17.3 Bilateral Transaction Bidding, <u>Transmission Service</u>, Schedul<u>esing</u> and Curtailment

All Transmission Customers and interested entities should refer to Attachment J, Section

16.3 of the ISO OATT for all information related to Transmission Service, Schedules and Curtailment.

17.3.1 Requests for Bilateral Transaction Schedules

Transmission Customers scheduling Transmission Service or to support a Bilateral Transaction with Energy supplied by an External Generator or Internal Generator shall submit the following information to the ISO:

Point of Injection location. For Transactions with Internal sources, the
 Point of Injection is the LBMP bus; for Transactions with Trading Hubs as their
 sources, the Point of Injection is the Trading Hub Generator bus; for Transactions
 with External sources, the Point of Injection is the Proxy Generator Bus; however,
 based upon such an advance notification to the ISO, an External Supplier will
 have the additional option of being modeled at a specific External LBMP bus
 (rather than an External Proxy Generator Bus) and being able to submit a bid
 curve. Otherwise, an External Supplier with Incremental or Decremental Bids at
 an External Proxy Generator Bus will be modeled as a single point price curve at
 that bus. An LBMP bus is a specific bus at which a Generator Shift Factor has
 been calculated, and for which LBMP will be calculated.

17.3.1.2 Point of Withdrawal location. For Internal Load, the Point of Withdrawal is the Load Zone in which the Load is situated or the bus at which that Load is interconnected to the Transmission System, if there is a revenue quality real-time Formatted: Body para

meter located at that bus (software constraints may initially limit the ability to specify buses as Points of Withdrawal); for delivery points outside the NYCA, the Point of Withdrawal is the Proxy Generator Bus; for Transactions with Trading Hubs as their sinks, the Point of Withdrawal is the Trading Hub Load bus;

- 17.3.1.3 Hourly MW schedules;
- 17.3.1.4 Minimum run times for Firm Point to Point Transmission Service, if any;
- 17.3.1.5 Whether Firm or Non Firm Transmission Service is requested,
- 17.3.1.6 NERC Transaction Priorities for Bilateral Transactions involving External Generators, Exports, and Wheels Through;
- 17.3.1.7 A Sink Price Cap Bid for Export transactions up to the MW level of the desired schedule, a Decremental Bid for Import and Wheels Through transactions up to the MW level of the desired schedule;
- 17.3.1.8 For an Internal Generator, whether the Generator is On Dispatch or Off-Dispatch;
- 17.3.1.9 The amount and location of any Ancillary Services the Transmission Customer will Self Supply in accordance with and to the extent permitted by each of the Rate Schedules under the ISO OATT; and
- 17.3.1.10 Other data required by the ISO.

17.3.2 Bilateral Transaction Scheduling

17.3.2.1 ISO's General Responsibilities

The ISO shall determine, pursuant to ISO Procedures, the amount of Total Transfer

Capability at each External Interface to be made available for scheduling.

The ISO shall evaluate requests for Transmission Service submitted in the Day-Ahead scheduling process using SCUC, and will subsequently establish a Day Ahead schedule. During the Dispatch Day, the ISO shall use RTC₁₅ to establish schedules for each hour of dispatch in that day.

The ISO shall use the information provided by RTC when making Curtailment decisions pursuant to the Curtailment rules described in this Attachment B.

17.3.2.2 Use of Decremental Bids to Dispatch Internal Generators

When dispatching Generators taking service under the ISO OATT to match changing conditions, the ISO shall treat Decremental Bids and Incremental Energy Bids simultaneously and identically as follows: (i) a generating facility selling Energy in the

LBMP Market may be dispatched downward if the LBMP at the Point of Receipt falls below the generating facility's Incremental Energy Bid; (ii) a Generator serving a Transaction scheduled under the ISO OATT may be dispatched downward if the LBMP at the Generator's Point of Receipt falls below the Decremental Bid for the Generator; (iii) a Supplier's Generator may be dispatched upward if the LBMP at the Generator's Point of Receipt rises above the Decremental or Incremental Energy Bid for the Generator regardless of whether the Generator is supplying Energy to the LBMP Market or supporting a Transaction scheduled under the ISO OATT.

