

# 5.14 Installed Capacity Spot Market Auction and Installed Capacity Supplier Deficiencies

# 5.14.1 LSE Participation in the ICAP Spot Market Auction

## **5.14.1.1 ICAP Spot Market Auction**

When the ISO conducts each ICAP Spot Market Auction it will account for all Unforced Capacity that each NYCA LSE has certified for use in the NYCA to meet its NYCA Minimum Installed Capacity Requirement or Locational Minimum Installed Capacity Requirement, as applicable, whether purchased through Bilateral Transactions or in prior auctions. The ISO shall receive offers of Unforced Capacity that has not previously been purchased through Bilateral Transactions or in prior auctions from qualified Installed Capacity Suppliers for the ICAP Spot Market Auction. The ISO shall also receive offers of Unforced Capacity from any LSE for any amount of Unforced Capacity that the LSE has in excess of its NYCA Minimum Unforced Capacity Requirement or Locational Minimum Unforced Capacity Requirement, as applicable. Unforced Capacity that will be exported from the New York Control Area during the month for which Unforced capacity is sold in an ICAP Sport Market Auction shall be certified to the NYISO by the certification deadline for that auction.

The ISO shall conduct an ICAP Spot Market Auction to purchase Unforced Capacity which shall be used by an LSE toward all components of its LSE Unforced Capacity Obligation for each Obligation Procurement Period immediately preceding the start of each Obligation Procurement Period. The exact date of the ICAP Spot Market Auction shall be established in the ISO Procedures. All LSEs shall participate in the ICAP Spot Market Auction. In the ICAP Spot Market Auction, the ISO shall submit monthly bids on behalf of all LSEs at a level per MW determined by the ICAP Demand Curves established in accordance with this Tariff and the ISO

Procedures. The ICAP Spot Market Auction will set the LSE Unforced Capacity Obligation for each NYCA LSE in accordance with the ISO Procedures.

The ICAP Spot Market Auction will be conducted and solved simultaneously for Unforced Capacity that may be used by an LSE towards all components of its LSE Unforced Capacity Obligation for that Obligation Procurement Period using the applicable ICAP Demand Curves, as established in accordance with the ISO Procedures. LSEs that are awarded Unforced Capacity in the ICAP Spot Market Auction shall pay to the ISO the Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction using the applicable ICAP Demand Curve. The ISO shall pay Installed Capacity Suppliers that are selected to provide Unforced Capacity the Market-Clearing Price determined in the ICAP Spot Market Auction using the applicable ICAP Demand Curve.

# **5.14.1.2 Demand Curve and Adjustments**

ICAP Demand Curves will be established to determine (a) the locational component of LSE Unforced Capacity Obligations for each Locality (b) the locational component of LSE Unforced Capacity Obligations for any New Capacity Zone, and (c) the total LSE Unforced Capacity Obligations for all LSEs. The ICAP Demand Curves for the 2010/2011, 2011/2012, 2012/2013, and 2013/2014 Capability Years shall be established at the following points:

Capability Year	5/1/2010 to 4/30/2011	5/1/2011 to 9/30/2011	10/1/2011 to 4/30/2012	5/1/2012 to 4/30/2013	5/1/2013 to 4/30/2014
NYCA	Max @ \$13.42	Max @ \$13.42	Max @ \$14.96	Max @ \$15.22	Max @ \$15.48
	\$9.90 @ 100%	\$9.90 @ 100%	\$8.84 @ 100%	\$8.99 @ 100%	\$9. @ 100%
	\$0.00 @ 112%	\$0.00 @ 112%	\$0.00 @ 112%	\$0.00 @ 112%	\$0.00 @ 112%
NYC	Max @ \$27.32	Max @ \$27.32	Max @ \$34.84	Max @ \$35.43	Max @ \$36.04
	\$15.99 @ 100%	\$15.99 @ 100%	\$19. @ 100%	\$19. @ 100%	\$19.85 @ 100%
	\$0.00 @ 118%	\$0.00 @ 118%	\$0.00 @ 118%	\$0.00 @ 118%	\$0.00 @ 118%

LI	Max @ \$24.25	Max @ \$24.25	Max @ \$31.	Max @ \$31.88	Max @ \$32.42
	\$8.69 @ 100%	\$8.69 @ 100%	\$9.98 @ 100%	\$10. @ 100%	\$10.32 @ 100%
	\$0.00 @ 118%	\$0.00 @ 118%	\$0.00 @ 118%	\$0.00 @ 118%	\$0.00 @ 118%

NOTE: All dollar figures are in terms of \$/kW-month of ICAP and all percentages are in terms of the applicable NYCA Minimum Installed Capacity Requirement and Locational Minimum Installed Capacity Requirement. The defined points describe a line segment with a negative slope that will result in higher values for percentages less than 100% of the NYCA Minimum Installed Capacity Requirement or the Locational Installed Capacity Requirement ("reference point") with the maximum value for each ICAP Demand Curve established at 1.5 times the estimated localized levelized cost per kW-month to develop a new peaking unit in each Locality or in Rest of State, as applicable.

In subsequent years, the costs assigned by the ICAP Demand Curves to the NYCA

Minimum Installed Capacity Requirement, the Locational Minimum Installed Capacity

Requirement, and any Indicative NCZ Minimum Installed Capacity Requirement, will be defined

by the results of the independent review conducted pursuant to this section. The ICAP Demand

Curves will be translated into Unforced Capacity terms in accordance with the ISO Procedures.

