Sched. 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.

#### 1.0 Obligations of the ISO and Suppliers

#### 1.1 The ISO shall:

- (a) Establish Regulation Service criteria and requirements in the ISO Procedures to ensure that Generators follow changes in Load consistent with the Reliability Rules;
- (b) Provide RTD Base Point Signals and AGC Base Point Signals to Generators providing Regulation Service to direct their output;
- (c) Establish criteria in the ISO Procedures that Generators must meet to qualify, or re-qualify, to supply Regulation Service;
- (d) Establish minimum metering requirements and telecommunication capability required for a Generator to be able to respond to AGC Base Point Signals and RTD Base Point Signals sent by the ISO;
- (e) Select Generators to provide Regulation Service in the Day-Ahead Market and Real-Time Market, as described in Section 2.0 of this Rate Schedule;

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(f) Pay Suppliers for providing Regulation Service as described in Sections 4.0, 5.0, 6.0

and 7.0 of this Rate Schedule; and

(g) Monitor Generators' performance to ensure that they provide Regulation Service as

required, as described in Section 3.0 of this Rate Schedule.

**1.2** Each Supplier shall:

(a) Offer only Generators that are; (i) ISO-Committed Flexible or Self-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;

(b) 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;

(c) Pay any charges imposed under this Rate Schedule including, if they are re--instituted,

the charges described in Section 8.0 of this Rate Schedule;

(d) Ensure that all of its Generators 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 Generators that are selected to provide Regulation Service comply with all

Effective:

ISO Procedures that apply to providing Regulation Service.

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First Revised Sheet No. 272A Superseding Original Sheet No. 272A

Effective:

# 2.0 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

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Service for each hour in the following Dispatch Day, from those that have Bid to

provide Regulation Service from Generators that meet the qualification standards and

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criteria established in Section 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 Generators' obligation to follow the AGC

Base Point Signals sent to Regulation Service providers, pursuant to Section 9.0 of this

Rate Schedule, the Real-Time Marketclearing 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 Generators 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 4.0, 5.0 and 7.0 of this

Effective:

Rate Schedule. The ISO shall also compute Regulation Revenue

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First Revised Sheet No. 273A Superseding Original Sheet No. 273A

Effective:

Adjustment Payments and Regulation Revenue Adjustment Charges under Section 6.0

of this Rate Schedule.

**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 Generators, provided,

however, that Bids submitted by Suppliers that are attempting to re-qualify to provide

Regulation Service, after being disqualified pursuant to Section 3.0 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

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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 Generator is willing to provide for Regulation Service; (ii) the

Generator's regulation response rate (in MW/Minute) which must be sufficient to permit

that Generator to provide the offered amount of Regulation Service within an RTD

interval and which shall be the same as the response rate specified in the Energy Bid for

that Generator; (iii) the Supplier's Availability Bid Price (in \$/MW); and (iv) the physical

location and name or designation of the Generator.

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Effective:

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Effective:

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3.0 Monitoring Regulation Service Performance and Performance Related Payment Adjustments

(a) The ISO shall establish (i) Generator performance measurement criteria; (ii) procedures

to disqualify Suppliers whose Generators 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.

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Effective:

Superseding First Revised Sheet No. 276

actually supplied and the Energy scheduled by the ISO for all Generators serving Load

within the NYCA as set forth in the ISO Procedures. The ISO shall use these values to

reduce Regulation Service payments pursuant to Section 5.4 of this Rate Schedule.

Suppliers that consistently fail to perform adequately may be disqualified by the ISO, (c)

pursuant to ISO Procedures.

4.0 **Regulation Service Settlements - Day-Ahead Market** 

> 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 Serviceconstraint for that hour, which shall e 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

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impact on the Bid Production Cost of procuring Energy or Operating Reserves that would result from

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Effective:

procuring an increment of Regulation Service in that hour,, as calculated during the fifth SCUC pass

described in Section I.B of Attachment B to this ISO Services Tariff, and Section I.B of Attachment J

to the ISO OATT. As a result, 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. Shadow Prices shall also be consistent with the

Regulation Service Demand Curves described in Section 7.0 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.

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4.2 Other Day-Ahead Payments

As provided in Article 4 and Attachment C of the Services Tariff, the ISO shall compensate

each ISO-Committed Flexible Generator that provides Regulation Service if its Bid Production Cost to

provide the Energy and Ancillary Services it is scheduled to supply in the Day-Ahead Market,

including start-up costs, minimum Load costs, and Availability Bids, exceeds the revenues it receives

from the sale of Energy and Ancillary Services.

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.

