

### **2.154 Real-Time LBMP**

The LBMPs established through the ISO Administered Real-Time Market.

### **2.155 Real-Time Market**

The ISO Administered Markets for Energy and Ancillary Services resulting from the operation of the RTC and RTD.

#### **2.155a Real-Time Minimum Run Qualified Gas Turbine**

One or more gas turbines, offered in the Real-Time Market, which, because of their physical operating characteristics, may qualify for a minimum run time of two hours in the Real-Time Market. Characteristics that qualify gas turbines for this treatment are established by ISO Procedures and include using waste heat from the gas turbine-generated electricity to make steam for the generation of additional electricity via a steam turbine.

#### **2.155b Real-Time Scheduled Energy**

The quantity of Energy that a Supplier is directed to inject or withdraw in real-time by the ISO. Injections are indicated by positive Base Point Signals and withdrawals are indicated by negative Base Point Signals. Unless otherwise directed by the ISO, Dispatchable Supplier's Real-Time Scheduled Energy is equal to its RTD Base Point Signal, or, if it is providing Regulation Service, to its AGC Base Point Signal, and an ISO Committed Fixed or Self-Committed Fixed Supplier's Real-Time Scheduled Energy is equal to its bid output level in real-time.

#### **2.155c Real-Time Scheduling Window**

The period of time within which the ISO accepts offers and bBids to sell and purchase Energy and Ancillary Services in the real-time Mmarket which period closes seventy-five (75) minutes before each hour, or eighty-five (85) minutes before each hour for Bids to schedule External Transactions at the Proxy Generator Buses associated with the Cross-Sound Scheduled Line, the Neptune Scheduled Line, or the Linden VFT Scheduled Line).

**2.155[c]d Reconfiguration Auction**

The monthly auction administered by the ISO in which Market Participants may purchase and sell one-month TCCs.

**2.156 Reduction or Reduce**

The partial or complete reduction in Non-Firm Transmission Service as a result of transmission Congestion (either anticipated or actual).

**2.157 Reference Bus**

The location on the NYS Transmission System relative to which all mathematical quantities, including Shift Factors and penalty factors relating to physical operation, will be calculated. The NYPA Marcy 345 kV transmission substation is designated as the Reference Bus.

**2.157a Regulation Service Demand Curve**

A series of quantity/price points that defines the maximum Shadow Price for Regulation Service corresponding to each possible quantity of Resources that the ISO's software may schedule to satisfy the ISO's Regulation Service constraint.

A single Regulation Service Demand Curve will apply to both the Day-Ahead Market and the Real-Time Market for Regulation Service. The Shadow Price for Regulation Service shall be used to calculate Regulation Service payments under Rate Schedule 3 of this ISO Services Tariff.

2. If the ISO becomes aware that a Customer may be engaging in, or might have engaged in, electric energy market manipulation, it shall promptly inform its Market Monitoring Unit. The ISO retains the discretion, as it deems appropriate, to inform FERC of any potential electric energy market manipulation it identifies. If the ISO informs FERC's Office of Enforcement, it shall request that FERC determine whether a violation has occurred and, if so, that FERC impose appropriate remedies.
3. This Section 4.1.6a of the ISO Services Tariff does not independently empower the ISO or its Market Monitoring Unit to impose penalties for, or to provide a remedy for, violations of FERC's prohibition against electric energy market manipulation, or for violations of the ISO's Tariffs.

#### **4.1.7 Commitment for Reliability**

Suppliers with [G]generating units committed by the ISO for service to ensure NYCA reliability or local system\_reliability will recover startup and minimum generation costs that were not bid, that were not known before the close of the Real-Time Scheduling Window, and that were not recovered in the Dispatch Day, provided however, eligibility to recover such additional costs shall not be available for megawatts scheduled Day-Ahead. Payment for such costs shall be determined, as if bid, pursuant to the provisions of Attachment C. [Such p]Payments for securing NYCA reliability and local system reliability shall be recovered by the ISO [from the local customers for whose benefit the generation was committed ]in accordance with Rate Schedule 1 of the ISO OATT.

