

15.2 Rate Schedule 2 - Payments for Supplying Voltage Support Service

This Rate Schedule applies to payments to Suppliers who provide Voltage Support Service to the ISO. Transmission Customers and Customers will purchase Voltage Support Service from the ISO under the ISO OATT.

Eligible Suppliers provide Voltage Support Service from eligible providers which are Resources, synchronous condensers and Qualified Non-Generator Voltage Support Resources.

The rate provided in this Rate Schedule shall be used to calculate payments to all eligible Suppliers providing Voltage Support Service as applied on a ~~Resource- provider-~~specific basis (~~or Qualified Non-Generator Voltage Support Resource specific~~). The ISO shall calculate payments on an annual basis, and make payments monthly.

15.2.1 Responsibilities

The ISO shall coordinate the Voltage Support Service provided by Suppliers that qualify to provide such services as described in Section 15.2.1.1 of this Rate Schedule. The ISO shall also establish methods and procedures for Reactive Power (MVar) capability testing.

15.2.1.1 Suppliers

To qualify for payments, Suppliers of Voltage Support Service shall provide a Resource that has an AVR, ~~or a Qualified Non-Generator Voltage Support Resource,~~ or a synchronous condenser. All Suppliers of Voltage Support Service must successfully perform Reactive Power (MVar) capability testing in accordance with the ISO Procedures and prevailing industry standards. The ISO may direct Suppliers to operate their Resources, ~~and~~ Qualified Non-Generator Voltage Support Resources or synchronous condensers -within these demonstrated reactive capability limits. Suppliers of Voltage Support Service will test their Resources, ~~and~~

Qualified Non-Generator Voltage Support Resources, and synchronous condensers and provide these services in accordance with ISO Procedures.

Voltage Support Service includes the ability to produce or absorb Reactive Power within the Resource's, ~~or~~ Qualified Non-Generator Voltage Support Resource's or synchronous condenser's, tested reactive capability, and the ability to maintain a specific voltage level under both steady-state and post-contingency operating conditions subject to the limitations of the Resource's, Qualified Non-Generator Voltage Support Resource's, or synchronous condenser's stated reactive capability. The requirement for a Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource (~~“Resource”~~) to absorb Reactive Power may be set aside by the ISO with input from the Transmission Owner in whose Transmission District the Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource is located, which input may include, at the Transmission Owner's option, an executive level review. To grant an exemption from the requirement that the Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource be able to absorb Reactive Power, the ISO shall have determined that: 1) the ~~Resource,~~ synchronous condenser, or Qualified Non-Generator Voltage Support Resource is unable, due to transmission system configuration, to absorb Reactive Power; 2) the ability of the Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource to produce Reactive Power is needed for system reliability; and 3) for purposes of system reliability the Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource does not need to have the ability to absorb Reactive Power.

15.2.2 Payments

Each month, Suppliers whose Resource(s) meet the requirements to supply Installed Capacity, as described in Article 5 of the ISO Services Tariff, and are under contract to supply Installed Capacity shall receive one-twelfth (1/12th) of the annual payment calculated under

Section 15.2.2.1 of this Rate Schedule, for Voltage Support Service. To the extent Suppliers of Installed Capacity are electrically located outside the NYCA, payments for Voltage Support Service will be subject to criteria established by the ISO.

Each month, Suppliers whose Generators are not under contract to supply Installed Capacity, Suppliers with synchronous condensers, and, except as noted in the following paragraph, Qualified Non-Generator Voltage Support Resources shall receive one-twelfth ($1/12^{\text{th}}$) of the annual payment calculated under Section 15.2.2.1 of this Rate Schedule, pro-rated by the number of hours that the Generator, synchronous condenser, or Qualified Non-Generator Voltage Support Resource operated in that month, as recorded by the ISO.

Each month, the Cross-Sound Scheduled Line shall receive one-twelfth ($1/12^{\text{th}}$) the annual payment calculated under Section 15.2.2.1 of this Rate Schedule, pro-rated by the number of hours that it is energized in that month, as recorded by the ISO.

15.2.2.1 Annual Payment for Voltage Support Service

For purposes of the calculation set forth in Section 15.2.2 of this Rate Schedule, the annual payment to Suppliers qualified and eligible to provide Voltage Support Service shall equal: (i) in the case of Generators and synchronous condensers the product of \$3919/MVAr and the tested MVAr capacity of the Generator or synchronous condenser; (ii) in the case of Qualified Non-Generator Voltage Support Suppliers, other than the Cross-Sound Scheduled Line, the product of \$3919/MVAr and its tested MVAr capacity as determined pursuant to the ISO Procedures; and (iii) in the case of the Cross-Sound Scheduled Line, the product of \$3919/MVAr and the tested, Reactive Power (MVAr) capacity measured at maximum real power flow.

15.2.2.2 Lost Opportunity Costs

A Supplier of Voltage Support Service from a Generator that is being dispatched by the ISO shall also receive a payment for Lost Opportunity Costs (“LOC”) when the ISO directs the resource to reduce its real power (MW) output below its Economic Operating Point in order to allow the resource to produce or absorb more Reactive Power (MVar), unless the Supplier is already receiving a Day-Ahead Margin Assurance Payment for that reduction under Attachment J to this ISO Services Tariff. The Lost Opportunity Cost payment shall be calculated as the product of: (a) the MW of output reduction; (b) the time duration of reduction in hours or fractions thereof; and (c) the Real-Time LBMP at the Generator bus minus the Generator’s Energy Bid for the reduced output of the Generator. The details of the Lost Opportunity Cost payments are as follows:

The formula below describes the calculation of LOC as applied to each Generator supplying Voltage Support Service.

$$LOC = P_{RT} \cdot (D_1 - D_2) - \int_{D_2}^{D_1} Bid$$

$$LOC_i = \left(LBMP_{RT,i} \times \left(EOP_i - \text{Max}(AEI_i, RTS_i, DAS_i) \right) \right) - \int_{\text{Max}(AEI_i, RTS_i, DAS_i)}^{EOP_i} Bid_i$$

Where:

~~P_{RT} = Real-Time LBMP~~

~~D_1 = Original dispatch point, which shall be equal to the Generator’s Economic Operating Point.~~

~~D_2 = New dispatch point, which shall be the greater of the Generator’s Real Time Scheduled Energy Injection, the Generator’s Actual Energy Injection, or the amount of Energy the Generator is scheduled to produce for the hour in the Day-Ahead Market.~~