17.3.2.3 Scheduling of Bilateral Transactions

Transmission Service for Bilateral Transactions shall be scheduled as follows:

(i) The ISO shall, following evaluation of the Bids submitted, schedule Transmission Service to support Transactions for the hours in which those Transactions may be accommodated.

- (ii) The ISO shall treat all Internal Generators as dispatchable and all External Generators as non-dispatchable.
- (iii) The ISO will use SCUC and RTD to determine schedules for Internal Generators and schedules for DNI with other Control Areas so that Firm Transmission Service will be provided to any Bilateral Transaction Customer requesting Firm Transmission Service to the extent that is physically feasible.
- (iv) The ISO shall not schedule Non Firm Transmission Service Day Ahead for a Transaction if Congestion Rents associated with that Transaction are positive, nor will the ISO schedule Non Firm Transmission Service in the RTC if Congestion Rents associated with that Transaction are expected to be positive. All schedules for Non Firm Point to Point Transmission Service are advisory only and are subject to Reduction if real time Congestion Rents associated with those Transactions become positive. Transmission Customers receiving Non Firm Transmission Service will be required to pay Congestion Rents during any delay in the implementation of Reduction (<u>e.g.</u>, during the nominal five minute RTD intervals that elapse before the implementation of Reduction).

17.3.2.4 Day-Ahead Bilateral Transaction Schedules

The ISO shall compute all NYCA Interface Transfer Capabilities prior to scheduling Transmission Service Day Ahead. The ISO shall run the SCUC utilizing the computed Transfer Capabilities, submitted Firm Point-to-Point Transmission Service and Network Integration Transmission Service schedules, Load forecasts, and submitted Incremental Energy Bids, Decremental Bids and Sink Price Cap Bids.

In the Day-Ahead schedule, the ISO shall use the SCUC to determine Generator schedules, Transmission Service schedules and DNIs with adjacent Control Areas. The ISO shall not use Decremental Bids submitted by Transmission Customers for Generators associated with Non Firm Point to Point Transmission Service in the determination of the Day Ahead schedule.

17.3.2.5 Reduction and Curtailment

If a Transmission Customer's Firm Point to Point Transmission Service or Network Integration Transmission Service is supporting an Internal Bilateral Transaction, or an Import, the ISO shall not reduce the Transmission Service.

If the Transaction was scheduled in the Day Ahead Market, and the Day Ahead Schedule for the Generator designated as the Supplier of Energy for that Bilateral Transaction called for that Generator to produce less Energy than was scheduled Day-Ahead to be consumed in association with that Transaction, the ISO shall supply the Load or Transmission Customer in an Export with Energy from the Day Ahead LBMP Market.

The Transmission Customer shall continue to pay the Day Ahead TUC and, in addition, if it takes service under this Tariff, the Supplier of Energy for the Bilateral Transaction shall pay the Day Ahead LBMP price, at the Point of Receipt for the Transaction, for the replacement amount of Energy (in MWh) purchased in the LBMP Market. If the Supplier of Energy for the Bilateral Transaction does not take service under this Tariff, it shall pay the greater of 150 percent of the Day Ahead LBMP at the Point of Receipt for the Transaction or \$ 100/MWh for the replacement amount of energy, as specified in the OATT. These procedures shall apply regardless of whether the Generator designated to supply Energy in association with the Transaction was located inside or outside the NYCA.

If the Transaction was scheduled following the Day-Ahead Market, or the schedule for was revised following the Day Ahead Market, then the ISO shall supply the d or Transmission Customer in an Export with Energy from the Real Time LBMP Market, at the Real Time LBMP, if necessary, if (1) the Generator designated to supply the Transaction is an Internal Generator, and it has been dispatched to produce less than the amount of Energy that is scheduled hour ahead to be consumed in association with that Transaction; or (2) the Generator designated to supply the Transaction is an External Generator, and the amount of Energy it has been scheduled an hour ahead to produce (modified for within hour changes in DNI, if any) is less than the amount of Energy scheduled hour ahead to be consumed in association with that Transaction; then the Transmission Customer shall pay the Real Time TUC for the amount of Energy withdrawn in real time in association with that Transaction minus the amount of Energy scheduled Day Ahead to be withdrawn in association with that Transaction. In addition, to the extent that it has not purchased sufficient replacement Energy in the Day Ahead Market, the Supplier of Energy for the Bilateral Transaction, if it takes service under this Tariff, shall pay the Real Time LBMP price, at the Point of Injection for the Transaction, for any additional replacement Energy (in MWh) necessary to serve the Load. If the Supplier of Energy for the Bilateral Transaction does not take service under this Tariff, it shall pay the greater of 150 percent of the Real Time LBMP at the Point of Injection for the Transaction or \$100/MWh for the replacement amount of Energy, as specified in the OATT. These procedures shall apply regardless of whether the Generator designated to supply Energy in association with that Transaction was located inside or outside the NYCA. Notwithstanding the foregoing, the amount of Transmission Service scheduled hour ahead in the RTC for Transactions supplied by