Re-dispatching costs incurred as a result of reductions in Transfer Capability caused by Storm Watch (“Storm Watch Costs”) shall be aggregated and recovered on a monthly basis by the ISO exclusively from Transmission Customers in Load Zone J. The ISO shall calculate Storm Watch Costs by multiplying the real-time Shadow Price of any binding constraint associated with a Storm Watch, by the higher of (a) zero; or (b) the scheduled Day-Ahead flow across the constraint minus the actual real-time flow across the constraint.

**4.1.7a Incremental Cost Recovery for Units Responding to Local Reliability Rule I-R3 or I-R5**

Generating units designated pursuant to the New York State Reliability Council’s Local Reliability Rule I-R3 -- Loss of Generator Gas Supply (New York City) or I-R5 -- Loss of Generator Gas Supply (Long Island), as being required to burn an alternate fuel at designated minimum levels based on forecast Load levels in Load Zones J and K (for purposes of this section 4.1.7a, “eligible units”), shall be eligible to recover the variable operating costs associated with burning the required alternate fuel pursuant to the provisions of this section 4.1.7a. For purposes of this section 4.1.7a, the periods of time for which Consolidated Edison invokes Local Reliability Rule I-R3 or LIPA invokes Local Reliability Rule I-R5 and in which the eligible unit burns its required alternate fuel, including that period of time required to move into and out of Rule I-R3 or I-R5 compliance, shall be referred to as the “Eligibility Period.” For Eligibility Periods, the eligible unit shall recover its variable operating costs associated with burning the required alternate fuel if and to the extent that such variable operating costs are not reflected in the reference level for that unit for the hours included in the Eligibility Period, pursuant to ISO procedures. To be recoverable, variable operating costs associated with burning the required alternate fuel must be incurred during an Eligibility Period and must be incurred only because Local Reliability Rule I-R3 or I-R5 was invoked.

#### **4.4.2 Real-Time Commitment (“RTC”)**

##### **A. Overview**

RTC will make binding unit commitment and de-commitment decisions for the periods beginning fifteen minutes (in the case of Resources that can respond in ten minutes) and thirty minutes (in the case of Resources that can respond in thirty minutes) after the scheduled posting time of each RTC run, will provide advisory commitment information for the remainder of the two and a half hour optimization period, and will produce binding schedules for External Transactions to begin at the start of each hour. RTC will co-optimize to solve simultaneously for all Load, Operating Reserves and Regulation Service requirements and to minimize the total as-bid production costs over its optimization timeframe. RTC will consider SCUC’s Resource commitment for the day, load and loss forecasts that RTC itself will produce each quarter hour, binding transmission constraints, and all Real-Time Bids and Bid parameters submitted pursuant to Section 4.4.2.B below.

##### **B. Bids and Other Requests**

After the Day-Ahead schedule is published and no later than seventy-five (75) minutes before each hour; (or no later than eighty-five minutes before each hour for Bids to schedule External Transactions at the Proxy Generator Buses associated with the Cross-Sound Scheduled Line, the Neptune Scheduled Line, or the Linden VFT Scheduled Line), Customers may submit Real-Time Bids into RTC for real-time evaluation.