A periodic review of the ICAP Demand Curves shall be performed every three (3) years in accordance with the ISO Procedures to determine the parameters of the ICAP Demand Curves for the next three Capability Years. The periodic review shall assess: (i) the current localized levelized embedded cost of a peaking plant in each NYCA Locality, the Rest of State, and any New Capacity Zone, to meet minimum capacity requirements, and (ii) the likely projected annual Energy and Ancillary Services revenues of the peaking plant over the period covered by the adjusted ICAP Demand Curves, net of the costs of producing such Energy and Ancillary Services. The cost and revenues of the peaking plant used to set the reference point and maximum value for each Demand Curve shall be determined under conditions in which the available capacity is equal to the sum of (a) the minimum Installed Capacity requirement and (b) the peaking plant's capacity equal to the number of MW specified in the periodic review and

used to determine all costs and revenues. The minimum Installed Capacity requirement for each Locality shall be equal to the Locational Minimum Installed Capacity Requirement in effect for the year in which the independent consultant's final report (referenced below in Section 5.14.1.2.6) is issued; for the NYCA, equal to the NYCA Minimum Installed Capacity Requirement based on the Installed Reserve Margin accepted by the Commission and applicable to the Capability Year which begins in the Capability Year in which the independent consultant's final report is issued; and for any New Capacity Zone, equal to the Indicative NCZ Locational Minimum Installed Capacity Requirement determined by the NYISO in accordance with Section 5.16.3. The periodic review shall also assess (i) the appropriate shape and slope of the ICAP Demand Curves, and the associated point at which the dollar value of the ICAP Demand Curves should decline to zero; and (ii) the appropriate translation of the annual net revenue requirement of the peaking plant determined from the factors specified above, into monthly values that take into account seasonal differences in the amount of capacity available in the ICAP Spot Market Auctions; and (iii) the escalation factor and inflation component of the escalation factor applied to the ICAP Demand Curves. For purposes of this periodic review, a peaking unit is defined as the unit with technology that results in the lowest fixed costs and highest variable costs among all other units' technology that are economically viable, and a peaking plant is defined as the number of units (whether one or more) that constitute the scale identified in the periodic review.

The periodic review shall be conducted in accordance with the schedule and procedures specified in the ISO Procedures. A proposed schedule will be reviewed with the stakeholders not later than May 30 of the year prior to the year of the filing specified in (xi) below. The schedule and procedures shall provide for:

- 5.14.1.2.1 ISO development, with stakeholder review and comment, of a request for proposals to provide independent consulting services to determine recommended values for the factors specified above, and appropriate methodologies for such determination;
- 5.14.1.2.2 Selection of an independent consultant in accordance with the request for proposals;
- 5.14.1.2.3 Submission to the ISO and the stakeholders of a draft report from the independent consultant on the independent consultant's determination of recommended values for the factors specified above;
- 5.14.1.2.4 Stakeholder review of and comment on the data, assumptions and conclusions in the independent consultant's draft report, with participation by the responsible person or persons providing the consulting services;
- 5.14.1.2.5 An opportunity for the Market Monitoring Unit to review and comment on the draft request for proposals, the independent consultant's report, and-the ISO's proposed ICAP Demand Curves (the responsibilities of the Market Monitoring Unit that are addressed in this section of the Services Tariff are also addressed in Section 30.4.6.3.1 of Attachment O;
- 5.14.1.2.6 Issuance by the independent consultant of a final report;
- 5.14.1.2.7 Issuance of a draft of the ISO's recommended adjustments to the ICAP

  Demand Curves for stakeholder review and comment;
- 5.14.1.2.8 Issuance of the ISO's proposed ICAP Demand Curves, taking into account the report of the independent consultant, the recommendations of the Market

- Monitoring Unit, and the views of the stakeholders together with the rationale for accepting or rejecting any such inputs;
- 5.14.1.2.9 Submission of stakeholder requests for the ISO Board of Directors to review and adjust the ISO's proposed ICAP Demand Curves;
- 5.14.1.2.10 Presentations to the ISO Board of Directors of stakeholder views on the ISO's proposed ICAP Demand Curves; and
- 5.14.1.2.11 Filing with the Commission of ICAP Demand Curves as approved by the ISO Board of Directors incorporating the results of the periodic review, such filing to be made not later than November 30 of the year prior to the year that includes the beginning of the first Capability Year to which such ICAP Demand Curves would be applied. The filing shall specify ICAP Demand Curves for a period of three Capability Years and the inflation rate component of the escalation factor applied to the ICAP Demand Curves.

Upon FERC approval, the ICAP Demand Curves will be translated into Unforced Capacity terms in accordance with the ISO Procedures; provided that nothing in this Tariff shall be construed to limit the ability of the ISO or its Market Participants to propose and adopt alternative provisions to this Tariff through established governance procedures.

### **5.14.1.3** Supplemental Supply Fee

Any LSE that has not met its share of the NYCA Minimum Installed Capacity
Requirement or its share of the Locational Minimum Installed Capacity Requirement after the
completion of an ICAP Spot Market Auction, shall be assessed a supplemental supply fee equal
to the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot
Market Auction multiplied by the number of MWs the LSE needs to meet its share of the NYCA

Minimum Installed Capacity Requirement or its share of the Locational Minimum Installed Capacity Requirement.

The ISO will attempt to use these supplemental supply fees to procure Unforced Capacity at a price less than or equal to the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction from Installed Capacity Suppliers that are capable of supplying Unforced Capacity including: (1) Installed Capacity Suppliers that were not qualified to supply Capacity prior to the ICAP Spot Market Auction; (2) Installed Capacity Suppliers that offered Unforced Capacity at levels above the ICAP Spot Market Auction Market-Clearing Price; and (3) Installed Capacity suppliers that did not offer Unforced Capacity in the ICAP Spot Market Auction. In the event that different Installed Capacity Suppliers offer the same price, the ISO will give preference to Installed Capacity Suppliers that were not qualified to supply capacity prior to the ICAP Spot Market Auction.

Offers from Installed Capacity Suppliers are subject to review pursuant to the Market

Monitoring Plan that is set forth in Attachment O to the Services Tariff, and the Market

Mitigation Measures that are set forth in Attachment H to the Services Tariff. Installed Capacity

Suppliers selected by the ISO to provide capacity after the ICAP Spot Market Auction will be

paid a negotiated price, subject to the standards, procedures and remedies in the Market

Mitigation Measures.

The ISO will not pay an Installed Capacity Supplier more than the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction per MW of Unforced Capacity, or, in the case of In-City generation that is subject to capacity market mitigation measures, the annual mitigated price cap per MW of Unforced Capacity, whichever is less, pro-rated to reflect the portion of the Obligation Procurement Period for which the Installed

Capacity Supplier provides Unforced Capacity. Any remaining monies collected by the ISO pursuant to this section will be applied in accordance with Section 5.14.3 of the Services Tariff.