~~Bid = Bid curve or Generation supplying Voltage Support Service~~

$LOC_i =$ Lost Opportunity Cost for interval i

$LBMP_{RT,i} =$ Real-time LBMP for interval i

$EOP_i =$ The Generator's Economic Operating Point for interval i

$AEI_i =$ The Generator's Actual Energy Injection for the interval i

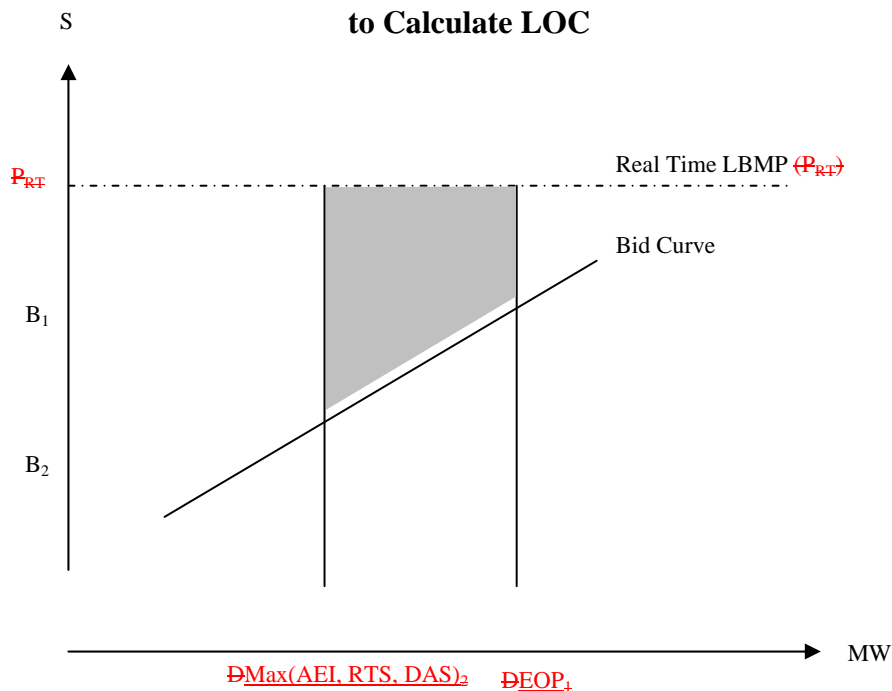
$RTS_i =$ The Generator's Real-Time Energy Schedule for interval i

$DAS_i =$ The Generator's Day-Ahead Energy Schedule for the hour h -containing interval i

$Bid_i =$ Generator's Bid curve in effect for interval i

Figure 2.0(b) below graphically portrays the calculation of the LOC for a gGenerator which reduced its MW output to allow it to produce or absorb more Reactive Power (MVar).

Figure 2.0(b)
Incremental Bid Curve Used
to Calculate LOC



15.2.2.3 Other Payments to Synchronous Condensers and Qualified Non-Generator Voltage Support Resources

If a synchronous condenser or Qualified Non-Generator Voltage support Resource energizes in order to provide Voltage Support Service in response to a request from the ISO, the

ISO shall compensate the facility for the cost of Energy it consumes to energize converters and other equipment necessary to provide that Voltage Support Service.

15.2.2.43 Failure to Perform by Suppliers

A Resource, synchronous condenser, or a Qualified Non-Generator Voltage Support Resource will have failed to provide voltage support if it:

15.2.2.43.1 when operating at real-power levels consistent with test conditions,

fails at the end of 10 minutes to be within 5% (+/-) of the requested Reactive Power (MVar) level of production or absorption as requested by the ISO or applicable Transmission Owner ~~for levels below it's Normal Operating limit which must be at least 90% of its Dependable Maximum Net Capability (DMNC)~~ except when the Resource is the requested not to produce or absorb Reactive Power level, is unity, in which case that Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource fails to provide Voltage Support if the absolute value of its level of Reactive Power production or absorption at the end of ten minutes is greater than must be within 5% (+/-) of its tested Reactive Power range from zero. multiplied by the sum of the absolute values of (a) that Resource's maximum reactive power production level under test conditions and (b) that Resource's maximum reactive power absorption level under test conditions;

15.2.2.43.2 when operating as real-power levels consistent with test conditions, fails at the end of 10 minutes to be at 95% or greater of the Resource's, synchronous condenser's, or Qualified Non-Generator Voltage Support Resource's demonstrated Reactive Power capability (tested ~~at its Normal Operating Limit or~~

~~at 90% of its DMNC, whichever is greater in MW) pursuant to ISO Procedures)~~

in the appropriate lead or lag direction when requested to go to maximum lead or lag reactive capability by the ISO or applicable Transmission Owner.;

15.2.3.3 fails to provide Voltage Support Service in a Contingency, as defined by ISO Procedures;

15.2.3.4 fails to maintain its automatic voltage regulator (as appropriate) in service and in automatic voltage control mode, or fails to commence timely repairs to the automatic voltage regulator.

~~Whether the Resource or Qualified Non-Generator Voltage Support Resource has failed to provide Voltage Support Service in a Contingency shall be defined by ISO Procedures.~~

Suppliers of Voltage Support Service that fail to comply with the ISO Procedures will be assessed charges by the ISO in the manner described in Sections ~~15.2.2.54, and 15.2.2.65 and 15.2.2.76~~ below.

~~15.2.2.54~~ Failure to Respond to ISO's Request for Steady-State Voltage Control

~~Initial~~ Failure: If a Supplier's Resource, synchronous condenser, or a Qualified Non-Generator Voltage Support Resource fails to comply with the ISO's request for steady-state voltage control, the ISO shall withhold Voltage Support Service payments from the non-complying Supplier equivalent to one-twelfth (1/12th) of the annual payment for that specific Resource, synchronous condenser or a Qualified Non-Generator Voltage Support Resource (or an amount equal to the last month's voltage support payment made to it, if it is not an Installed Capacity provider). The Supplier shall also be liable for any additional cost in procuring replacement Voltage Support Service including LOC incurred by the ISO as a direct result of the Supplier's non-performance.

Repeated Failures: ~~For each instance of failure to perform~~In addition to the charges for failure, the non-complying Supplier will also be subject to the charges described ~~herein in this paragraph~~. If a Supplier's Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource fails to comply with the ISO's request on three (3) separate days, within a thirty (30) day period, then upon the third occurrence, the non-complying Supplier will no longer be eligible for Voltage Support Service payments for service provided by that Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource. The ISO may reinstate payments once the Supplier complies with the following conditions to the ISO's satisfaction:

15.2.~~2.54~~.1 the Supplier's Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource must successfully perform a Reactive Power (MVar) capability test, and

15.2.~~2.54~~.2 the Supplier's Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource must provide Voltage Support Service for thirty (30) consecutive days without any compliance failures. No payments for Voltage Support Service or LOC will be made to the Supplier during this period.