## 1. Real-Time Bids to Supply Energy and Ancillary Services

Intermittent Power Resources that depend on wind as their fuel submitting new or revised offers to supply Energy shall bid as ISO-Committed Flexible and shall not include a Minimum Generation Bid or a Start-Up Bid. Eligible Customers may submit new or revised Bids to supply Energy, Operating Reserves and/or Regulation Service. Customers that submit such Bids may specify different Bid parameters in RTC than they did Day-Ahead. **Incremental Energy Bids may be submitted for** ISO-Committed Fixed Generators, ISO-Committed Flexible Generators and Demand Side Resources, and Self-Committed Flexible Generators ~~not otherwise prohibited from doing so pursuant to other provisions of the tariff may not increase their submit Day Ahead Incremental Energy Bids~~ that exceed the Incremental Energy Bids submitted in the Day-Ahead Market ~~[that are and] applicable to any~~ for ~~the~~ portions of their ~~Capacity~~ of such Resources ~~incremental Energy~~ that ~~was were~~ scheduled in the Day-Ahead Market, if not otherwise prohibited ~~from doing so pursuant to other provisions of the tariff.[-, and] They may not, however, increase their~~ Minimum Generation Bids~~[,] or~~ and Start-Up Bids~~[,]~~ for any hour in which ~~they~~ such Resources received a Day-Ahead Energy schedule **may not exceed the Minimum Generation Bids and Start-up Bids submitted for those Resources in the Day-Ahead Market.** Additionally, Real-Time Minimum Run Qualified Gas Turbine Customers shall not increase their previously submitted Real-Time Incremental Energy Bids, Minimum Generation Bids, or Start-Up Bids within 135 minutes of the dispatch hour. Bids to supply Energy or Ancillary Services shall be subject to the rules set forth in Section 4.2.2 above and in Attachment D to this ISO Services Tariff.

Generators that did not submit a Day-Ahead Bid for a given hour may offer to be ISO-Committed Flexible, Self-Committed Flexible, Self-Committed Fixed or, with ISO approval, as

and therefore must take service as a Customer under the Tariff. To be included within NYCA, a Market Participant must meet the requirements of Section 5.6 A Market Participant that is not included within the NYCA may take service as a Customer under the Tariff, provided that it meets the requirements of Section 5.7.

**B. Suspension of Virtual Transactions**

The ISO may temporarily suspend Virtual Transactions if it determines that:

- 1) The financial exposure of customers engaged in Virtual Transactions cannot be determined with a reasonable degree of accuracy or to factors such as software or system failures;
- 2) a market aberration associated with Virtual Transactions substantially impairs the functioning of the ISO-administered markets; or
- 3) Virtual Transactions substantially impair the ability of the ISO to maintain the reliability of the electric system.

As soon as reasonably practicable, the ISO shall notify the Commission and Market Participants of the reason(s) for any suspension of Virtual Transactions, the action(s) necessary to restore Virtual Transactions, and the estimated time required to restore Virtual Transactions.

**C. Suspension of the Ability of Generators to Increase Their Bids in Real-Time**

The ISO may temporarily suspend the ability ~~for all Generators to [increase their]~~ submit ~~real-time~~ Incremental Energy Bids in the real-time market that exceed the Incremental Energy Bids submitted in the Day-Ahead Market ~~[and ]applicable to~~ for the portions of ~~their incremental Energy~~ Generators' Capacity that ~~was~~ were scheduled in the Day-Ahead Market, if ~~it~~ the ISO determines that:

- 1) a market aberration associated with ~~Generators [increasing their ]submitting real-time~~ Incremental Energy Bids submitted in the real-time market that exceed the Incremental Energy Bids submitted in the Day-Ahead Market ~~[and ]applicable to~~ for the portions of ~~their~~ Generators' Capacity ~~incremental Energy~~ that ~~was~~ were scheduled in the Day-Ahead Market substantially impairs the functioning of the ISO-administered markets; or
- 2) ~~Generators [increasing their ]submitting real-time~~ Permitting Incremental Energy Bids submitted in the real-time market ~~to~~ that exceed the Incremental Energy Bids submitted in the Day-Ahead Market ~~[and ]applicable to~~ ~~the~~ for portions of ~~their incremental Energy~~ Generators' Capacity that ~~was~~ were scheduled in the Day-Ahead Market substantially impairs the ability of the ISO to maintain the reliability of the electric system.

As soon as reasonably practicable, the ISO shall notify the Commission and Market Participants of the reason(s) for any suspension of the ability for ~~Generators to [increase their]~~ submit ~~real-time~~ Incremental Energy Bids submitted in the real-time market ~~to~~ that exceed the Incremental Energy Bids submitted in the Day-Ahead Market ~~[and ]applicable to~~ ~~the~~ for portions of ~~their incremental Energy~~ Generators' Capacity that ~~was~~ were scheduled in the Day-Ahead Market; the action(s) necessary to restore this feature to the ISO--Administered Markets; and the estimated time required to restore this feature to the ISO--Administered Markets.