### 5.14.2 Installed Capacity Supplier Shortfalls and Deficiency Payments

In the event that an Installed Capacity Supplier sells in the Capability Period Auctions, in the Monthly Auctions, or through Bilateral Transactions more Unforced Capacity than it is qualified to sell in any specific month due to a de-rating or other cause, the Installed Capacity Supplier shall be deemed to have a shortfall for that month. To cover this shortfall, the Installed Capacity Supplier shall purchase sufficient Unforced Capacity in the relevant Monthly Auction or through Bilateral Transactions, and certify to the ISO consistent with the ISO Procedures that it has covered such shortfall. If the Installed Capacity Supplier does not cover such shortfall or if it does not certify to the ISO in a timely manner, the ISO shall prospectively purchase Unforced Capacity on behalf of that Installed Capacity Supplier in the appropriate ICAP Spot Market Auction or through post ICAP Spot Market Auction Unforced Capacity purchases to cover the shortfall.

If the Installed Capacity Supplier is a Responsible Interface Party, the shortfall shall be computed for each Load Zone separately, in increments of 0.1 MW, as the total of the amount of UCAP sold for a month in a Capability Period Auction or a Monthly Auction and certified prior to that month's ICAP Spot Market Auction, the UCAP sold in that month's ICAP Spot Market Auction, and the UCAP sold as a Bilateral Transaction and certified prior to that month's ICAP Spot Market Auction that is greater than the greatest quantity MW reduction achieved during a single hour in a test or event called by the ISO in the Capability Period as confirmed by data by the ISO in accordance with ISO Procedures (or the value of zero if data is not received by the ISO in accordance with such procedures).

If the Installed Capacity Supplier is a Responsible Interface Party, after each Special Case Resource with a Provisional Average Coincident Load has its Average Coincident Load determined for the Capability Period in which it had a Provisional Average Coincident Load (such determination in accordance with ISO Procedures and without regard to whether the resource was registered to the same Responsible Interface Party at the time of the ACL determination), the ISO shall determine if there is a shortfall due to the Provisional Average Coincident Load being higher than the Average Coincident Load. This shortfall will be equal to the value, if positive, of (x) the sum of (i) the amount of UCAP a Responsible Interface Party sold in an Monthly or an ICAP Spot Market Auction or certified Bilateral Transactions for a Special Case Resource and (ii) the Special Case Resource's actual metered demand for the month in accordance with ISO Procedures, minus (y) the Special Case Resource's Average Coincident Load. If the ISO does not receive data to determine the Average Coincident Load in accordance with ISO Procedures, for each Capability Period a Special Case Resource had a Provisional Average Coincident Load, for purposes of determining the shortfall, the Average Coincident Load shall equal zero.

In the event that an External Installed Capacity Supplier fails to deliver to the NYCA the Energy associated with the Unforced Capacity it committed to the NYCA due to a failure to obtain appropriate transmission service or rights, the External Installed Capacity Supplier shall be deemed to have a shortfall from the last time the External Installed Capacity Supplier "demonstrated" delivery of its Installed Capacity Equivalent ("ICE"), or any part thereof, until it next delivers its ICE or the end of the term for which it certified the applicable block of Unforced Capacity, whichever occurs first, subject to the limitation that any prior lack of demonstrated delivery will not precede the beginning of the period for which the Unforced Capacity was

certified. An External Installed Capacity Supplier deemed to have a shortfall shall be required to pay to the ISO a deficiency charge equal to one and one-half times the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction for the applicable month, prorated for the number of hours in the month that External Installed Capacity Supplier is deemed to have a shortfall (i.e., (((deficiency charge ÷ 12 months) ÷ total number of hours in month when shortfall occurred) \* number of hours the shortfall lasted) \* number of MWs of shortfall).

The ISO shall submit a Bid, calculated pursuant to Section 5.14.1 of this Tariff, in the appropriate ICAP Spot Market Auction on behalf of an Installed Capacity Supplier deemed to have a shortfall as if it were an LSE. Such Installed Capacity Supplier shall be required to pay to the ISO the applicable Market-Clearing Price of Unforced Capacity established in that ICAP Spot Market Auction. Immediately following the ICAP Spot Market Auction, the ISO may suspend the Installed Capacity Supplier's privileges to sell or purchase Unforced Capacity in ISO-administered Installed Capacity auctions or to submit Bilateral Transactions to the NYISO. Once the Installed Capacity Supplier pays for or secures the payment obligation that it incurred in the ICAP Spot Market Auction, the ISO shall reinstate the Installed Capacity Supplier's privileges to participate in the ICAP markets.

In the event that the ICAP Spot Market Auction clears below the NYCA Minimum Installed Capacity Requirement or the Locational Minimum Installed Capacity Requirement, whichever is applicable to the Installed Capacity Supplier, the Installed Capacity Supplier shall be assessed the applicable deficiency charge equal to the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction, times the amount of its shortfall.

If an Installed Capacity Supplier is found, at any point during a Capability Period, to have had a shortfall for that Capability Period, *e.g.*, when the amount of Unforced Capacity that it supplies is found to be less than the amount it was committed to supply, the Installed Capacity Supplier shall be retrospectively liable to pay the ISO the monthly deficiency charge equal to one and one-half times the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction for each month the Installed Capacity Supplier is deemed to have a shortfall.

Any remaining monies collected by the ISO pursuant to Section 5.14.1 and 5.14.2 will be applied as specified in Section 5.14.3.

## 5.14.3 Application of Installed Capacity Supplier Deficiency Charges

Any remaining monies collected by the ISO through supplemental supply fees or Installed Capacity Supplier deficiency charges pursuant to Section 5.14.1 but not used to procure Unforced Capacity on behalf of LSEs or Installed Capacity suppliers deemed to have a shortfall shall be applied as provided in this Section 5.14.3.

## **5.14.3.1** General Application of Deficiency Charges

Except as provided in Section 5.14.3.2, remaining monies will be applied to reduce the Rate Schedule 1 charge in the following month.

#### **5.14.3.2** Installed Capacity Rebates

# (i) New York City

If an Unforced Capacity shortfall exists during any month, the ISO shall rebate any remaining unspent deficiency charges or supplemental supply fees collected for that month for the New York City Locality allocated among all LSEs in that Locality in proportion to their

share of the applicable Locational Minimum Installed Capacity Requirement. Rebates shall include interest accrued between the time payments were collected and the time that rebates are paid.