15.2.~~2.65~~ Failure to Provide Voltage Support Service When a Contingency Occurs on the NYS Power System

If a Supplier's Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource fails to respond to a contingency, based on ISO review and analysis, the ISO shall withhold Voltage Support Service payments from the non-complying Supplier as follows:

Initial Failure: The ISO will withhold from the Supplier one-twelfth (1/12th) of the annual payment for the specific Resource, synchronous condenser, or Qualified Non-Generator

Voltage Support Resource-(or an amount equal to the last month's voltage support payment made to it, if it is not an Installed Capacity provider).

Second Failure within the same thirty (30) day period: The ISO shall withhold from the Supplier one-fourth (1/4th) of the annual payment for the specific Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource (or an amount equal to the last three (3) months' voltage support payments made to it, if it is not an Installed Capacity provider).

In addition, the Supplier that is in violation shall be prohibited from receiving Voltage Support Service payments for the non-complying Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource until the Supplier complies with the following conditions to the ISO's satisfaction:

15.2.~~2-65~~.1 the Supplier's Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource shall successfully perform a Reactive Power (MVA_r) capability test, and

15.2.~~2-65~~.2 the Supplier's Resource, synchronous condenser, or Qualified Non-Generator Voltage Support Resource shall provide Voltage Support Service for thirty (30) consecutive days without any compliance failures. No payments for Voltage Support Service, or LOC shall be made to the Supplier for this resource during this period.

15.2.6. Failure to Maintain an Automatic Voltage Regulator or Commence Timely Repairs

If a Supplier's Resource or Qualified Non-Generator Voltage Support Resource fails to maintain its automatic voltage regulator in operation and fails to commence timely repairs following a failure of the automatic voltage regulator within a 30-day period, the Resource will be disqualified as a supplier of Voltage Support Service.

The Supplier will not receive Voltage Support Service payments for the disqualified Resource until the Supplier complies with the following conditions:

- (1) the Supplier provides documentation to the NYISO of the completion of the repairs,
- (2) the Supplier's Resource or Qualified Non-Generator Voltage Support Resource successfully performs a Reactive Power (MVAR) capability test, and
- (3) the Supplier's Resource or Qualified Non-Generator Voltage Support Resource provides Voltage Support Service for thirty (30) consecutive days without any compliance failures. No payments for Voltage Support Service or LOC shall be made to the Supplier during this period.

15.2.37 Consistence with Cross-Sound Scheduled Line Protocols

Nothing in this Rate Schedule shall be construed to change existing protocols between the ISO and ISO New England, Inc. regarding the operation of the Cross-Sound Scheduled Line.

15.3 Rate Schedule 3 - Payments for Regulation Service

This Rate Schedule applies to Suppliers that provide Regulation Service to the ISO.

Transmission Customers will purchase Regulation Service from the ISO under the ISO OATT.

15.3.1 Obligations of the ISO and Suppliers

15.3.1.1 The ISO shall:

- (a) Establish Regulation Service criteria and requirements in the ISO Procedures to ensure that Suppliers follow changes in Load consistent with the Reliability Rules;
- (b) Provide RTD Base Point Signals and AGC Base Point Signals to Suppliers providing Regulation Service to direct their output;
- (c) Establish criteria in the ISO Procedures that Suppliers must meet to qualify, or re-qualify, to supply Regulation Service;
- (d) Establish minimum metering requirements and telecommunication capability required for a Supplier to be able to respond to AGC Base Point Signals and RTD Base Point Signals sent by the ISO;
- (e) Select Suppliers to provide Regulation Service in the Day-Ahead Market and Real-Time Market, as described in Section 15.3.2 of this Rate Schedule;
- (f) Pay Suppliers for providing Regulation Service as described in Sections 15.3.4, 15.3.5, 15.3.6 and 15.3.7 of this Rate Schedule; and
- (g) Monitor Suppliers' performance to ensure that they provide Regulation Service as required, as described in Section 15.3.3 of this Rate Schedule.

15.3.1.2 Each Supplier shall:

- (a) Register with the ISO the capacity its resources are qualified to bid in the Regulation Services market;
- (b) Offer only Resources that are; (i) ISO-Committed Flexible or Self-Committed Flexible, provided however that Demand Side Resources shall be offered as ISO-Committed Flexible; within the dispatchable portion of their operating range, and; (ii) able to respond to AGC Base Point Signals sent by the ISO pursuant to the ISO Procedures, to provide Regulation Service;
- (c) Not use, contract to provide, or otherwise commit Capability that is selected by the ISO to provide Regulation Service to provide Energy or Operating Reserves to any party other than the ISO;
- (d) Pay any charges imposed under this Rate Schedule including, if they are re-instituted the charges described in Section 15.3.8 of this Rate Schedule;
- (e) Ensure that all of its Resources that are selected to provide Regulation Service comply with Base Point Signals issued by the ISO at all times pursuant to the ISO Procedures; and ensure that all of its Resources that are selected to provide Regulation Service comply with all criteria and ISO Procedures that apply to providing Regulation Service.

(f) Provide a regulation response rate that does not exceed the lowest normal energy response rate provided for the facility.

15.3.2 Selection of Suppliers in the Day-Ahead Market and the Real-Time Market

- (a) The ISO shall select Suppliers, in the Day-Ahead Market, to provide Regulation Service for each hour in the following Dispatch Day, from those that have Bid to

provide Regulation Service from Resources that meet the qualification standards and criteria established in Section 15.3.1 of this Rate Schedule and in the ISO Procedures.

- (b) Real-Time Market: The ISO shall establish a Real-Time Market for Regulation Service and will establish a real-time Regulation Service market clearing price in each interval. During any period when the ISO suspends Resources' obligation to follow the AGC Base Point Signals sent to Regulation Service providers, pursuant to Section 15.3.9 of this Rate Schedule, the Real-Time Market clearing price for Regulation Service shall automatically be set at zero, which shall be the price used for real-time balancing and settlement purposes. The ISO shall select Suppliers for Regulation Service from those that have Bid to provide Regulation Service from Resources that meet the qualification standards and criteria established in the ISO Procedures.
- (c) The ISO shall establish separate market clearing prices for Regulation Service in the Day-Ahead Market and the Real-Time Market under Sections 15.3.4, 15.3.5 and 15.3.7 of this Rate Schedule. The ISO shall also compute Regulation Revenue Adjustment Payments and Regulation Revenue Adjustment Charges under Section 15.3.6 of this Rate Schedule.

15.3.2.1 Bidding Process

- (a) A Supplier may submit a Bid in the Day- Ahead Market or the Real-Time Market to provide Regulation Service from eligible Resources, provided, however, that Bids submitted by Suppliers that are attempting to re-qualify to provide Regulation Service, after being disqualified pursuant to Section 15.3.3 of this Rate Schedule 3, may be limited by the ISO pursuant to ISO Procedures.

