Rate Schedule 3

Payments for Regulation and Frequency Response Service ~~and Establishment of Regulation Service Performance Standards~~

This Rate Schedule applies to Suppliers that provide Regulation and Frequency Response Service to the ISO. Transmission Customers will purchase Regulation and Frequency Response Service from the ISO under the ISO OATT.

1.0 Obligations of the ISO and Suppliers

1.1 The ISO shall:

(a) Establish Regulation and Frequency Response 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, ~~or when appropriate RTD-CAM Base Point Signals,~~ and AGC Base Point Signals to Generators providing Regulation and Frequency Response Service to direct their output;

(c) Establish criteria in the ISO Procedures that ~~Suppliers~~Generators must meet to qualify, or re-qualify, to supply ~~this~~Regulation and Frequency Response 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~~, or RTD-CAM Base Point Signals,~~ sent by the ISO;

(e) Select ~~Supplier~~Generators to provide Regulation and Frequency Response Service in the Day-Ahead Market and the Real-Time Market, as described in Section 2.0 of this Rate Schedule;

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(f) Pay Suppliers for providing Regulation and Frequency Response Service as described in Sections 4.0, 5.0, 6,0 and ~~5~~7.0 of this Rate Schedule; and

(g) Monitor ~~the Supplier~~Generators' performance to ensure that they provide Regulation and Frequency Response Service as required, as described in Section 3.0 of this Rate Schedule.

1.2 Suppliers shall:

(a) ~~Use~~Offer only Generators that are: (i) ~~Dispatchable, or that ar~~ISO-Committed Flexible or Self-Committed Flexible,; ~~and~~ within the ~~D~~dispatchable portion of their operating range, and; ~~that are~~ (ii) able to respond to AGC Base Point Signals ~~sent by~~ from the ISO pursuant to the ISO Procedures~~;~~, to provide Regulation and Frequency Service

(b) Not use, contract to provide, or otherwise commit ~~the~~ Capability that is ~~designated~~selected by the ISO to provide Regulation and Frequency Response Service to provide Energy or ~~Spinning~~Operating Reserves to any party other than the ISO; and

(c) Pay any charges imposed under this Rate Schedule including, if they are re-instituted, the charges described in Section ~~7~~8.0 of this Rate Schedule.

(d) Ensure that all of its Generators that are selected to provide Regulation and Frequency Response Service ~~C~~comply with Base Point Signals issued by the ISO at all times pursuant to the ISO Procedures; and

(e) Ensure that all of its Generators that are selected to provide Regulation and

Frequency Response Service ~~C~~comply with ~~the~~all ISO Procedures that apply to providing Regulation and Frequency Response Service

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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

Service for each hour in the following Dispatch Day, from those that have Bid to provide Regulation and Frequency Response Service from Generators that meet the qualification standards and 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 and Frequency Response Service and will establish a real-time Regulation and Frequency Response Service Market-Clearing ~~p~~Price in each interval~~;~~. ~~except at times~~During any period when the ISO suspends Generators' obligation to follow the AGC Base Point Signals sent to Regulation and Frequency Response Service providers, pursuant to Section 9.0 of this Rate Schedule, the real-time Market-Clearing Price for Regulation and Frequency Response Service shall automatically be set at zero, which ~~and~~ shall be the price used for real-time balancing and settlement purposes. The ISO shall select Suppliers for Regulation and Frequency Response Service from those that have Bid to provide Regulation and Frequency Response 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 and Frequency Response Service in the Day-Ahead Market and the Real-Time Market under Sections 4.0, 5.0 and 7.0 of this Rate Schedule. The ISO shall also compute Regulation Revenue Adjustment Payments and Regulation Revenue Adjustment Charges ~~LOC charges~~ under Section 6.0 of this Rate Schedule.

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2.1 Bidding Process

(a) A~~ny qualified~~ Supplier may submit a Bid in the Day--Ahead Market or the Real-Time Market to provide Regulation and Frequency Response Service from eligible Generators, provided, however, that Bids submitted by Suppliers that are attempting to re-qualify to provide Regulation and Frequency Response 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.

~~(e) Subject to the real-time Availability Bid Price rule specified in subsection (e), Bids in the Day-Ahead Market that are not accepted by the ISO shall be automatically considered for the Real-Time Market, unless withdrawn by the Supplier~~

(~~d~~c) Each Bid shall contain the following information: (i) the maximum amount of Capability (in MW) that the ~~Supplier~~Generator is willing to provide for Regulation and Frequency Response 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 and Frequency Response Service within an RTD interval ~~nominally five (5) minute RTD interval (or, when appropriate an RTD-CAM interval)~~ and which shall be the same as the ~~ramp~~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.