**5.0** Regulation Service Settlements - Real-Time Market

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 9.0 of this Rate Schedule. Except when the

circumstances described below in Section 5.1A apply, the Real-Time Market clearing price for

each interval shall equal the real-time Shadow Price for the ISO's Regulation Service constraint

Effective:

for that RTD interval, which shall be established under the

Sched. 3

ISO Procedures. Real-time Shadow Prices will be calculated by the ISO's RTD. Each Real-

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Effective:

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 ruing the third RTD

pass described in Section I.A.1.b.iii of Attachment B to this ISO Services Tariff, and Section

I.A.1.b.iii 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. Shadow Prices

shall also be consistent with the Regulation Service Demand Curves described in Section 7.0 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.

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5.1A 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 section I.A.2.a or 2.b of Attachment B to this ISO Services Tariff, and Section I.A.2.a

or 2.b of Attachment J to the ISO OATT, the real-time Regulation Service market clearing price may

be recalculated in light of the Availability Bids 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 5.1 of this Rate Schedule.

**5.2** Real-Time Regulation Service Balancing Payments

Any deviation from a Generator's Day-Ahead schedule to provide Regulation Service shall be

settled pursuant to the following rules.

(a) When the Generator's real-time Regulation Service schedule is less than its Day-Ahead

Regulation Service schedule, the Generator shall pay a charge for the imbalance equal

to the product of: (i) the Real-Time Market clearing price for Regulation Service; and

Effective:

(ii) the difference between the Generator's Day-Ahead

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Regulation Service schedule and its real-time Regulation Service schedule (subject to

possible adjustments pursuant to Section 5.4 of this Rate Schedule.)

(b) When the Generator's real-time Regulation Service schedule is greater than its Day-

Ahead Regulation Service schedule, the ISO shall pay the Generator 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 Generator's

Day-Ahead Regulation Service schedule and its real-time Regulation Service schedule

(subject to possible adjustments pursuant to Section 5.4 of this Real Schedule.)

**5.3** Other Real-Time Regulation Service Payments

As is provided in Article 4 and Attachment C of the Services Tariff, the ISO shall

compensate each ISO-Committed Flexible Generator that provides Regulation Service if its Bid

Effective:

Production Cost to provide the Energy and Ancillary Services it is scheduled to supply in the

Real-Time Market, including start-up costs, minimum Load costs, and Availability Bids,

exceeds the revenues it receives from the sale of Energy and Ancillary Services.

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Effective:

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the amount of Regulation Service scheduled by the ISO in the Real-Time Market, except to the

extent that a Generator is directed to provide the excess amount by the ISO.

Finally, whenever a Generator's real-time Regulation Service schedule is reduced by the

No payments shall be made to any Generator providing Regulation Service in excess of

ISO to a level lower than its Day-Ahead schedule for that product, the Generator's Day-

Ahead Margin shall be protected after accounting for any margin associated with other products

that the Generator is scheduled to provide in real-time. The rules governing the calculation of

these Day-Ahead Margin Assurance Payments are set forth in Attachment J to this ISO

Services Tariff.

5.4 Performance-Based Adjustments to Regulation Service Payments

The amount paid to each Generator for providing Regulation Service in each RTD

interval i shall be reduced to reflect the Generator's performance pursuant to the following

formula:

 $Total\ Payment = S_i(Total\ Payment_i *(s_i/3600))$ 

Where:

 $Total\ Payment_i = (DAMCPreg_i\ x\ DARcap_i) + ((RTRcap_i\ x\ K_{Pl})\ -\ DARcap_i)\ x\ RTMCPreg_i)$ 

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DAMCPreg<sub>i</sub> is the applicable market clearing price for Regulation Service (in \$/MW),

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in the Day-Ahead Market as established by the ISO pursuant to Section 4.1 of this Rate

Schedule for the hour that includes RTD interval i;

DAMCPreg<sub>i</sub> is the Regulation Service Capability (in MW) offered by the Generator

and selected by the ISO in the Day-Ahead Market in the hour that includes RTD interval i;

RTMCPreg<sub>i</sub> is the applicable market clearing price for Regulation Service (in MW), in

the Real-Time Market as established by the ISO under Section 5.1 of this Rate Schedule in

RTD interval i;

RTR*cap<sub>i</sub>* is the Regulation Service Capability (in MW) offered by the Generator 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

 $K_{pi}$  is a factor, with a value between 0.0 and 1.0 inclusive, derived from each

Generator's Regulation Service performance, as measured by the performance indices set forth

in the ISO Procedures and determined pursuant to the following equation:

 $K_{PI} = \frac{PI - PSF}{1 - PSF}$ 

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Effective:

Where:

PI is the Generator's performance index; 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

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First Revised Sheet No. 276B Superseding Original Sheet No. 276B

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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. Generators 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.