- (b) Bids rejected by the ISO may be modified and resubmitted by the Supplier to the ISO in accordance with the terms of the ISO Tariff.
- (c) Each Bid shall contain the following information: (i) the maximum amount of Capability (in MW) that the Resource is willing to provide for Regulation Service; (ii) the Resource's regulation response rate (in MW/Minute) which must be sufficient to permit that Resource to provide, within an RTD interval, the ~~offered amount of~~ Regulation Service (in MW) offered, provided that the regulation response rate for Demand Side Resources shall be at least shall be less than or equal to its lowest normal energy response rate; (iii) the Supplier's Availability Bid Price (in \$/MW); and (iv) the physical location and name or designation of the Resource.
- (d) Regulation Service Offers from Limited Energy Storage Resources: The ISO may reduce the real-time Regulation Service offer (in MWs) from a Limited Energy Storage Resource to account for the Energy storage capacity of such Resource.

15.3.3 Monitoring Regulation Service Performance and Performance Related Payment Adjustments

- (a) The ISO shall establish (i) Resource performance measurement criteria; (ii) procedures to disqualify Suppliers whose Resources consistently fail to meet those criteria; and (iii) procedures to re-qualify disqualified Suppliers, which may include a requirement to first demonstrate acceptable performance for a time.
- (b) The ISO shall establish and implement a Performance Tracking System to monitor the performance of Suppliers that provide Regulation Service. The ISO shall develop performance indices, which may vary with Control Performance, as part of the ISO Procedures. The Performance Tracking System shall compute the

difference between the Energy actually supplied and the Energy scheduled by the ISO for all Suppliers serving Load within the NYCA as set forth in the ISO Procedures. The ISO shall use these values to ~~reduce~~adjust real-time Regulation Service ~~payments-schedules~~ pursuant to Section 15.3.5.5 of this Rate Schedule.

- (c) Resources that consistently fail to perform adequately may be disqualified by the ISO, pursuant to ISO Procedures.

15.3.4 Regulation Service Settlements - Day-Ahead Market

15.3.4.1 Calculation of Day-Ahead Market Clearing Prices

The ISO shall calculate a Day-Ahead Market clearing price for Regulation Service each hour of the following day. The Day-Ahead Market clearing price for each hour shall equal the Day-Ahead Shadow Price of the ISO's Regulation Service constraint for that hour, which shall be established under the ISO Procedures. Day-Ahead Shadow Prices will be calculated by the ISO's SCUC. Each hourly Day-Ahead Shadow Price shall equal the marginal Bid cost of scheduling Resources to provide additional Regulation Service in that hour, including any impact on the Bid Production Cost of procuring Energy or Operating Reserves that would result from procuring an increment of Regulation Service in that hour, as calculated during the fifth SCUC pass described in Section 17.1.2 of Attachment B to this ISO Services Tariff, and Section 16.1.2 of Attachment J to the ISO OATT. As a result, the Shadow Price shall include the Day-Ahead Regulation Service Bid of the marginal Resource selected to provide Regulation Service ~~(or in the applicable price on the Regulation Service Demand Curve during shortage conditions)~~, plus any margins on the sale of Energy or Operating Reserves in the Day-Ahead Market that the Resource would forego if scheduling it to provide additional Regulation Service would lead to it being scheduled to provide less Energy or Operating Reserves ~~(or the applicable price on the Regulation Service Demand Curve during shortage conditions)~~. Shadow Prices ~~shall also be~~

consistent with the Regulation Service Demand Curves described in Section 15.3.7 of this Rate Schedule, ~~which~~ will ensure that Regulation Service is not scheduled by SCUC at a cost greater than the Regulation Service Demand Curve ~~indicates should be paid~~. Each Supplier that is scheduled Day-Ahead to provide Regulation Service shall be paid the Day-Ahead Market clearing price in each hour, multiplied by the amount of Regulation Service that it is scheduled to provide in that hour.

15.3.4.2 Other Day-Ahead Payments

A Supplier that bids on behalf of a Generator that provides Regulation Service may be eligible for a Day-Ahead Bid Production Cost guarantee payment pursuant to Section 4.6.6 and Attachment C of this ISO Services Tariff.

No payments shall be made to any Supplier providing Regulation Service in excess of the amount of Regulation Service scheduled by the ISO in the Day-Ahead Market, except to the extent that a Supplier is directed to provide the excess amount by the ISO.

15.3.5 Regulation Service Settlements - Real-Time Market

15.3.5.1 Calculation of Real-Time Market Clearing Prices

The ISO shall calculate a Real-Time Market clearing price for Regulation Service for every RTD interval, except as noted in Section 15.3.9 of this Rate Schedule. Except when the circumstances described below in Section 15.3.5.2 apply, the Real-Time Market clearing price for each interval shall equal the real-time Shadow Price for the ISO's Regulation Service constraint for that RTD interval, which shall be established under the ISO Procedures. Real-time Shadow Prices will be calculated by the ISO's RTD. Each Real-Time Shadow Price in each RTD interval shall equal the marginal Bid cost of scheduling Resources to provide additional Regulation Service in that interval, including any impact on the Bid Production Cost of

procuring Energy or Operating Reserves that would result from procuring an increment of Regulation Service in that interval, ~~as calculated during the third RTD pass described in Section 17.1.1.1.2.3 of Attachment B to this ISO Services Tariff, and Section 16.1.1.1.2.3 of Attachment J to the ISO OATT.~~ As a result, the Shadow Price shall include the Real-Time Regulation Service Bid of the marginal Resource selected to provide Regulation Service (~~or the applicable price on the Regulation Service Demand Curve during shortage conditions~~), plus any margins on the sale of Energy or Operating Reserves in the Real-Time Market that Resource would forego if scheduling it to provide additional Regulation Service would lead to it being scheduled to provide less Energy or Operating Reserves (or the applicable price on the Regulation Service Demand Curve during shortage conditions). Shadow Prices ~~shall also be~~ consistent with the Regulation Service Demand Curves described in Section 15.3.7 of this Rate Schedule, ~~which~~ will ensure that Regulation Service is not scheduled ~~by RTC~~ at a cost greater than the Demand Curve indicates ~~should be paid~~.

15.3.5.2 Calculation of Real-Time Market Clearing Prices for Regulation Service During EDRP/SCR Activations

During any interval in which the ISO is using scarcity pricing rule “A” or “B” to calculate LBMPs under Sections 17.1.1.2 or 17.1.1.3 of Attachment B to this ISO Services Tariff, and Sections 16.1.1.2 or 16.1.1.3 of Attachment J to the ISO OATT, the real-time Regulation Service market clearing price may be recalculated in light of the Availability Bids of Suppliers and Lost Opportunity Costs of Generators scheduled to provide Regulation Service in real-time.

Specifically, when either scarcity pricing rule is applicable, the real-time Regulation Service clearing price shall be set to the higher of: (i) the highest total Availability Bid and Lost

Opportunity Cost of any Regulation Service provider scheduled by RTD; and (ii) the market clearing price calculated under Section 15.3.5.1 of this Rate Schedule.