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one of the following Generators shall retroactively be set equal to that Generator's actual output in each RTD interval:

- Generators providing Energy under contracts executed and effective on or before November 18, 1999 (including PURPA contracts) in which the power purchaser does not control the operation of the supply source but would be responsible for penalties for being off schedule;
- (ii) Existing topping turbine Generators and extraction turbine Generators producing electric Energy resulting from the supply of steam to the district steam system located in New York City (LBMP Zone J) in operation on or before November 18, 1999 and/or topping or extraction turbine Generators utilized in replacing or repowering existing steam supplies from such units (in accordance with good engineering and economic design) that cannot follow schedules, up to a maximum total of 499 MW of such units; and
- (iii) Existing intermittent (i.e., non-schedulable) renewable resource Generators in operation on or before November 18, 1999 within the NYCA, plus up to an additional 1000 MW of such Generators.

This procedure shall not apply for those hours the Generator supplying that Transaction has bid in a manner that indicates it is available to provide Regulation Service or Operating Reserves. If the Energy injections scheduled by RTC₁₅ at a Proxy Generator Bus are Curtailed at the request of the ISO then the Supplier or Transmission Customer whose transaction is Curtailed, in addition to paying the charge for replacement Energy necessary to serve the Load and the charge to balance the TUC, as appropriate, shall be paid the product (if positive) of: (a) the Real Time LBMP at the Proxy Generator Bus minus the higher of the Real Time Bid

price and zero; and (b) the Scheduled Energy Injection minus the Actual Energy Injections at that Proxy Generator Bus for the dispatch hour.

If the Transmission Customer was receiving Non-Firm Point to Point Transmission Service, and its Transmission Service was Reduced or Curtailed, the replacement Energy may be purchased in the Real Time LBMP Market, at the Real Time LBMP, by the Internal Load. An Internal Generator supplying Energy for such a Transmission Service that is Reduced or Curtailed may sell its excess Energy in the Real Time LBMP Market.

The ISO shall not automatically reinstate Non Firm Point to Point Transmission Service that was Reduced or Curtailed. Transmission Customers may submit new schedules to restore the Non Firm Point to Point Transmission Service in the next RTC₁₅-execution.

If a security violation occurs or is anticipated to occur, the ISO shall attempt to relieve the violation using the following procedures:

- (i) Reduce Non Firm Point to Point Transmission Service: Partially or fully physically Curtail External Non Firm Transmission Service (Imports, Exports and Wheels Through) by changing DNI schedules to (1) Curtail those in the lowest NERC priority categories first; (2) Curtail within each NERC priority category based on Incremental Energy Bids, Decremental Bids, or Sink Price Cap Bids; and (3) prorate Curtailment of equal cost transactions within a priority category.
- (ii) Curtail Non Firm Point to Point Transmission Service: Curtail (through changing DNI) unscheduled Non Firm Transactions which contribute to the violation, starting with the lowest NERC priority category.
- (iii) Dispatch Internal Generators, based on Incremental Energy Bids and Decremental Bids, including committing additional resources, if necessary;

- (iv) Adjust the DNI associated with Transactions supplied by External resources:
 Curtail External Firm Transactions until the Constraint is relieved by (1)
 Curtailing based on Incremental Energy Bids, Decremental Bids or Sink Price
 Cap Bids, and (2) except for External Transactions with minimum run times,
 prorating Curtailment of equal cost transactions;
 - (v) Request Internal Generators to voluntarily operate in manual mode below minimum or above maximum dispatchable levels. When operating in manual mode, Generators will not be required to adhere to the one percent minimum ramp rate set forth in Article 4 of the ISO Services Tariff, nor will they be required to respond to RTD Base Point Signals;
- (vi) In overgeneration conditions, decommit Internal Generators based on Minimum
 Generation Bid rate in descending order; and
- (vii) Invoke other emergency procedures including involuntary Load Curtailment, if necessary.