### (iii) Long Island

If an Unforced Capacity shortfall exists during any month, the ISO shall rebate any remaining unspent deficiency charges or supplemental supply fees collected for that month for the Long Island Locality, allocated among all LSEs in that Locality in proportion to their share of the applicable Locational Minimum Installed Capacity Requirement. Rebates shall include interest accrued between the time payments were collected and the time that rebates are paid.

#### (iii) Rest of State

If an Unforced Capacity shortfall exists during any month, the ISO shall rebate any remaining unspent deficiency charges or supplemental supply fees collected for that month for the Rest of State requirements, allocated among all LSEs in each of the two Localities, New York City and Long Island, and in Rest of State, in proportion to each LSE's share of the NYCA Minimum Installed Capacity Requirement less that LSE's Locational Minimum Installed Capacity Requirement. Rebates shall include interests accrued between the time payments were collected and the time that rebates are paid.

## 23.4 Mitigation Measures

#### 23.4.1 Purpose and Terms

If conduct is detected that meets the criteria specified in Section 23.3, the appropriate mitigation measure described in this Section shall be applied by the ISO. The conduct specified in Sections 23.3.1.1 to 23.3.1.3 shall be remedied by (1) the prospective application of a default bid measure, or (2) the application of a default bid to correct guarantee payments, as further described in Section 23.4.2.2.4, below. If a Market Party or its Affiliates engage in physical withholding by providing the ISO false information regarding the derating or outage of an Electric Facility or does not operate a Generator in conformance with ISO dispatch instructions such that the prospective application of a default bid is not feasible, or if otherwise appropriate to deter either physical or economic withholding, the ISO shall apply the sanction described in Section 23.4.3.

Terms with initial capitalization not defined in Section 23.4 shall have the meaning set forth in the Open Access Transmission Tariff.

#### 23.4.2 Default Bid

#### 23.4.2.1 **Purpose**

A default bid shall be designed to cause a Market Party to Bid as if it faced workable competition during a period when (i) the Market Party does not face workable competition, and (b) has responded to such condition by engaging in the physical or economic withholding of an Electric Facility. In designing and implementing default bids, the ISO shall seek to avoid causing an Electric Facility to Bid below its marginal cost.

# 23.4.2.2 Implementation

- 23.4.2.2.1 If the criteria contained in Section 23.3 are met, the ISO may substitute a default bid or bid parameter for a Bid or bid parameter submitted for an Electric Facility. The default bid or bid parameter shall establish a maximum or minimum value for one or more components of the submitted Bid or Bid parameters, equal to a reference level for that component determined as specified in Section 23.3.1.4.
- 23.4.2.2.2 An Electric Facility subject to a default bid shall be paid the LBMP or other market clearing price applicable to the output from the facility.
  Accordingly, a default bid shall not limit the price that a facility may receive unless the default bid determines the LBMP or other market clearing price applicable to that facility.
- 23.4.2.2.3 If an Electric Facility is mitigated using the automated mitigation procedures described in Section 23.3.2.2.3 of these mitigation measures to a default bid for an Incremental Energy Bid other than a default bid determined as specified in Section 23.3.1.4, the Electric Facility shall receive an additional payment for each interval in which such mitigation occurs equal to the product of:

  (i) the amount of Energy in that interval scheduled or dispatched to which the incorrect default bid was applied; (ii) the difference between (a) the lesser of the applicable unmitigated bid and a default bid determined in accordance with Section 23.3.1.4, and (b) the applicable LBMP or other relevant market price in each such interval, if (a) greater than (b), or zero otherwise; and (iii) the length of that interval

If an Electric Facility is mitigated to a default bid for a Start-Up Bid or a Minimum Generation Bid other than a default bid determined as specified in Section 23.3.1.4 of these Mitigation Measures, or if an Electric Facility is mitigated to a default bid for an Incremental Energy Bid other than a default bid determined as specified in Section 23.3.1.4 of these Mitigation Measures based on mitigation procedures other than the automated mitigation procedures described in Section 23.3.2.2.3 of these Mitigation Measures, then the ISO shall determine if the Bids would have failed the relevant conduct test(s) if correctly determined default bids had been used. The ISO shall then restore any original (as-submitted) Bid(s) that would not have failed the relevant conduct test(s) if correctly determined default bids had been used, and use the restored Bid(s) to determine a settlement. Otherwise, the ISO shall use the Generator's correct or corrected default bid(s) to determine a settlement.

- 23.4.2.2.4 Except as may be specifically authorized by the Commission:
- 23.4.2.2.4.1 The ISO shall not use a default bid to determine revised market clearing prices for periods prior to the imposition of the default bid.
- 23.4.2.2.4.2 The ISO shall only be permitted to apply default bids to determine revised real-time guarantee payments to a Market Party in accordance with the provisions of Section 23.3.3.3 of these Mitigation Measures.
- 23.4.2.2.5 Automated implementation of default bid mitigation measures shall be subject to the following requirements.

- 23.4.2.2.5.1 Automated mitigation measures shall not be applied if the price effects of the measures would cause the average day-ahead energy price in the mitigated locations or zones to rise over the entire day.
- 23.4.2.2.5.2 Automated mitigation measures as specified in Section 23.3.2.2.3 shall be applied to Minimum Generation Bids and start-up costs Bids meeting the applicable conduct and impact tests. When mitigation of Minimum Generation Bids is warranted, mitigation shall be imposed from the first hour in which the impact test is met to the last hour in which the impact test is met, or for the duration of the mitigated Generator's minimum run time, whichever is longer.
- 23.4.2.2.5.3 The posting of the Day-Ahead schedule may be delayed if necessary for the completion of automated mitigation procedures.
- 23.4.2.5.4 Bids not mitigated under automated procedures shall remain subject to mitigation by other procedures specified herein as may be appropriate.
- 23.4.2.5.5 The role of automated mitigation measures in the determination of Day-Ahead market clearing prices is described in Section 17.1.3 of Attachment B of the ISO Services Tariff.
- 23.4.2.2.6 A Real-Time automated mitigation measure shall remain in effect for the duration of any hour in which there is an RTC interval for which such mitigation is deemed warranted.
- 23.4.2.2.7 A default bid shall not be imposed on a Generator that is not in the New York Control Area and that is electrically interconnected with another Control Area.

#### 23.4.3 Sanctions

# 23.4.3.1 Types of Sanctions

The ISO may impose financial penalties on a Market Party in amounts determined as specified below.