15.3.5.3 Real-Time Regulation Service Balancing Payments

Any deviation from a Supplier's Day-Ahead schedule to provide Regulation Service shall be settled pursuant to the following rules.

- (a) When the Supplier's real-time Regulation Service schedule, adjusted pursuant to Section 5.4 of this Rte Schedule, is less than its Day-Ahead Regulation Service schedule, the Supplier shall pay a charge for the imbalance equal to the product of: (i) the Real-Time Market clearing price for Regulation Service; and (ii) the difference between the Supplier's Day-Ahead Regulation Service schedule and its real-time Regulation Service schedule (~~subject to possible adjustments adjusted pursuant to Section 15.3.5.5 of this Rate Schedule.~~)
- (b) When the Supplier's real-time Regulation Service schedule, adjusted pursuant to Section 5.4 of this Rate schedule is greater than its Day-Ahead Regulation Service schedule, the ISO shall pay the Supplier an amount to compensate it for the imbalance equal to the product of: (i) the Real-Time market clearing price for Regulation Service; and (ii) the difference between the Supplier's real-time Regulation Service schedule, adjusted pursuant to Section 5.4 of this Rate schedule, and its Day-Ahead Regulation Service schedule (~~subject to possible adjustments pursuant to Section 15.3.5.5 of this Rate Schedule.~~)

15.3.5.4 Other Real-Time Regulation Service Payments

A Supplier that bids on behalf of a Generator that provides Regulation Service may be eligible for a real-time Bid Production Cost guarantee payment pursuant to Section 4.6.6 and Attachment C of this ISO Services Tariff.

A Supplier that provides Regulation Service may also be eligible for a Day-Ahead Margin Assurance Payment pursuant to Section 4.6.5 and Attachment J of this ISO Services Tariff.

15.3.5.5 Payments and Performance-Based Adjustments to Payments for Regulation Service Providers

Each Supplier that is scheduled in real-time to provide Regulation Service shall be paid in accordance with the following formula. The amount paid to each Supplier for providing Regulation Service in each RTD interval i shall be reduced to reflect the Supplier's performance:

$$\text{Total Payment} = \sum_i (\text{Total Payment}_i * (s_i/3600))$$

Where:

$$\text{Total Payment}_i = (\text{DAMCPreg}_i \times \text{DARcap}_i) + ((\text{RTRcap}_i \times K_i) - \text{DARcap}_i) \times \text{RTMCPreg}_i$$

DAMCPreg_i is the applicable market clearing price for Regulation Service (in \$/MW), in the Day-Ahead Market, as established by the ISO pursuant to Section 15.3.4.1 of this Rate Schedule for the hour that includes RTD interval i ;

DARcap_i is the Regulation Service Capability (in MW) offered by the Resource and selected by the ISO in the Day-Ahead Market in the hour that includes RTD interval i ;

RTMCPreg_i is the applicable market clearing price for Regulation Service (in \$/MW), in the Real-Time Market as established by the ISO under Section 15.3.5.1 of this Rate Schedule in RTD interval i ;

RTRcap_i is the Regulation Service Capability (in MW) offered by the Resource and selected by the ISO in the Real-Time Market in RTD interval i ;

s_i is the number of seconds in interval i ; and

K_i is a factor, with a value between 0.0 and 1.0 inclusive, derived from each Supplier's Regulation Service performance, as measured by the performance indices set forth in the ISO Procedures and determined pursuant to the following equation:

$$K_i = (PI_i - PSF) / (1 - PSF)$$

Where:

PI_i is the performance index of the Resource for interval i ; and

PSF is the payment scaling factor, established pursuant to ISO Procedures. The PSF shall be set between 0 and the minimum performance index required for payment of Availability payments.

The PSF is established to reflect the extent of ISO compliance with the standards established by NERC, NPCC or Good Utility Practice for Control Performance and System Security. The PSF is set initially at zero. Should the ISO's compliance with these measures deteriorate, in a manner that can be improved if regulation performance improves, the PSF will be increased. Resources providing Regulation Service will be required to increase their performance index to obtain the same total Regulation Service payment as they received during periods of good ISO performance, as measured by these standards. The factor K_{PI} shall initially be set at 1.0 for Limited Energy Storage Resources. No payments shall be made to any Supplier providing Regulation Service in excess of the amount of Regulation Service scheduled by the ISO in the Real Time Market, except to the extent that a Supplier is directed to provide the excess amount by the ISO.

15.3.6 Energy Settlement Rules for Generators Providing Regulation Service

15.3.6.1 Energy Settlements

- A. For any interval in which a Generator is providing Regulation Service, it shall receive a settlement payment for Energy consistent with a real-time Energy injection equal to the lower of its actual generation or its AGC Base Point Signal. Demand Side Resources providing Regulation Service shall not receive a settlement payment for Energy.

B. For any hour in which a Limited Energy Storage Resource has injected or withdrawn Energy, pursuant to an ISO schedule to do so, it shall receive a settlement payment (if the amount calculated below is positive) or charge (if the amount calculated below is negative) for Energy pursuant to the following formula:

$$\text{Energy Settlement}_h = \text{Net MWHR}_h * \text{LBMP}_h$$

Where:

Net MWHR_h = the amount of Energy injected by the Limited Energy Storage Resource in hour h minus the amount of Energy withdrawn by that Limited Energy Storage Resource in hour h

LBMP_h = the time-weighted average LBMP in hour h calculated for the location of that Limited Energy Storage Resource

15.3.6.2 Additional Payments/Charges When AGC Base Point Signals Exceed RTD Base Point Signals

For any interval in which a Generator that is providing Regulation Service receives an AGC Base Point Signal that is higher than its RTD Base Point Signal, it shall receive or pay a Regulation Revenue Adjustment Payment (“RRAP”) or Regulation Revenue Adjustment Charge (“RRAC”) calculated under the terms of this subsection, provided however no RRAP shall be payable and no RRAC shall be charged to a Limited Energy Storage Resource. If the Energy Bid Price of such a Generator is higher than the LBMP at its location in that interval, the Generator shall receive a RRAP. Conversely, for any interval in which such a Generator’s Energy Bid Price is lower than the LBMP at its location at that interval, the Generator shall be assessed a RRAC. RRAPs and RRACs shall be calculated using the following formula:

$$\text{Payment/Charge} = \frac{\int_{\text{RTD Base Point Signal}}^{\max(\text{RTD Base Point Signal}, \min(\text{AGC Base Point Signal}, \text{Actual Output}))} [\text{Bid} - \text{LBMP}] \, ds}{\text{RTD Base Point Signal}} * s/3600$$

Where:

s is the number of seconds in the RTD interval;

If the result of the calculation is positive then the Generator shall receive a RRAP. If it is negative then the Generator shall be subject to a RRAC. For purposes of applying this formula, whenever the Generator's actual Bid exceeds the applicable LBMP the "Bid" term shall be set at a level equal to the lesser of the Generator's actual Bid or its reference Bid plus \$100/MWh. Demand Side Resources providing Regulation Service shall not be eligible for a RRAP and not liable for an RRAC.

