 KV
- ADAMS-BENNETTS X-2224-3 230 KV
- ATHENIA-CLIF PS K-2263 230 KV
- ATHENIA-SADDLEBR Q-2217 230 KV
- BERGEN-HOBOKEN R-2270 230 KV
- BERGEN-LEONIA T-2272 230 KV
- BRANCHBU-FLAGTOWN C-2203 230 KV
- BRANCHBU-READINGT M-2265 230 KV
- CEDARGRO-CLIF PS K-2263-3 230 KV
- CEDARGRO-ROSELAND B-2228 230 KV
- CEDARGRO-ROSELAND F-2206 230 KV
- GOETHALS-LINDEN A-2253 230 KV
- GREYSTON-PORTLAND S1007 230 KV
- HAWTHORN-HINCHMAN N-2266 230 KV
- HILLSDAL-NEWMILFR V-2222 230 KV
- HILLSDAL-NEWMILFR V-2222 230 KV
- HOBOKEN-NEWP PS R-2270 230 KV
- LEONIA-NEWMILFR T-2272 230 KV
- ROSELAND-WHIPPANY A-941 230 K
- BRANCHBU-RAMAPO 5018 500 KV
- GOETHALS-LINDEN 230 KV A-2253 PAR or Circuit
- HUDSON - FARRAGUT 345 KV B-3402 PAR or Circuit
- HUDSON - FARRAGUT 345 KV C-3403 PAR or Circuit
- WALDWICK - FAIRLAWN 230 KV O-2267 PAR or Circuit
- WALDWICK - HAWTHORNE 230 KV E-2257 PAR or Circuit
- WALDWICK - HILLSDALE 230 KV F-2258 PAR or Circuit

- WALDWICK - SOUTH MAHWAH 345 KV K-3411
- WALDWICK - SOUTH MAHWAH 345 KV J-3410

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 contracts. 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.

1. 600 MW Contract - It is not anticipated that one primary facility outage will preclude PJM from providing redispatch for the 600 MW contract. However, combinations of two or more outages of the facilities, listed below, could preclude PJM from accommodating all or part of the 600 MW delivery, even with redispatch. In this case, PJM will provide notification to NYISO.
2. 400 MW Contract - The outage of one or more of the facilities in the following list, may impact redispatch costs regarding, or the delivery of all or portions of the 400 MW contract:

Branchburg-Ramapo 500 kV 5018
South Mahwah-Waldwick J 345 kV J-3410/69
South Mahwah-Waldwick K 345 kV K-3411/70
Hudson-Farragut B-3402
Hudson-Farragut C-3403
Linden-Goethals 230 kV A-2253
Athenia-NJT Meadows -Essex-Hudson 230 kV C-2281-P-2216-A-2227
New Milford-Leonia-Bergen-Penhorn-Hudson 230 kV T-2272-X-2250
Waldwick-Hillsdale-New Milford 230 kV F-2258-V-2222
Waldwick- Fairlawn 230 kV O-2267
Waldwick-Hawthorne-Hinchman's Ave-Cedar Grove 230 kV E-2257 – N-2266 – M-2239 – L-2238
Roseland-Cedar Grove-Clifton-Athenia B 230 kV B-2228
Roseland-Cedar Grove-Clifton-Athenia K 230 kV F-2206 – K-2263
Linden-Bayway 230 kV H-2234

Linden-Minue Street R 230 kV R-2218
Linden-Minue Street G 230 kV G-2207
Roseland-Whippany A-941
Branchburg-Readington-Roseland M-2265 - U-2221
Roseland-Montville-Newton-Kittatinny E-2203 – N-2214 - T-2298
Deans – Aldene W-2249

In addition, the forced or maintenance outage of one or more of the following generators may impact redispatch costs regarding, or the delivery of all or portions of the 400 MW contract provided that any such maintenance outage is approved by PJM. Otherwise, each of these generators will be considered to be available to support the 600/400 MW contracts under a security constrained dispatch in PJM's Day-Ahead and Real-Time Markets.