## **23.4.3.2** Imposition

The ISO shall impose financial penalties as provided in this Section 23.4.3, if the ISO determines in accordance with the thresholds and other standards specified in this Attachment H that: (i) a Market Party has engaged in physical withholding, including providing the ISO false information regarding the derating or outage of an Electric Facility; or (ii) a Market Party or its Affiliates have failed to follow the ISOs dispatch instructions in real-time, resulting in a different output level than would have been expected had the Market Party's or the Affiliate's generation followed the ISO's dispatch instructions, and such conduct has caused a material increase in one or more prices or guarantee payments in an ISO Administered Market; or (iii) a Market Party has made unjustifiable changes to one or more operating parameters of a Generator that reduce its ability to provide Energy or Ancillary Services; or (iv) a Load Serving Entity has been subjected to a Penalty Level payment in accordance with Section 23.4.4 below; or (v) a Market Party has submitted inaccurate fuel type or fuel price information that is used by the ISO in the development of a Generator's reference level, where the inaccurate reference level that is developed, in turn, directly or indirectly impacts guarantee payments or market clearing prices paid to the Market Party; or (vi) the opportunity to submit Incremental Energy Bids into the realtime market that exceed Incremental Energy Bids made in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriate, has been revoked for a Market Party's Generator pursuant to Sections 23.4.7.2 and 23.4.7.3 of these Mitigation Measures.

## 23.4.3.3 Base Penalty Amount

- 23.4.3.3.1 Except for financial penalties determined pursuant to Sections 23.4.3.3.2,
  23.4.3.3.3, and 23.4.3.3.4 below, financial penalties shall be determined by the product of the Base Penalty Amount, as specified below, times the appropriate multiplier specified in Section 23.4.3.4:
  MW meeting the standards for mitigation during Mitigated Hours \* Penalty market-clearing price.
- 23.4.3.3.1.1 For purposes of determining a Base Penalty Amount, the term "Mitigated Hours" shall mean: (i) for a Day-Ahead Market, the hours in which MW were withheld; (ii) for a Real-Time Market, the hours in the calendar day in which MW were withheld; and (iii) for load Bids, the hours giving rise to Penalty Level payments.
- 23.4.3.3.1.2 For purposes of determining a Base Penalty Amount, the term "Penalty market-clearing price" shall mean: (i) for a withholding seller, the LBMP or other market-clearing price at the generator bus of the withheld resource (or in the relevant Load Zone, if a clearing price is not calculated at the generator bus); and (ii) for a Load Serving Entity, its zonal LBMP.
- 23.4.3.3.2 The financial penalty for failure to follow ISOs dispatch instructions in real-time, resulting in real-time operation at a different output level than would have been expected had the Market Party's or the Affiliate's generation followed the ISO's dispatch instructions, if the conduct violates the thresholds set forth in Sections 23.3.1.1.1.2, or 23.3.1.3.1.2 of these Mitigation Measures, and if a Market Party or its Affiliates, or at least one Generator, is determined to have had

impact in accordance with Section 23.3.2.1 of these Mitigation Measures, shall be:

One and a half times the estimated additional real time LBMP and Ancillary Services revenues earned by the Generator, or Market Party and its Affiliates, meeting the standards for impact during intervals in which MW were not provided or were overproduced.

23.4.3.3.3 If inaccurate fuel type and/or fuel price information was submitted by or for a Market Party, and the reference level that the ISO developed based on that inaccurate information impacted guarantee payments or market clearing prices paid to the Market Party in a manner that violates the thresholds specified in this Section 23.4.3.3.3, then, following consultation with the Market Party regarding the appropriate fuel type and/or fuel price, the ISO shall apply the penalty set forth below, unless: (i) the Market Party shows that the information was submitted in compliance with the requirements of Section 4.1.9 of the ISO Services Tariff (Incremental Cost Recovery for Units Responding to Local Reliability Rule I-R3 or I-R5), or (ii) the total penalty calculated for a particular Day-Ahead or Real-Time Market day is less than \$5,000, in which case the ISO will not apply a penalty.

#### 23.4.3.3.3.1 Day-Ahead Conduct and Market Impact Tests

### 23.4.3.3.3.1.1 Day-Ahead Conduct Test

Using the higher of (a) a revised reference level calculated using the Generator's actual fuel costs, or (b) the reference level that would have been in place for the Generator but for the submission of inaccurate fuel type and/or fuel

price information, test the Bids to determine if they violate the relevant conduct threshold in accordance with the appropriate provision(s) of Section 23.3.1.2 of these Mitigation Measures.

### 23.4.3.3.3.1.2 Day-Ahead Impact Test

Using the higher of (a) a revised reference level calculated using the Generator's actual fuel costs, or (b) the reference level that would have been in place for the Generator but for the submission of inaccurate fuel type and/or fuel price information, test the Bids for both LBMP and guarantee payment impact in accordance with the appropriate provisions of Section 23.3.2.1 of these Mitigation measures

### 23.4.3.3.2 Real-Time Conduct and Market Impact Tests

## 23.4.3.3.3.2.1 Real-Time Conduct Test

Using the higher of (a) a revised reference level calculated using the Generator's actual fuel costs, or (b) the reference level that would have been in place for the Generator but for the submission of inaccurate fuel type and/or fuel price information, test the Bids to determine if they violate the relevant conduct threshold in accordance with the appropriate provision(s) of Section 23.3.1.2 of these Mitigation Measures

### 23.4.3.3.3.2.2 Real-Time LBMP Impact Test

The Market Party's Bids for a Generator will be treated as having a Real-Time Market LBMP impact if the higher of (a) a revised reference level calculated using the Generator's actual fuel costs, or (b) the reference level that would have been in place for the Generator but for a Market Party's submission of inaccurate

fuel type and/or fuel price information, is less than or equal to the real-time LBMP at the PTID that represents the Generator's location, and the Generator's reference level that was actually used to test the Bid for LBMP impact in the Real-Time Market for that hour was greater than or equal to the LBMP at the Generator's location.

## 23.4.3.3.2.3 Real-Time Guarantee Payment Impact Test

Using the greater of (a) a revised reference level calculated using the Generator's actual fuel costs, or (b) the reference level that would have been in place for the Generator but for the submission of inaccurate fuel type and/or fuel price information, test the Bids for guarantee payment impact in accordance with the appropriate provisions of Section 23.3.2.1 of these Mitigation Measures.