15.3.6.3 Additional Charges/Payments When AGC Base Point Signals Are Lower than RTD Base Point Signals

For any interval in which a Generator that is providing Regulation Service receives an AGC Base Point Signal that is lower than its RTD Base Point Signal, it shall receive or pay a RRAP or RRAC calculated under the terms of this subsection. If the Energy Bid Price of such a Generator is higher than the LBMP at its location in that interval, the Generator shall be assessed a RRAC. Conversely, for any interval in which such a Generator's Energy Bid Price is lower than the LBMP at its location in that interval, the Generator shall receive a RRAP. RRAPs and RRACs shall be calculated using the following formula:

$$\text{Payment/Charge} = \frac{\int_{\min(\text{RTD Base Point Signal}, \max(\text{AGC Base Point Signal}, \text{Actual Output}))}^{\text{RTD Base Point Signal}} - [\text{Bid} - \text{LBMP}] \quad * \quad s/3600$$

Where:

s is the number of seconds in the RTD interval;

If the result of the calculation is positive then the Generator shall receive a RRAP. If it is negative then the Generator shall be subject to a RRAC. For purposes of this formula, whenever the Generator's actual Bid is lower than the applicable LBMP the "Bid" term shall be set at a level equal to the higher of the Generator's actual Bid or its reference Bid minus \$100/MWh.

Demand Side Resources providing Regulation Service shall not be eligible for a RRAP and not liable for an RRAC.

15.3.7 Regulation Service Demand Curve

The ISO shall establish a Regulation Service Demand Curve that will apply to both the Day-Ahead and real-time Regulation Service markets. The market clearing prices for Regulation Service calculated pursuant to Sections 15.3.4.1 and 15.3.5.1 of this Rate Schedule shall take account of the demand curve established in this Section so that Regulation Service is not purchased by SCUC or RTC at a cost higher than the demand curve indicates should be paid in the relevant market.

The ISO shall establish and post a target level of Regulation Service for each hour, which will be the number of MW of Regulation Service that the ISO would seek to maintain in that hour. The ISO will then define a Regulation Service demand curve for that hour as follows:

For quantities of Regulation Service that are less than or equal to the target level of Regulation Service minus 25 MW, the price on the Regulation Service demand curve shall be \$300/MW.

For quantities of Regulation Service that are less than or equal to the target level of Regulation Service but that exceed the target level of Regulation Service minus 25 MW, the price on the Regulation Service demand curve shall be \$250/MW.

For all other quantities, the price on the Regulation Service demand curve shall be \$0/MW. However, the ISO shall not schedule more Regulation Service than the target level for the requirement for that hour.

In order to respond to operational or reliability problems that arise in real-time, the ISO may procure Regulation Service at a quantity and/or price point different than those specified above. The ISO shall post a notice of any such purchase as soon as reasonably possible and shall

report on the reasons for such purchases at the next meeting of its Business Issues Committee. The ISO shall also immediately initiate an investigation to determine whether it is necessary to modify the quantity and price points specified above to avoid future operational or reliability problems. The ISO will consult with its Market Monitoring Unit when it conducts this investigation.

If the ISO determines that it is necessary to modify the quantity and/or price points specified above in order to avoid future operational or reliability problems it may temporarily modify them for a period of up to ninety days. If circumstances reasonably allow, the ISO will consult with its Market Monitoring Unit, the Business Issues Committee, the Commission, and the PSC before implementing any such modification. In all circumstances, the ISO will consult with those entities as soon as reasonably possible after implementing a temporary modification.

Not later than 90 days after the implementation of the Regulation Service Demand Curve the ISO, in consultation with its Advisor, shall conduct an initial review in accordance with the ISO Procedures. The scope of the review shall be upward or downward in order to optimize the economic efficiency of any, or all, the ISO-Administered Markets. The ISO and the Market Advisor shall perform additional quarterly reviews, subject to the same scope requirement, during the remainder of the first year that this Section 15.3.7 is in effect. After the first year, the ISO shall perform periodic reviews, subject to the same scope requirement, and the Market Monitoring Unit shall be given the opportunity to review and comment on the ISO's periodic reviews of the Regulation Service Demand Curve.

The responsibilities of the Market Monitoring Unit that are addressed in the above section of Rate Schedule 3 to the Services Tariff are also addressed in Section 30.4.6.4.1 of Attachment O.

15.3.8 Reinstating Performance Charges

The ISO will monitor, on a real-time hourly or daily basis, as appropriate, its compliance with the standards established by NERC and NPCC and with the standards of Good Utility Practice for Control Performance, area control error, disturbance control standards, reserve pickup performance and system security. Should it appear to the ISO that degradation in performance threatens compliance with one or more of the established standards for these criteria or compromises reliability, and that reinstating the performance charges that were originally part of the ISO's market design, would assist in improving compliance with established standards for these criteria, or would assist in re-establishing reliability, the ISO may require Suppliers of Regulation Service, as well as Suppliers not providing Regulation Service, to pay a performance charge. Any reinstatement of Regulation penalties pursuant to this Section shall not override previous Commission-approved settlement agreements that exempt a particular unit from such penalties. The ISO shall provide notice of its decision to reinstate performance charges to the Commission, to each Customer and to the Operating Committee and the Business Issues Committee no less than seven days before it re-institutes the performance charges.

If the ISO determines that performance charges are necessary, Suppliers of Regulation Service shall pay a performance charge per interval to the ISO as follows:

$$\text{Performance Charge} = \text{Energy Deviation} \times \text{MCP}_{\text{reg}} \times (\text{Length of Interval}/60 \text{ minutes})$$

Where:

Energy Deviation (in MW) is the absolute difference between the actual Energy supplied by the Supplier and the Energy required by the AGC Base Point Signals, whether positive or negative, averaged over each RTD interval; and

MCP_{reg} is the market clearing price (\$/MW) which applies to the RTD interval for this Service in the Real-Time Market or the Day-Ahead Market, if appropriate.

The method used by the ISO to calculate the Energy Deviation will permit Suppliers a certain period of time to respond to AGC Base Point Signals. Initially this time period will be thirty (30) seconds, although the ISO will have the authority to change its length. If the Supplier's output at any point in time is between the largest and the smallest of the AGC Base Points sent to that Supplier within the preceding thirty (30) seconds (or such other time period length as the ISO may define), the Supplier's Energy Deviation at that point in time will be zero. Otherwise, the Supplier may have a positive Energy Deviation. However, in cases in which responding to the AGC Base Point within that time period would require a Supplier to change output at a rate exceeding the amount of Regulation it has been scheduled to provide, the Supplier will have a zero Energy Deviation if it changes output at the rate equal to the amount of Regulation it is scheduled to provide.