3.0 Monitoring Regulation and Frequency Response 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.

(b) The ISO shall establish and implement a Performance Tracking System to monitor the performance of Generators that provide Regulation and Frequency Response 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 Generators serving Load within the NYCA as set forth in the ISO Procedures. The ISO shall use these values to reduce Regulation and Frequency Response Service payments pursuant to Section 5.4 of this Rate Schedule.

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

4.0 Regulation and Frequency Response Service Settlements – Day-Ahead Market

4.1 Calculation of Day-Ahead Market Clearing Prices

The ISO shall calculate a Day-Ahead Market Clearing Price~~s~~ for Regulation and Frequency Response Service for each hour of the following day. The ~~Real-Time~~Day-Ahead Market-Clearing Price for each hour shall equal the Day-Ahead Shadow Price of the ISO's Regulation and Frequency Response Service constraint ~~requirement~~ for that hour, which shall be established under the ISO Procedures. Day-Ahead Shadow Prices will be calculated by the ISO's SCUC ~~program~~. Each hourly Day-Ahead Shadow Price shall ~~will reflect, Suppliers'~~ include the Lost ~~o~~Opportunity ~~c~~Costs and Availability Bids of the marginal Generator selected during the fifth SCUC pass, described in Section __ of Attachment B to this ISO Services Tariff, and Section __ of Attachment J to the ISO OATT, that is selected to provide Regulation and Frequency Response Service in that hour. ~~and Frequency Response~~. Shadow Prices will also ~~reflect~~take account of the Regulation and Frequency Response Service Demand Curves described in Section ~~6~~7.0 of this Rate Schedule, which will ensure that Regulation and Frequency Response Service is not ~~procured~~scheduled by SCUC at a cost greater than the Demand Curve indicates should be paid.

Each Supplier that is scheduled Day-Ahead to provide Regulation and Frequency Response Service shall be paid the Day-Ahead Market Clearing Price in each hour, multiplied by the amount of Regulation and Frequency Response Service that it is scheduled to provide in that hour.

4.2 Other Day-Ahead Payments

As is provided in Article 4 and Attachment C of the Services Tariff, the ISO shall compensate each ~~Dispatchable~~ISO-Committed Flexible Generator ~~Supplier~~ that provides Regulation and Frequency Response 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 and Frequency Response Service in excess of the amount of Regulation and Frequency Response 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 and Frequency Response Service Settlements – Real-Time Market

5.1 Calculation of Real-Time Market Clearing Prices

The ISO shall calculate a Real-Time Market Clearing Price~~s~~ for Regulation and Frequency Response Service for every RTD interval, except as noted in Section 9.0 of this Rate Schedule. The Real-Time Market-Clearing Price for each interval shall equal the real-time Shadow Price for the ISO's Regulation and Frequency Response Service constraint ~~requirement~~ for that RTD interval, which shall be established under the ISO Procedures. Real-time Shadow Prices will be calculated by the ISO's RTD~~, and RTD CAM programs.~~ Each real-time Shadow Price ~~will reflect~~ ~~, Suppliers'~~ shall include the Lost ~~o~~Opportunity ~~c~~Costs and Availability Bids of

the marginal Generator, based on the third Real-Time Dispatch pass, described in Section __ of Attachment B to this ISO Services Tariff and Section __ of Attachment J to the ISO OATT, that is selected to provide Regulation and Frequency Response Service in that interval. Shadow Prices will also ~~reflect~~take account of the Regulation and Frequency Response Service Demand Curves described in Section ~~6~~7.0 of this Rate Schedule, which will ensure that Regulation and Frequency Response Service is not ~~procured~~scheduled by RTC at a cost greater than the Demand Curve indicates should be paid.

5.2 Real-Time Regulation and Frequency Response Service Balancing Payments

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

(a) When the ~~Supplier~~Generator's real-time Regulation and Frequency Response Service schedule is less than its Day-Ahead Regulation and Frequency Response Service ~~award~~schedule, the ~~Supplier~~Generator shall pay a charge for the imbalance equal to the product of: (~~a~~i) the Real-Time Market Clearing Price for Regulation and Frequency Response Service; and (~~b~~ii) the difference between the ~~Supplie~~Generator~~r~~'s ~~scheduled~~ Day-Ahead Regulation and Frequency Response Service ~~award~~schedule and its real-time ~~Operating Reserves~~Regulation and Frequency Response Service schedule (subject to possible ~~reductions~~adjustments ~~(??)~~ pursuant to Section 5.4 of this Rate Schedule.)