## 23.4.3.3.3 Day-Ahead Market Penalty Calculation

If the results of the Day-Ahead Market impact test indicate that the Market Party's Bid had either LBMP or guarantee payment impact then the ISO shall charge the Market Party a penalty, calculated for each penalized day, for each of its Generators, for each hour of the day, as follows:

Daily Penalty =  $\max [(Multiplier * [\Sigma_g \blacktriangle Day-Ahead BPCG payment_g] + (Multiplier) \Sigma_h \Sigma_g ([Market Party MWh_{gh}] x [\blacktriangle Day Ahead LBMP@PTID_{gh}]) + \\ \max [\Sigma_h TCC Revenue Calc for Market Party_h, 0]), 0]$ 

Where:

g = an index running across all the Market Party's Generators

h = for purposes of this Section 23.4.3.3.3, h is an index running across all hours of the day

Multiplier = a factor of 1.0 or 1.5. The ISO shall use a 1.0 Multiplier if the Market Party has not been penalized for inaccurately reporting fuel type or fuel price information in the Day-Ahead Market over the 6 months prior to the market-day for which the penalty is being calculated. In all other cases the ISO shall use a 1.5 Multiplier.

▲ Day-Ahead BPCG payment<sub>g</sub> = the change in the Day-Ahead Market guarantee payment that the Market Party receives for Generator g determined when the ISO performs the Day Ahead Market guarantee payment impact test in accordance with Section 23.3.2.1.2 of these Mitigation Measures

Market Party  $MWh_{gh}$  = the MWh of Energy scheduled in the Day-Ahead Market for Generator g in hour h

▲ Day Ahead LBMP@PTIDgh = the change in the Day-Ahead Market LBMP for hour h at the location of Generator g, as determined when the ISO performs the relevant Day Ahead Market LBMP impact test in accordance with Section 23.3.2.1.1 or 23.3.2.1.3 of these Mitigation Measures

TCC Revenue Calc for Market  $Party_h = the change in TCC$  Revenues that the Market Party receives for hour h, determined when the ISO performs the relevant Day Ahead Market LBMP impact test

## 23.4.3.3.4 Real-Time Market Penalty Calculation

If the results of either of the Real-Time Market impact tests indicate that the

Incremental Energy Bid submitted for a Market Party's Generator had either

LBMP or guarantee payment impact then the ISO shall charge the Market Party a

penalty, calculated for each penalized day, for each of its Generators, for each hour of the day, as follows:

Daily Penalty = Max [(Multiplier \*  $\Sigma_g$  [  $\blacktriangle$  simplified guarantee payment<sub>g</sub>]) +  $\Sigma_h \Sigma_g$  (Multiplier \* [original reference level<sub>gh</sub> – updated reference level<sub>gh</sub>]) \* max [MWh DAM<sub>gh</sub>, MWh RT<sub>gh</sub>, Market Party MWh<sub>gh</sub>, 0], 0] Where

g = an index running across all the Market Party's Generators

h = an index running across all hours of the day in which inaccurate fuel type or fuel price information was supplied for any of the Market Party's Generators; provided that one of the Bids in that hour "h" for at least one of the Market Party's Generators must have had a Real Time Market LBMP or guarantee payment impact in accordance with Sections 23.4.3.3.3.2.2 or 23.4.3.3.3.2.3 of these Mitigation Measures

Multiplier = a factor of 1.0 or 1.5. The ISO shall use a 1.0 Multiplier if the Market Party has not been penalized for inaccurately reporting fuel type or fuel price information in the Real-Time Market over the 6 months prior to the market-day for which the penalty is being calculated. In all other cases the ISO shall use a 1.5 Multiplier.

Updated reference level $_{gh}$  = greater of a revised reference level calculated using the actual fuel costs of Generator g in hour h, or the reference level that would have been in place for the Generator in hour h, but for the Market Party's submission of inaccurate fuel type and/or fuel price information

Original reference level $_{gh}$  = the reference level for Generator g in hour h actually used in the Real-Time Market to perform conduct and impact testing of the Market Party's Bids

 $MWh\ DAM_{gh}$  = the  $MWh\ that\ Generator\ g$  was scheduled to produce in the Day-Ahead Market in hour h

 $MWh\ RT_{gh}$  = the  $MWh\ that\ Generator\ g$  was scheduled to produce in the Real-Time Market in hour h

Market Party MWh<sub>gh</sub> = MWh produced by Market Party's Generator g that was scheduled to produce energy in hour h in the Real-Time Market

- ▲ simplified guarantee payment<sub>g</sub> = the change in the Real-Time Market guarantee payment that the Market Party receives for Generator g, determined when the ISO performs a simplified Bid Production Cost guarantee payment impact test using the threshold specified in Section 23.3.2.1.2 of these Mitigation Measures. The simplified guarantee payment shall be based upon actual Real-Time Bids, actual Real-Time Generator LBMPs, and reference levels that are the greater of (a) a revised reference level calculated using the Generator's actual fuel costs, or (b) the reference level that would have been in place for the Generator but for the submission of inaccurate fuel type and/or fuel price information
- 23.4.3.3.4 If the opportunity to submit Incremental Energy Bids into the real-time market that exceed Incremental Energy Bids made in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriate, has been revoked on a Market Party's Generator pursuant to Sections 23.4.7.2 and 23.4.7.3

of these Mitigation Measures, then the following virtual market penalty may be imposed on the Market Party:

Virtual market penalty = (Virtual Load MWs) \* (Amount by which the hourly integrated real-time LBMP exceeds the day-ahead LBMP applicable to the Virtual Load MWs)

#### WHERE:

Virtual Load MWs are the scheduled MWs of Virtual Load Bid by the Market Party in the hour for which an increased real-time Bid for the Market Party's Generator failed the test specified in Section 23.4.7.2 of these Mitigation Measures; and

LBMP is the LBMP at which the Virtual Load MWs settled in the Day-Ahead and real-time Markets.

23.4.3.3.5 Real-Time LBMPs shall not be revised as a result of the imposition of a financial obligation as specified in this Section 23.4.3.3, except as may be specifically authorized by the Commission.