15.3.9 Temporary Suspension of Regulation Service Markets During Reserve Pickups and Maximum Generation

During any period in which the ISO has activated its RTD-CAM software and called for a “large event” or “small event” reserve or maximum generation pickup, as described in Article 4.4.4.1 of this ISO Services Tariff, the ISO will suspend Generators’ obligation to follow the AGC Base Point Signals sent to Regulation Service providers, freeing them to provide Energy and will suspend the real-time Regulation Service market. The ISO will not procure any Regulation Service and will establish a real-time Regulation Service market clearing price of zero for settlement and balancing purposes. The ISO will resume sending AGC Base Point Signals and restore the real-time Regulation Service market as soon as possible after the end of the reserve or maximum generation pickup.

15.3A Rate Schedule “3-A” -Charges Applicable to Suppliers That Are Not Providing Regulation Service

15.3A.1 Persistent Undergeneration Charges

A Supplier, other than a Supplier included in Section 15.3A.3.3 of this Rate Schedule, that is not providing Regulation Service and that persistently operates at a level below its schedule shall pay a persistent undergeneration charge to the ISO, unless its operation is within a tolerance described below, provided, however, no persistent undergeneration charges shall apply to a Fixed Block Unit that has reached a percentage of its Normal Upper Operating Limit, which percentage shall be set pursuant to ISO Procedures and shall be initially set at seventy percent (70%). Persistent undergeneration charges per interval shall be calculated as follows:

$$\text{Persistent undergeneration charge} = \frac{\text{Energy Difference} \times \text{MCP}_{\text{reg}} \times \text{Length of Interval}}{60 \text{ Minutes}}$$

Where:

Energy Difference in (MW) is determined by subtracting the actual Energy provided by the Supplier from its RTD Base Point Signal for the dispatch interval. The Energy Difference shall be set at zero for any Energy Difference that is otherwise negative or that falls within a tolerance, set pursuant to ISO Procedures, and which shall contain a steady-state and a dynamic component. The steady-state component shall initially be 3% of the Supplier’s Normal Upper Operating Limit or Emergency Upper Operating Limit, as applicable, and the dynamic component shall be a time constant that shall initially be set at fifteen minutes; and

MCP_{reg} is the market clearing price (\$/MW) which applies to the dispatch interval for which Regulation Service in the Real-Time Market, or, if applicable, the Day-Ahead Market.

15.3A.1.1 Overgeneration Charges

An Intermittent Power Resource that depends on wind as its fuel, for which the ISO has imposed a Wind Output Limit after October 31, 2009 or after February 1, 2010 for an Intermittent Power Resource that depends on wind as its fuel in commercial operation before 2006 with nameplate capacity of 30 MWs or less, that operates at a level above its schedule shall pay an overgeneration charge to the ISO, unless its operation is within a tolerance described below.

Overgeneration charges per interval shall be calculated as follows:

$$\text{Overgeneration charge} = \text{Energy Difference} \times \text{MCP}_{\text{reg}} \times \text{Length of Interval} \frac{\text{in seconds}}{60 \text{ Minutes} \times 3600 \text{ seconds}}$$

Where:

Energy Difference in (MW) is determined by subtracting the RTD Base Point Signal for the dispatch interval from the actual Energy provided by the Intermittent Power Resource for the same interval. The Energy Difference shall be set at zero for any Energy Difference that is otherwise negative or that falls within a tolerance, set pursuant to ISO Procedures, which shall initially be set at 3% of the Supplier's Normal Upper Operating Limit or Emergency Upper Operating Limit, as applicable; and

MCP_{reg} is the market clearing price (\$/MW) which applies to the dispatch interval for Regulation Service in the Real-Time Market, or, if applicable, the Day-Ahead Market.

15.3A.2 Restoration of Performance Charges

The persistent undergeneration charges described in Section 15.3A.1 above shall be suspended in the event that the ISO re-institutes Regulation performance charges pursuant to Section 15.3.8 of Rate Schedule 3 of this Services Tariff. If the ISO re-institutes performance charges then Suppliers that sell Energy through the LBMP Markets or that supply Bilateral

Transactions that serve Load in the NYCA, but do not provide Regulation Service, shall pay a performance charge per interval to the ISO as follows:

$$\text{Performance Charge} = \text{Energy Difference} \times \text{MCP}_{\text{reg}} \times \text{Length of SCD Interval} \frac{\text{in seconds}}{60 \text{ minutes} \times 3600 \text{ seconds}}$$

Where:

Energy Difference (in MW) is the absolute difference between the actual Energy supplied by the Supplier and the Energy is directed to produce by its RTD Base Point Signals, whether positive or negative, averaged over each RTD interval; and

MCP_{reg} is the market clearing price (\$/MW) which applies to the interval for which Regulation Service was provided in the Real-Time Market, or, if appropriate, the Day-Ahead Market.

In cases in which the Energy Difference that would be calculated using the procedure described above is less than the tolerance set forth in the ISO Procedures, the ISO shall set the Energy Difference for that interval equal to zero.

15.3A.3 Exemptions

The following types of Generator shall not be subject to persistent undergeneration charges, or, if they are restored by the ISO, to performance charges:

15.3A.3.1 Generators providing Energy under contracts (including PURPA contracts), executed and effective on or before November 18, 1999, in which the power purchaser does not control the operation of the supply source but would be responsible for payment of the persistent undergeneration or performance charge;

15.3A.3.2 Existing topping turbine Generators and extraction turbine Generators producing electric Energy resulting from the supply of steam to the district steam system 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;

15.3A.3.3 Intermittent Power Resources that depend on wind as their fuel and Limited Control Run of River Hydro Resources within the NYCA in operation on or before November 18, 1999, plus up to an additional 3300 MW of such Generators;

15.3A.3.4 Intermittent Power Resources that depend on landfill gas or solar energy as their fuel;

15.3A.3.5 Capacity Limited Resources and Energy Limited Resources to the extent that their real-time Energy injections are equal to or greater than their bid-in upper operating limits but are less than their Real-Time Scheduled Energy Injections;

15.3A.3.6 Generators operating in their Start-Up Period or their Shutdown Period and, for Generators comprised of a group of generating units at a single location, which grouped generating units are separately committed and dispatched by the ISO, and for which Energy injections are measured at a single location, each of the grouped generating units when one of the grouped generating units is operating in its Start-Up or Shutdown Period; and

15.3A.3.7 Generators operating during a Testing Period.