(b) When the ~~Supplier~~Generator's real-time Regulation and Frequency Response Service schedule is greater than its Day-Ahead Regulation and Frequency Response Service ~~award~~schedule, the ISO shall pay the ~~Supplier~~Generator an amount to compensate it for the imbalance equal to the product of: (~~a~~i) the Real-Time Market Clearing Price for Regulation and Frequency Response

Service; and (~~b~~ii) the difference between the ~~Supplier~~Generator's ~~scheduled~~ Day-Ahead Regulation and Frequency Response Service ~~award~~schedule and its real-time Regulation and Frequency Response Service schedule (subject to possible ~~reductions~~adjustments ~~(??)~~pursuant to Section 5.4 of this Rate Schedule.) ~~.~~

5.3 Other Real-Time Regulation and Frequency Response Service Payments

As is provided in Article 4 and Attachment C of the Services Tariff, the ISO shall compensate each ~~Dispatchable~~ ISO-Committed Flexible ~~Supplier~~Generator that provides Regulation and Frequency Response Service if its Bid 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.

No payments shall be made to any ~~Supplier~~Generator providing Regulation and Frequency Response Service in excess of the amount of Regulation and Frequency Response Service scheduled by the ISO in the Real-Time Market, except to the extent that a ~~Supplie~~Generator is directed to provide the excess amount by the ISO.

~~A Regulation Service Supplier that is instructed to provide Energy at a level above its RTD Base Point Signal in a given dispatch interval shall receive a payment equal to the lower of its average AGC Base Point Signal over the duration of the interval, or its total actual output during the dispatch interval. A Regulation Service Supplier that is instructed to provide Energy at a rate lower than its RTD Base Point Signal in a given dispatch interval shall receive a payment equal to its RTD Base Point Signal for that dispatch interval.~~

Finally, whenever a Generator's real-time Regulation and Frequency Response Service schedule is reduced by the 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 additional MWs of 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. ~~**thelanguage under development by the NYISO**~~

5.4 Performance-Based Adjustments to Regulation and Frequency Response Service Payments

The total amount paid to ~~Supplier~~Generators for providing Regulation and Frequency Response Service shall be reduced to reflect the ~~Supplier~~Generator's performance pursuant to the following formula:

$$Total\ Payment = \text{~~(~~}(DAMCP_{reg}\ x\ DAR_{cap}) + ((RTR_{cap}\ x\ K_{pi})\ -\ DAR_{cap})\ x\ RTMCP_{reg})\ \text{~~}x\ K_{pi}\text{~~}$$

Where:

$DAMCP_{reg}$ is the applicable Market Clearing Price for Regulation and Frequency Response Service (in MW), in the Day-Ahead Market as established by the ISO pursuant to Section 4.1 of this Rate Schedule;

DAR_{cap} is the Regulation and Frequency Response Service Capability (in MW) offered by the ~~Supplie~~Generator and selected by the ISO in the Day-Ahead Market;

$RTMCP_{reg}$ is the applicable Market Clearing Price for Regulation and Frequency Response Service (in MW), in the Real-Time Market as established by the ISO ~~pursuant to~~under Section 5.1 of this Rate Schedule;

RTR_{cap} is the Regulation and Frequency Response Service Capability (in MW) offered by the ~~Supplier~~Generator and selected by the ISO in the Real-Time Market; and

K_{pi} is a factor, with a value between 0.0 and 1.0 inclusive, derived from each ~~Supplier~~Generator's Regulation and Frequency Response Service performance, as measured by the performance indices set forth in the ISO Procedures, and determined

pursuant to the following equation:.

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

Where:

PI is the ~~unit~~Generator's performance index; and

PSF is the payment scaling factor, established pursuant to ISO ~~p~~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. ~~Regulation Service Suppliers~~Generators providing Regulation and Frequency Response Service will be required to increase their performance index to obtain the same total Regulation and Frequency Response 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 and Frequency Response Service

6.1 Energy Settlements

For any interval in which a Generator that is providing Regulation and Frequency Response Service receives an AGC Base Point Singal that is different than its RTD Base Point Signal the Generator 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.

6.2 Additional Payments/Charges When AGC Base Points Exceed RTD Base Points

For any interval in which a Generator that is providing Regulation and Frequency Response Service receives an AGC base point that is higher than its RTD base point 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 the Generator shall receive a RRAP. Conversely, for any interval in which such a Generator's Energy Bid Price is lower than the LBMP the Generator shall be assessed a RRAC. RRAPs and RRACs shall be calculated using the following formula:

$$\_\_\_\_\_ Payment / Charge = \int_{\text{RTD Base Paint Signal}}^{\max(\text{RTD Base Point Signal},\min(\text{AGC Base Point Signal},\text{Actual}))} [Bid - LBMP]$$

For purposes of this formula, whenever the Generator's actual Bid exceeds the applicable LBMP the "Bid" term shall be set at a level equal to the minimum of (Bid or Reference Bid +$100)