17.3.2.6 Scheduling Transmission Service for External Transactions

The amount of Firm Transmission Service scheduled Day Ahead for Bilateral Transactions which designate External Generators to supply Imports or Internal Generators to supply Exports will be equal to the amount of Energy scheduled to be consumed under those Transactions Day Ahead. The amount of Firm Transmission Service scheduled in the RTC₁₅ for Bilateral Transactions which designate External Generators to supply Imports or Internal Generators to supply Exports will be equal to the amount of Energy scheduled to be consumed under those Transactions in RTC₁₅. The DNI between the NYCA and adjoining Control Areas will be adjusted as necessary to reflect the effects of any Curtailments of Import or Export

Transactions. Additionally, any Curtailment or Reductions of schedules for Export Transactions will cause the scheduled amount of Transmission Service to change.

To the extent possible, Curtailments of External Transactions at the Proxy Generator Bus associated with the Cross Sound Scheduled Line, the Neptune Scheduled Line, and the Linden VFT Scheduled Line shall be based on the transmission priority of the associated Advance Reservation for use of the Cross Sound Scheduled Line, the Neptune Scheduled Line, or the Linden VFT Scheduled Line (as appropriate).

The ISO shall use Decremental Bids supplied by Transmission Customers using External Generators to supply Wheels Through to determine the amount of Energy those Generators are scheduled Day Ahead to produce in each hour. This in turn will determine the Firm Transmission Service scheduled Day Ahead to support those Transactions. The ISO shall also use Decremental Bids supplied by Transmission Customers using External Generators to supply Wheels Through to determine the amount of Energy these Generators are scheduled to produce in RTC₁₅, which, in turn, will determine the Transmission Service scheduled in RTC₁₅ to support those Transactions.

The ISO will not schedule a Bilateral Transaction which crosses an Interface between the NYCA and a neighboring Control Area if doing so would cause the DNI to exceed the Transfer Capability of that Interface.

The ISO shall not permit Market Participants to schedule External Transactions over the following eight scheduling paths:

 External Transactions that are scheduled to exit the NYCA at the Proxy Generator Bus that represents its Interface with the Control Area operated by the

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Independent Electricity System Operator of Ontario ("IESO"), and to sink in the Control Area operated by PJM Interconnection, LLC ("PJM"):

- 2. External Transactions that are scheduled to exit the NYCA at the Proxy Generator Buses that represent the NYCA's common border with the Control Area operated by PJM, and to sink in the Control Area operated by IESO;
- External Transactions that are scheduled to enter the NYCA at the Proxy
 Generator Buses that represent the NYCA's common border with the Control
 Area operated by PJM, and to source from the Control Area operated by IESO;
- 4. External Transactions that are scheduled to enter the NYCA at the Proxy Generator Bus that represents the NYCA's Interface with the Control Area operated by IESO, and to source from the Control Area operated by PJM;
- 5. Wheels Through the NYCA that are scheduled to enter the NYCA at the Proxy Generator Buses that represent the NYCA's common border with the Control Area operated by PJM, and to sink in the Control Area operated by the Midwest Independent Transmission System Operator, Inc. ("MISO");
- 6. Wheels Through the NYCA that are scheduled to exit the NYCA at the Proxy Generator Buses that represent the NYCA's common border with the Control Area operated by PJM, and to source from the Control Area operated by the MISO;
- 7. Wheels Through the NYCA that are scheduled to enter the NYCA at the Proxy Generator Bus that represents the NYCA's Interface with the Control Area operated by IESO, and to sink in the Control Area operated by the MISO; and

8. Wheels Through the NYCA that are scheduled to exit the NYCA at the Proxy Generator Bus that represents the NYCA's Interface with the Control Area operated by IESO, and to source from the Control Area operated by the MISO. External Transactions at the Proxy Generator Buses that are associated with the Cross-Sound Scheduled Line, the Neptune Scheduled Line, and the Linden VFT Scheduled Line shall also be governed by Attachment N to the ISO Services Tariff.