## 23.4.3.4 Multipliers

The Base Penalty Amount specified in Section 23.4.3.3.1 shall be subject to the following multipliers:

- 23.4.3.4.1 For the first instance of a type of conduct by a Market Party meeting the standards for mitigation, the multiplier shall be one (1).
- 23.4.3.4.2 For the second instance within the current or the two immediately previous capability periods of substantially similar conduct in the same market by a Market Party or its Affiliates, the multiplier shall be one (1),

- 23.4.3.4.3 For the third instance within the current or the two immediately previous capability periods of substantially similar conduct in the same market by a Market Party or its Affiliates, the multiplier shall be two (2),
- 23.4.3.4.4 For the fourth or any additional instance within the current or immediately previous capability period of substantially similar conduct in the same market by a Market Party or its Affiliates, the multiplier shall be three (3).

## 23.4.3.5 Dispute Resolution

- 23.4.3.5.1 Parties with of disputes arising from or relating to the imposition of a sanction under this Section 23.4.3 may utilize the dispute resolution provisions of the ISO Services Tariff. The scope of any such proceeding shall include resolution of any dispute as to legitimate justifications, under applicable legal, regulatory or policy standards, for any conduct that is asserted to warrant a penalty. Any or all of the issues in any such proceeding may be resolved by agreement of the parties.
- 23.4.3.5.2 Payment of a financial penalty may be withheld pending conclusion of any arbitration or other alternate dispute resolution proceeding instituted pursuant to the preceding paragraph and any petition to FERC for review under the Federal Power Act of the determination in such dispute resolution proceeding; provided, however, that interest at the ISO's average cost of borrowing shall be payable on any part of the penalty that is withheld, and that is determined to be payable at the conclusion of the dispute resolution/FERC review process from the date of the infraction giving rise to the penalty to the date of payment. The exclusive remedy for the inappropriate imposition of a financial penalty, to the exclusion of any

claim for damages or any other form of relief, shall be a determination that a penalty should not have been imposed, and a refund with interest of paid amounts of a penalty determined to have been improperly imposed, as may be determined in the applicable dispute resolution proceedings.

- 23.4.3.5.3 This Section 23.4.3 shall not be deemed to provide any right to damages or any other form of relief that would otherwise be barred by Section 30.11 of Attachment O or Section 23.6 of this Attachment H.
- 23.4.3.5.4 This Section 23.4.3 shall not restrict the right of any party to make such filing with the Commission as may otherwise be appropriate under the Federal Power Act

#### 23.4.3.6 Disposition of Penalty Funds

Except as specified in Section 23.4.4.3.2, amounts collected as a result of the imposition of financial penalties shall be credited against costs collectable under Rate Schedule 1 of the ISO Services Tariff.

#### 23.4.4 Load Bid Measure

#### 23.4.4.1 **Purpose**

As initially implemented, the ISO market rules allow loads to choose to purchase power in either the Day-Ahead Market or in the Real-Time Market, but provide other Market Parties less flexibility in opting to sell their output in the Real-Time Market. As a result of this and other design features, certain bidding practices may cause Day-Ahead LBMPs not to achieve the degree of convergence with Real-Time LBMPs that would be expected in a workably competitive market. A temporary mitigation measure is specified below as an interim remedy if

conditions warrant action by the ISO until such time as the ISO develops and implements an effective long-term remedy, if needed. These measures shall only be imposed if persistent unscheduled load causes operational problems, including but not limited to an inability to meet unscheduled load with available resources. The ISO shall post a description of any such operational problem on its web site.

# 23.4.4.2 Implementation

- 23.4.4.2.1 Day-Ahead LBMPs and Real-Time LBMPs in each load zone shall be monitored to determine whether there is a persistent hourly deviation between them in any zone that would not be expected in a workably competitive market.

  Monitoring of Day-Ahead and real-time LBMPs shall include examination of the following two metrics (along with any additional monitoring tools and procedures that the ISO determines to be appropriate to achieve the purpose of this Section 23.4.4):
  - (1) The ISO shall compute a rolling average of the hourly deviation of real-time zonal LBMPs from Day-Ahead zonal LBMPs. The hourly deviation shall be measured as: (zonal LBMP<sub>real time</sub> zonal LBMP<sub>day ahead</sub>). Each observation of the rolling-average time series shall be a simple average of all the hourly deviations over the previous four weeks, or such other averaging period determined by the ISO to be appropriate to achieve the purpose of this Section 23.4.4.
  - (2) The ISO shall also compute the rolling average *percentage* deviation of real-time zonal LBMPs from Day-Ahead zonal LBMPs. This percentage deviation shall be calculated by dividing the rolling-average hourly deviation (defined in Section 23.4.4.2.1 (1) above) by the rolling-average level of Day-Ahead zonal

- LBMP over the same time period, using the averaging period(s) described in Section 23.4.4.2.1 (1), above.
- 23.4.4.2.2 The ISO shall also estimate and monitor the average percentage of each

  Load Serving Entity's load scheduled in the Day-Ahead Market, using a

  methodology intended to identify a sustained pattern of under-bidding as

  accurately as the ISO deems practicable. The average percentage will be

  computed over a specified time period determined by the ISO to be appropriate to

  achieve the purpose of this mitigation measure.
- 23.4.4.2.3 If the ISO determines that (i) the relationship between zonal LBMPs in a zone in the Day-Ahead Market and the Real-Time Market is not what would be expected under conditions of workable competition, (ii) one or more Load Serving Entities have been meeting a substantial portion of their loads with purchases in the Real-Time Market, and (iii) that this practice has contributed to an unwarranted divergence of LBMP between the two markets, then the following mitigation measure may be imposed. Any such measure shall be rescinded upon a determination by the ISO that any one or more of the foregoing conditions is not met.

# 23.4.4.3 Description of the Measure

23.4.4.3.1 The ISO may require a Load Serving Entity engaging in the purchasing practice described above to purchase or schedule all of its expected power requirements in the Day-Ahead Market. A Load Serving Entity subject to this requirement may purchase up to a specified portion of it actual load requirements

- (the "Allowance Level") in the Real-Time Market without penalty, as determined by the ISO to be appropriate in recognition of the uncertainty of load forecasting.
- 23.4.4.3.2 Effective with the imposition of the foregoing requirement, all purchases in the Real-Time Market in excess of this Allowance Level (the "Penalty Level") shall be settled at a specified premium over the applicable zone LBMP. Revenues from such premiums, if any, shall be rebated on a pro *rata* basis to the Market Parties that scheduled energy for delivery to load within New York in the Day-Ahead Market for the day in which the revenues were collected.
- 23.4.4.3.3 The Allowance Level and the Penalty Level shall be established by the ISO at levels deemed effective and appropriate to mitigate the market effects described in this Section 23.4.4. In addition, the Penalty Level payments shall be waived in any hour in which the Allowance Level is exceeded because of unexpected system conditions.