6.3 -Additional Charges/Payments When RTD Base Points Are Lower than AGC Base Points

For any interval in which a Generator that is providing Regulation and Frequency Response Service receives an AGC base point that is lower than its RTD base point 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 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 the Generator shall receive a RRAP. RRAPs and RRACs shall be calculated using the following formula:

$$\_\_\_\_\_ Payment / Charge = \int_{\min(\text{RTD Base Point Signal},\max(\text{AGC Base Point Signal},\text{Actual}))}^{\text{RTD Base Point Signal}} -[Bid - LBMP]$$

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 minimum of (Bid or Reference Bid -$100)

~~6~~7.0 Regulation and Frequency Response Service Demand Curve

The ISO shall establish a Regulation and Frequency Response Service Demand Curve that will apply to both the Day-Ahead and real-time Regulation and Frequency Response Service markets. The Market Clearing Prices for ~~Operating Reserves~~Regulation and Frequency Response Service calculated pursuant to Sections 4.1 and 5.1 of this Rate Schedule shall ~~reflect~~take account of the demand curve established in this Section so that ~~Operating Reserves~~Regulation and Frequency Response Service is ~~are~~ not purchased at a cost higher than the demand curve indicates should be paid in the relevant market.

The ISO shall establish a target level of Regulation and Frequency Response Service for each hour, which will be the number of MW of Regulation and Frequency Response Service that the ISO would seek to maintain in that hour if cost were not a consideration. The ISO will then define a Regulation and Frequency Response Service demand curve for that hour as follows:

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

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

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

~~The Regulation and Frequency Service Demand Curve shall be established at the following quantity/price points :. . . . . **(Numbers to be added.)**~~

~~First 25 MW and Frequency Response @ $250/MW~~

~~Regulation and Frequency Response Service@ $300/MW~~

~~The ISO shall, however, shall have the authority to temporarily modify these quantity and price points in response to operational or reliability problems that arise in real-time. In the event that it is necessary to temporarily modify these points, the ISO will post the modified points as soon as possible. It will also be required to report on the reasons for, and duration of, the modification to the Business Issues Committee as soon as possible.~~

The ISO, however, shall have the authority to temporarily modify these quantity and price points in order to permit an effective response to operational or reliability problems that arise in real-time. The ISO will consult with its independent market advisor as soon as possible regarding any such modifications. In the event that it is necessary to make such a temporary modification, the ISO will post the modified points as soon as possible. It will also be required to report on the reasons for, and duration of, any modification to the members of the Business Issues Committee as soon as possible. The ISO may keep the modified points in effect for up to one hundred twenty days. The ISO must post a notice of any such decision as soon as possible. The ISO must also give at least two days notice before returning to the quantity and price points specified above. Permanent changes to the quantity and price points can only be made pursuant to a filing under Section 205 or 206 of the FPA.

A periodic independent review of the Regulation and Frequency Response Service Demand Curve will be performed in accordance with the ISO Procedures to determine whether the parameters of the Regulation Demand Curve should be adjusted.

~~7~~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 Area, 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 and Frequency Response Service, as well as Suppliers not providing Regulation and Frequency Response 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 and Frequency Response Service shall pay a performance charge 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_{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.

9.0 Temporary Suspension of Regulation and Frequency Response Service Markets During Reserve Pick-Ups

During any period in which the ISO has activated RTD-CAM software and has called for a "large event" or "small event" reserve or maximum generation pickup, ~~or reserve pickupmaximum generation,~~ 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 Signals sent to Regulation and Frequency Response Service providers and will suspend the real-time Regulation and Frequency Response Service market. The ISO will not procure any Regulation and Frequency

Response Service and will establish a real-time Regulation and Frequency Response 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 and Frequency Response 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 and Frequency Response Service

1.0 Persistent Undergeneration Charges

A Supplier that is not providing Regulation and Frequency Response 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 for Self-Committed Fixed Suppliers **(Why- is this limited to Self-Committed Fixed Suppliers?)** shall be calculated as follows:

Persistent undergeneration charge = Energy Difference x MCP_{reg} 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 for the dispatch interval; and

MCP_{reg} is the Market-Clearing Price ($/MW) which applies to the dispatch interval for which Regulation and Frequency Response 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 event that the ISO re-institutes Regulation performance charges pursuant to Section ~~7~~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 that do not provide Regulation and Frequency Response Service,

shall pay a performance charge to the ISO as follows:

Performance Charge = Energy Difference x MCP_{reg} x Length of Interval/60 minutes

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 applies to the interval for which Regulation and Frequency Response 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.

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 undergeneration 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

(iv) 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.