Hudson #1
Hudson #2
Bergen #1
Bergen #2
Linden #1
Linden #5, 6, 7, & 8

PJM will provide notification[9] of all outages by posting these outages (transmission only) on the PJM OASIS (http://oasis.pjm.com/inform.html). At a minimum, PJM will identify critical scheduled outages by the first day of the month prior to the month of the start of the outage.

NYISO will provide notification of all outages by posting these outages (transmission only) on the NYISO OASIS (http://www.nyiso.com/oasis/index.html). NYISO will identify critical scheduled outages by the first day of the month prior to the month of the start of the outage.

PJM and the NYISO will review and revise, as necessary, the list of primary and secondary facilities contained in this Appendix 2 on an annual basis.

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9 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:

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

$NYDF_{JK}$ = [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.

- The Auto Correction Factor shall not apply to under-deliveries over the A, B, and C Feeders that occur during the first hour following a thunderstorm alert.

- The Auto Correction Factor shall be the sole and exclusive remedy available to any person or entity for any under- or over-delivery of power pursuant to the 600/400 MW transactions, unless such under- or over-delivery is the result of gross negligence or intentional misconduct.

A	13 %	Adjustment for NYISO-PJM Schedule
B	0 %	Adjustment for OH-NYISO Schedule
C	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.

Appendix 4 - Market Monitoring and Information Sharing Procedures

A. General Principles

The NYISO and PJM and their Market Monitoring Units shall, to the extent compatible with their respective tariffs and with any other market monitoring procedures that they have filed with the Commission:

1. Conduct such investigations as may be necessary to ensure that gaming, abuse of market power, or similar activities do not take place with regard to power transfers under the 600/400 MW contracts;
2. Conduct investigations that go into the region of the other ISO jointly with the NYISO, PJM and both Market Monitoring Units;
3. Inform each other of any such investigations; and
4. Share information related to such investigations, as necessary to conduct joint investigations, subject to the requirements of Section C, below.

The responsibilities of the Market Monitoring Unit that are addressed in Section A of Appendix 4 to the Operating Protocol for the Implementation of Commission Opinion No. 476 (Appendix M-1 to the ISO Services Tariff) are also addressed in Section 30.4.6.5.2 of Attachment O.

B. Information Regarding Transactions Associated with the 600/400 MW Contracts

1. General Information

a. The NYISO and PJM Market Monitoring Units shall have made available to them by their respective ISOs the Day-Ahead and Real-Time elections made by ConEd in both Control Areas under this protocol.

b. The NYISO and PJM Market Monitoring Units shall have available to them such data on transmission conditions in both the Day-Ahead and Real-Time markets in both PJM and NYISO, as is publicly available and posted on the ISOs' internet sites.

2. Information Available upon Request

a. On a case-by-case basis, as documented in writing as being necessary to an investigation or to determine if an investigation is necessary or

appropriate, the NYISO and PJM shall make available to each other, and to each of their Market Monitoring Units, generator outages and deratings in both the Day-Ahead and Real-Time markets.

b. On a case-by-case basis, as documented in writing as being necessary to an investigation or to determine if an investigation is necessary or appropriate, the NYISO and PJM shall make available to each other, and to each of the Market Monitoring Units, the specific FTRs or TCCs in the PSE&G zone or the ConEd Transmission District, respectively, held by ConEd, PSE&G, and any of their affiliates.

3. Information Needed To Conduct a Joint Investigation

The sharing of information that is necessary or appropriate to facilitate a joint investigation by the PJM and NYISO, and/or by their Market Monitoring Units shall be governed by the terms and conditions of the ISOs' respective tariffs, operating agreements, and other procedures that they have filed with the Commission, and shall be subject to the limitations in Section C, below.

C. Protection of Confidential Information

1. This Appendix does not present an independent basis for, and shall not be construed to authorize or require the disclosure of, confidential, proprietary or privileged information that the NYISO or PJM are otherwise prohibited from disclosing under applicable laws, regulations, tariffs, or other market monitoring procedures that they have filed with the Commission.

2. The NYISO's or its Market Monitoring Unit's disclosure of "Protected Information" to PJM, or to its Market Monitoring Unit are subject to the provisions of Section 30.6.6 of Attachment O. PJM's, or its Market Monitoring Unit's disclosure of "confidential information" to the NYISO, or to its Market Monitoring Unit, is subject to the provisions of Section 18.17.5 of the PJM Operating Agreement.