**6.0** Energy Settlement Rules for Generators Providing Regulation Service

**6.1** Energy Settlements

For any interval in which a Generator is providing Regulation

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First Revised Sheet No. 277 Superseding Original Sheet No. 277

Effective:

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.

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First Revised Sheet No. 278 Original Sheet No. 278

**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. 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 is location at that

interval, the Generator shall be assessed a RRAC, RRAps and RRAcs shall be calculated using the

following formula:

max(RTD Base PointSignal,min(AGC BasePointSignal,Actual Output))

[Bid - LBMP]Payment / Charg e =\* s/3600

RTD Base Point Signal

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 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.

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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:

Payment / Charg 
$$e = \int_{-\infty}^{\text{RTD Base PointSignal}} \left[ -\left[Bid - LBMP\right] \right] * s/3600$$

min(RTD Base PointSignal, max(AGC Base PointSignal, Actual Output))

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

Effective:

the higher of the Generator's actual Bid or its reference Bid minus \$100/MWh.

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7.0 Regulation Service Demand Curve

The ISO shall establish a Regulation Service Demand Curve that will apply to both the Day-

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Ahead and real-time Regulation Service markets. The market clearing prices for Regulation Service

calculated pursuant to Sections 4.1 and 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

Effective:

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.

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Superseding First Revised Sheet No. 279

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

Effective:

reliability problems. The ISO will consult with its Market Adviosr when it conducts this

investigation.

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If the ISO determines that it is necessary to modify the quantity and/or price points

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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 Advisor, the Business Issues Committee, the Commission, and the PSC

before implementing any such modification. In all circumstances, the ISO will consult with those

Effective:

entities as soon as reasonably possible after implementing a temporary modification.

Not later than 90 days after the implementation of the Regulation Service

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First Revised Sheet No. 279A Superseding Original Sheet No. 279A

Effective:

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 adjusted upward or downward in order to

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First Revised Sheet No. 279B Superseding Original Sheet No. 279B

Effective:

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 7.0 is in effect. After the first year, the ISO and

the Market Advisor shall perform periodic reviews, subject to the same scope requirement.

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Second Revised Sheet No. 279C Superseding First Revised Sheet No. 279C

Effective:

Reserved for Future Use.

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Second Revised Sheet No. 279D

Superseding First Revised Sheet No. 279D

8.0 **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

Effective:

Committee no less than seven days before it re-institutes the performance charges.

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Issued on:

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First Revised Sheet No. 279E Superseding Original Sheet No. 279E

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:

Performance Charge = Energy Deviation x  $MCP_{reg}$  x (Length of Interval/60 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<sub>reg</sub> is the market clearing price (\$/MW) which applies to the RTD interval for this Service

Effective:

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

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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.

9.0 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(A)

of this ISO Services Tariff, the ISO will suspend Generators' obligation to follow the AGC Base Point

Effective:

Signals sent to Regulation Service providers, freeing them to provide Energy

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Effective:

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.

Rate Schedule "3-A"

**Charges Applicable to Suppliers That Are Not Providing Regulation Service** 

1.0 Persistent Undergeneration Charges

A Supplier 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. Persistent undergeneration charges per interval shall be calculated as

follows:

Persistent undergeneration charge = Energy Difference x MCP<sub>reg</sub> x Length of Interval/60

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

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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

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be a time constant that shall initially be set at fifteen minutes; and

MCP<sub>reg</sub> 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.

2.0 Restoration of Performance Charges

the persistent undergeneration charges described in Section 1.0 above shall be suspended in the

Effective:

event that the ISO re-institutes Regulation performance charges pursuant to Section 8.0 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

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follows:

Performance Charge = Energy Difference x MCP<sub>reg</sub> x Length of SCD Interval/60 minutes

First Revised Sheet No. 280A

Superseding Original Sheet No. 280A

Effective:

Where:

Energy Difference (in MW) is the absolute difference between the actual Energy supplied by the

Supplier and the Energy it 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

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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

Third Revised Sheet No. 281

Superseding Second Revised Sheet No. 281

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.

3.0 **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:

(i) 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 undergenertion or performance charge;

(ii) 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 365 MW of such units;

(iii) Existing intermittent (i.e., non-schedulable) renewable resource Generators within the

NYCA in operation on or before November 18, 1999, plus up to an additional 500

MW of such Generators; and

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