For Generators and Resources described in Sections 15.3A.3.1, 15.3A.3.2, 15.3A.3.3, and 15.3A.3.4 above, this exemption shall not apply in an hour if the Generator or Resource has bid in that hour as ISO-Committed Flexible or Self-Committed Flexible.

15.4 Rate Schedule 4 - Payments for Supplying Operating Reserves

This Rate Schedule applies to payments to Suppliers that provide Operating Reserves to the ISO. Transmission Customers will purchase Operating Reserves from the ISO under Rate Schedule 5 of the ISO OATT.

15.4.1.2.3 30-Minute Reserve:

(i) Generators that are ISO-Committed Flexible or Self-Committed Flexible and operating within the dispatchable portion of their operating range and Demand Side Resources, that are not Local Generators, that are capable of reducing their Energy usage within thirty (30) minutes shall be eligible to supply synchronized 30-Minute Reserves; (ii) Off-line Generators that are capable of starting, synchronizing, and increasing their output level within thirty (30) minutes and that meet the criteria set forth in the ISO Procedures, and Demand Side Resources that are capable of reducing their Energy usage within thirty (30) minutes and that meet the criteria set forth in the ISO Procedures, shall be eligible to supply non-synchronized 30-Minute Reserves.

15.4.1.2.4 Self-Committed Fixed and ISO-Committed Fixed Generators:

Shall not be eligible to provide any kind of Operating Reserve.

15.4.1.3 Other Supplier Requirements

All Suppliers of Operating Reserve must be located within the NYCA and must be under ISO Operational Control. Each Supplier bidding to supply Operating Reserve or reduce demand must be able to provide Energy or reduce demand consistent with the Reliability Rules and the ISO Procedures when called upon by the ISO.

All Suppliers that are selected to provide Operating Reserves shall ensure that their Resources maintain and deliver the appropriate quantity of Energy, or reduce the appropriate

quantity of demand, when called upon by the ISO during any interval in which they have been selected.

Generators or Demand Side Resources that are selected to provide Operating Reserve in the Day-Ahead Market or any supplemental commitment may ~~not~~ increase their Incremental Energy Bids or Demand Reduction Bids for portions of their Resources that have been scheduled through those processes; provided however, that they are not otherwise prohibited from doing so pursuant to other provisions of the ISO's Tariffs. They may not, however, ~~or~~ reduce their Day-Ahead Market or supplemental commitments; in real-time except to the extent that they are directed to do so by the ISO. Generators and Demand Side Resources may enter into alternate sales arrangements utilizing any Capacity that has not been scheduled to provide Operating Reserve.

15.4.3.6 Performance Index for Demand Side Resource Suppliers of Operating Reserves

The ISO shall produce a performance index for purposes of calculating a Day Ahead Margin Assurance payment for a Demand Side Resource providing Operating Reserves. The performance index shall take account of the actual Demand Reduction achieved by the Supplier of Operating Reserves following the ISO's instruction to convert Operating Reserves to Demand Reduction.

The performance index shall be a factor with a value between 0.0 and 1.0 inclusive. For each interval in which the ISO has not instructed the Demand Side Resource to convert its Operating Reserves to Demand Reduction, the Performance Index shall have a value of one. For each interval in which the ISO has instructed the Demand Side Resource to convert its Operating Reserves to Demand Reduction the Performance Index shall be calculated pursuant to the following formula, provided however when UAG_i is zero or less, the Reserve PI shall be set to

zero:

If $UAG > 0$,

Then

$$\text{Reserve PI} = \text{Min} \left[\left(\frac{UAG_i}{ADG_i} + .1 \right), 1 \right];$$

Otherwise, Reserve PI = 0.

Where:

Reserve PI = Reserve Performance Index

UAG_i = Average actual demand reduction for interval i , ~~represented as a positive generation value.~~

ADG_i = Average scheduled demand reduction for interval i , represented as a positive generation base point

15.4.6.2 Calculation of Real-Time Market Clearing Prices for Operating Reserves During EDRP/SCR Activations

15.4.6.2.1 During Intervals When Scarcity Pricing Rule “A” Applies

During any interval in which the ISO is using scarcity pricing rule “A” to calculate LBMPs under Section 17.1.1.2 of Attachment B to this ISO Services Tariff, and Section 16.1.1.2 of Attachment J to the ISO OATT, the real-time market clearing prices for some Operating Reserves products may be recalculated **by** in light of the Lost Opportunity Costs of Resources that are scheduled to provide Spinning Reserves and synchronized 30-Minute Reserves in the manner described below. The ISO shall also consider the Lost Opportunity Costs of Resources providing lower quality Operating Reserves to ensure that the requirements of Section 15.4.4.3 of this Rate Schedule are not violated. Specifically:

15.5 Rate Schedule 5 - Payments and Certain Charges For Black Start and System Restoration Services

15.5.3.2 Charges to Support Payments to Existing Generators Under the Consolidated Edison Plan

The ISO shall collect, on a monthly basis, a charge from each Transmission Customer in the Consolidated Edison Transmission District in order to fund the payments described above in Section 15.5.3.1. The charge shall be equal to the product of (a) the Transmission Customer's hourly ~~L~~load ~~R~~ratio ~~S~~share of Load in the Consolidated Edison Transmission District, and (b) the total payments for existing Black Start and System Restoration Services in that Transmission District under Section 15.5.3.1, divided by the total number of hours in the month.

15.5.3.3 Payments to New Generators that Provide Black Start and System Restoration Services in the Consolidated Edison Transmission District

New Generators that agree to provide Black Start and System Restoration Services within the Consolidated Edison Transmission District shall be treated as set forth in Section 15.5.2 above.

Rate Schedule 5. Appendix I
Core Features of Testing Criteria Black Start and Restoration Services Testing
Requirements Consolidated Edison Transmission District

6. Upon successful completion of the test, the generator owner shall submit a certification form, ~~the template of which shall be included in the ISO tariff~~ in the form provided in Appendix II to this Rate Schedule, to the ISO and Consolidated Edison.
7. Consistent with past practice, plant owners will continue to test on a monthly basis their standby diesel generators, black start gas turbines and UPS/battery back up systems. If any of these critical systems are found to be non-operational or otherwise unavailable, the plant owner will notify Consolidated Edison and the ISO within 36 hours and provide a schedule for their repair and return to service.

Steam Turbine Facility Testing Requirements

6. Upon successful completion of the test, the generator owner shall submit a certification form, ~~the template of which shall be included in the ISO Services Tariff~~ in the form provided in Appendix II to the Rate Schedule, to the ISO and Consolidated Edison.
7. Consistent with past practice, plant owners will continue monthly tests of standby diesel generators; black start gas turbines and UPS/battery back up systems. If any of these critical systems are found to be non-operational or otherwise unavailable, the plant owner will notify Consolidated Edison and the ISO within 36 hours and provide a schedule for their repair and return to service.