3. If the NYISO or PJM, or either of their Market Monitoring Units receives a demand for the disclosure of confidential information that it received under this Appendix 4, it shall notify the other so that the other will have an opportunity to take any legal steps required to protect the information.

Appendix 5 - Impairments Impacting Delivery

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 contracts.

EXISTING IMPAIRMENTS

- PJM and the NYISO are not aware of any existing impairments that would preclude provision of transmission service under the 600 MW contract. There should not be any impairment on the 400 MW contract based on available redispatch options.

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:
    - The PJM Regional Transmission Expansion Planning Process;
    - 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 MW[10] of firm delivery from the NYISO at Waldwick and 1,000 MW of re-delivery from PJM at

[10] 1,000 MW will also be included in the FTR simultaneous feasibility analysis.

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

Nothing in this Operating Protocol shall modify any planning-related obligations of ConEd or PSE&G set forth in the 600/400 MW contracts.

Appendix 6 – 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 contracts, 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 contracts between PSE&G and ConEd.

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 requirements of the 600/400 MW contracts. 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. The process of modifying actual interface flows in incremental adjustments will continue 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. The process of modifying actual interface flows in incremental adjustments will continue 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 7 – 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 8 – References

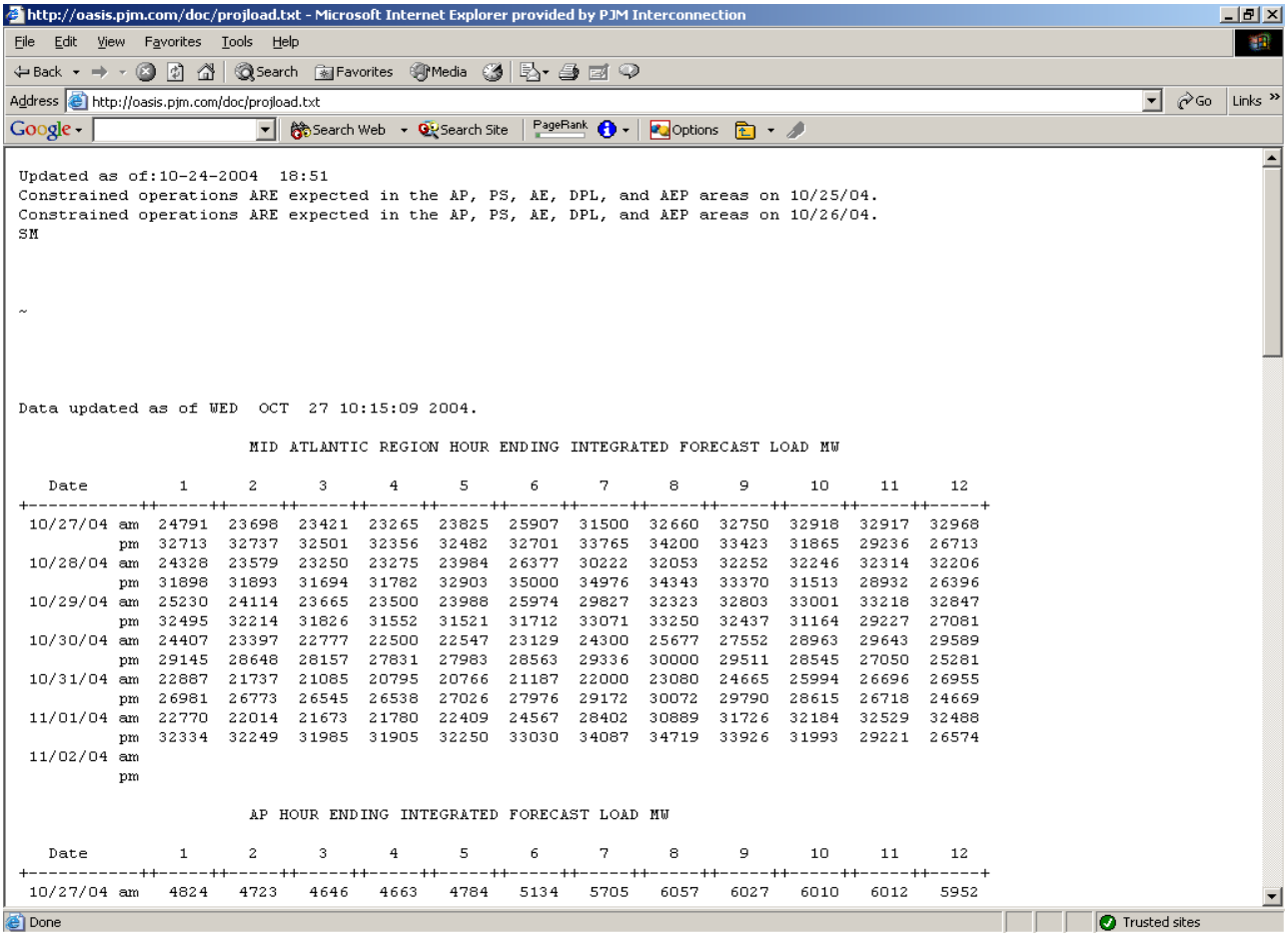

Figure 1 - PJM Constraints

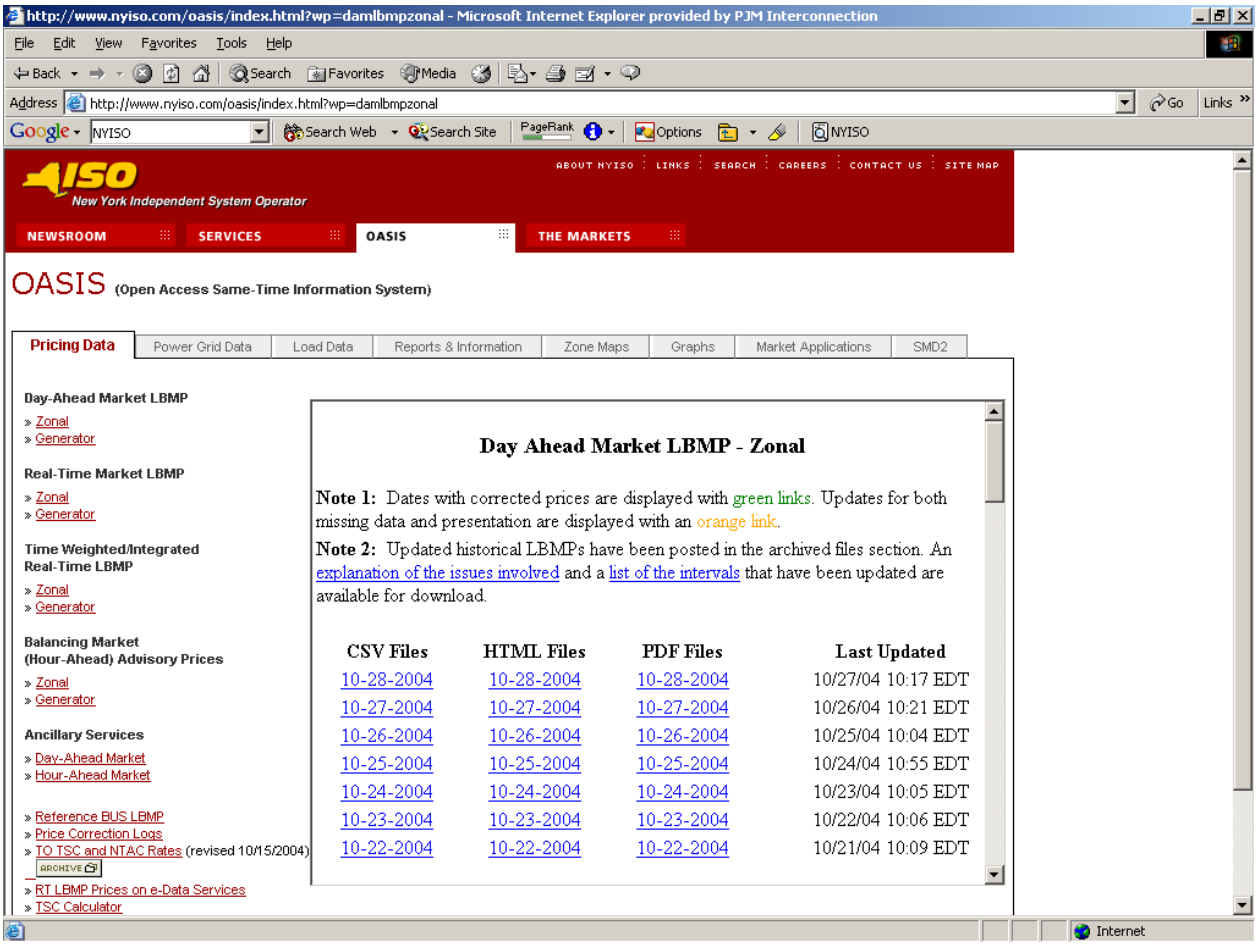

Figure 2 - NYISO Day Ahead Results

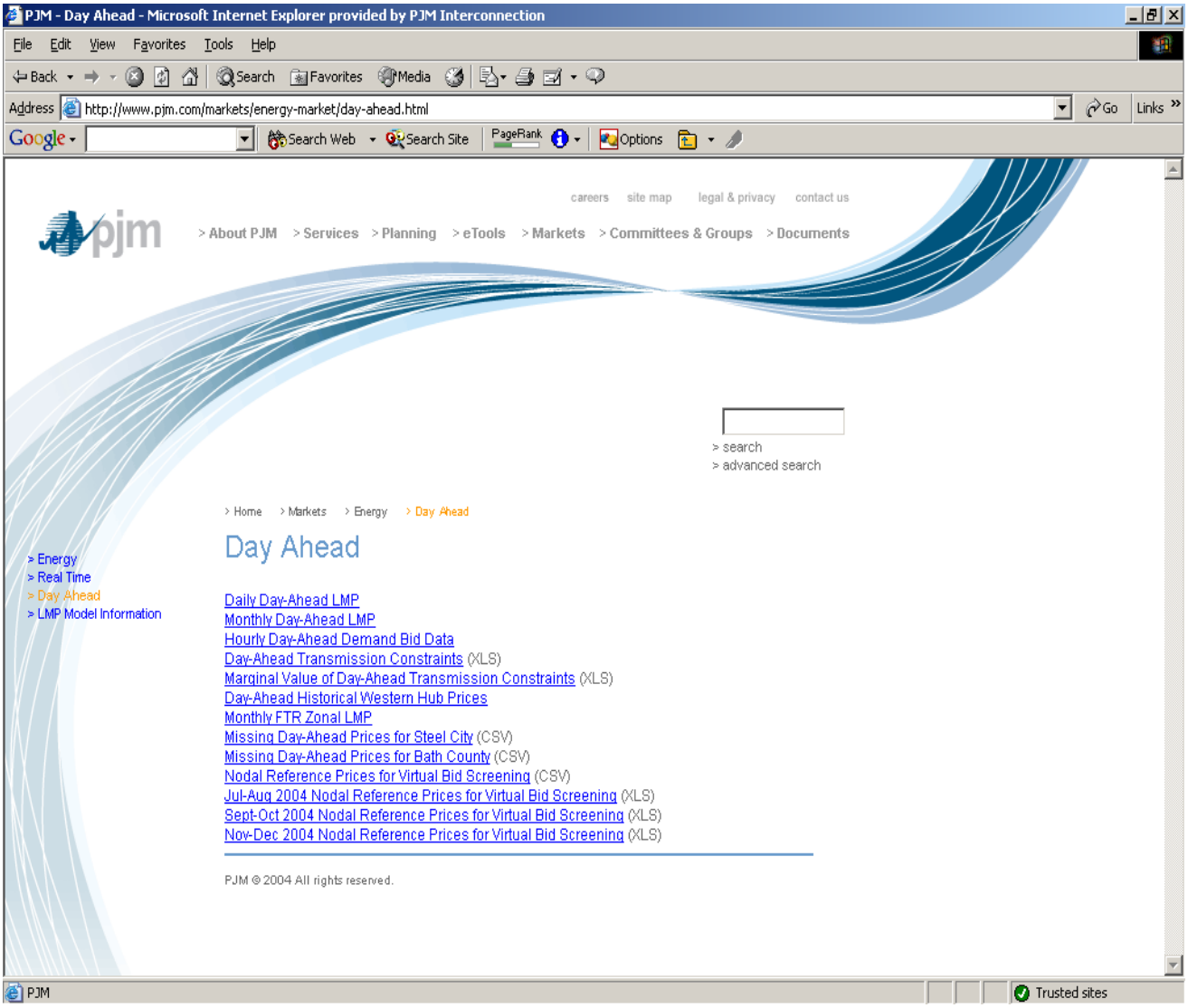

Figure 3 - PJM Day Ahead Market Results

Appendix 9 – Comparison of Contracts

	Delivery Priority	PJM Redispatch Required	Day Ahead Market Submittal	Day Ahead Market Congestion Charges	FTRs	Real Time Contract Schedule	Balancing Market Settlements
600 MW Contract	Firm	PJM redispatch required.	ConEd may submit up to 600 MW as DA Market transaction (fixed hourly MW schedule of up to 600 MW each hour)	PSEG pays DA Market congestion costs for amount of 600 MW contract scheduled in DA Market. Congestion charge = (LMPABC - LMPJK) * DA MW	PSEG receives up to 600 MW FTR with source of JK and sink of ABC. (hourly FTR MW level will equal hourly DA MW scheduled on 600 MW contract)	ConEd may request RT election which deviates from DA election.	ConEd receives/pays real time LMP /LBMP differential between JK and ABC for real-time MW amount scheduled below/above MW amount cleared in Day Ahead Market in both PJM and NY.
400 MW Contract	If ConEd is willing to pay congestion (WPC) then contract priority is above all other WPC transactions but below firm. If not then same priority as non-firm, non-WPC. If ConEd converts to firm transmission service then the contract shall be treated as firm.	PJM redispatch required to the extent that ConEd is willing to pay congestion (less credits back to ConEd.)	ConEd may submit up to 400 MW as DA Market transaction (fixed hourly MW amount of up to 400 MW each hour and/or 'WPC' of up to $25)	ConEd pays DA Market congestion costs for amount of 400 MW contract cleared in the DA Market. Congestion charge = (LMPABC - LMPJK) * DA MW	No FTRs Allocated. IConEd receives credit for DA congestion charges paid . The manner in which credits are alloted depends on whether ConEd converts the 400 MW contract to firm service	ConEd may request RT election which deviates from DA election.	ConEd receives/pays real time LMP/LBMP differential between JK and ABC for real-time MW amount scheduled below/above MW amount cleared in Day Ahead Market in bith PJM and NY.

Appendix 10 – Definitions

1. 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).
2. New York ISO Day Ahead Election (NY-DAE) - election by ConEd – submitted in the NYISO Day-Ahead Market prior to 5 a.m.
3. NY Desired Flow (NYDF) – desired flow calculation by NYISO based on NY-DAE for input to NYISO Day Ahead Market.
4. PJM Day Ahead Market Election (PJM-DAE) - election by the ConEd – submitted in the PJM Day Ahead Market prior to 12 noon.
5. Willing To Pay Congestion (WPC) – an election made by ConEd based on willingness to pay congestion costs.
6. PJM Desired Flow (PJMDF) – desired flow calculation by PJM based on PJM-DAE for input to PJM Day Ahead Market.
7. ConEd Real-Time election (RTE) – option by ConEd to request Real-Time Market modification from its Day Ahead Market election.
8. Real-Time Market Desired Flow (RTMDF) – Desired flow for real time operations.
9. Impairments – Conditions determined during the NYISO's and PJM's respective planning analyses that will cause implementation of the 600/400 MW contracts to result in violations of established reliability criteria.
10. Emergency Load Response - Emergency Load Response is the reduction of load by participants in the PJM Emergency Load Response Program in response to a request by PJM for load reduction following the declaration of Maximum Emergency Generation.
11. 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.