# 23.4.5 Installed Capacity Market Mitigation Measures

23.4.5.1 If and to the extent that sufficient installed capacity is not under a contractual obligation to be available to serve load in New York and if physical or economic withholding of installed capacity would be likely to result in a material change in the price for installed capacity in all or some portion of New York, the ISO, in consideration of the comments of the Market Parties and other interested parties, shall amend this Attachment H, in accordance with the procedures and requirements for amending the Plan, to implement appropriate mitigation measures for installed capacity markets.

- 23.4.5.2 Offers to sell Mitigated UCAP in an ICAP Spot Market Auction shall not be higher than the higher of (a) the UCAP Offer Reference Level for the applicable ICAP Spot Market Auction, or (b) the Going-Forward Costs of the Installed Capacity Supplier supplying the Mitigated UCAP. Where an Installed Capacity Supplier is a Pivotal Supplier in some, but not all, Mitigated Capacity Zones in which it has Resources, such Installed Capacity Supplier's offer to sell Mitigated UCAP in any ICAP Spot Market Auction for any Resource for which it is a Pivotal Supplier shall not be higher than the higher of (a) the lowest of the UCAP Offer Reference Levels for each Mitigated Capacity Zone in which such Installed Capacity Supplier has Resources; or (b) if an Offer for a Resource has an applicable Going-Forward Cost, such Going-Forward Cost.
- 23.4.5.3 An Installed Capacity Supplier's Going-Forward Costs for an ICAP Spot
  Market Auction shall be determined upon the request of the Responsible Market
  Party for that Installed Capacity Supplier. The Going-Forward Costs shall be
  determined by the ISO after consultation with the Responsible Market Party,
  provided such consultation is requested by the Responsible Market Party not later
  than 50 business days prior to the deadline for offers to sell Unforced Capacity in
  such auction, and provided such request is supported by a submission showing the
  Installed Capacity Supplier's relevant costs in accordance with specifications
  provided by the ISO. Such submission shall show (1) the nature, amount and
  determination of any claimed Going-Forward Cost, and (2) that the cost would be
  avoided if the Installed Capacity Supplier is taken out of service or retired, as
  applicable. If the foregoing requirements are met, the ISO shall determine the

level of the Installed Capacity Supplier's Going-Forward Costs and shall seasonally adjust such costs not later than 7 days prior to the deadline for submitting offers to sell Unforced Capacity in such auction. A Responsible Market Party shall request an updated determination of an Installed Capacity Supplier's Going-Forward Costs not less often than annually, in the absence of which request the Installed Capacity Supplier's offer cap shall revert to the UCAP Offer Reference Level. An updated determination of Going-Forward Costs may be undertaken by the ISO at any time on its own initiative after consulting with the Responsible Market Party. Any redetermination of an Installed Capacity Supplier's Going-Forward Costs shall conform to the consultation and determination schedule specified in this paragraph. The costs that an Installed Capacity Supplier would avoid as a result of retiring should only be included in its Going-Forward Costs if the owner or operator of that Installed Capacity Supplier actually plans to mothball or retire it if the Installed Capacity revenues it receives are not sufficient to cover those costs.

- 23.4.5.4 Mitigated UCAP shall be offered in each ICAP Spot Market Auction in accordance with Section 5.14.1.1 of the ISO Services Tariff and applicable ISO procedures, unless it has been exported to an External Control Area or sold to meet Installed Capacity requirements outside the Mitigated Capacity Zone in which the ICAP Supplier is a Pivotal Supplier is located in a transaction that does not constitute physical withholding under the standards specified below.
- 23.4.5.4.1 An export to an External Control Area or sale to meet an Installed

  Capacity requirement outside the Mitigated Capacity Zone in which the ICAP

Supplier is a Pivotal Supplier is located of Mitigated UCAP (either of the foregoing being referred to as "External Sale UCAP") may be subject to audit and review by the ISO to assess whether such action constituted physical withholding of UCAP from a Mitigated Capacity Zone. External Sale UCAP shall be deemed to have been physically withheld on the basis of a comparison of the net revenues from UCAP sales that would have been earned by the sale in a Mitigated Capacity Zone of External Sale UCAP. The comparison shall be made for the period for which Installed Capacity is committed (the "Comparison Period") in each of the shortest term organized capacity markets (the "External Reconfiguration Markets") for the area and during the period in which the Mitigated UCAP was exported or sold. External Sale ICAP shall be deemed to have been withheld from a Mitigated Capacity Zone if: (1) the Responsible Market Party for the External Sale UCAP could have made all or a portion of the External Sale UCAP available to be offered in the Mitigated Capacity Zone by buying out of its external capacity obligation through participation in an External Reconfiguration Market; and (2) the net revenues over the Comparison Period from sale in the Mitigated Capacity Zone of the External Sale UCAP that could have been made available for sale in that Locality would have been greater by 15% or more, provided that the net revenues were at least \$2.00/kilowatt-month more than the net UCAP revenues from that portion of the External Sale UCAP over the Comparison Period.

23.4.5.4.2 If Mitigated UCAP is not offered or sold as specified above, the

Responsible Market Party for such Installed Capacity Supplier shall pay the ISO

an amount equal to the product of (A) 1.5 times the difference between the Market-Clearing Price for the Mitigated Capacity Zone in the ICAP Spot Market Auction with and without the inclusion of the Mitigated UCAP and (B) the total of (1) the amount of Mitigated UCAP not offered or sold as specified above, and (2) all other megawatts of Unforced Capacity in the Mitigated Capacity Zone under common Control with such Mitigated UCAP. If the failure to offer was associated with the same period as the sale of External Sale UCAP, and the failure caused or contributed to an increase in UCAP prices in the Mitigated Capacity Zone of 15 percent or more, provided such increase is at least \$2.500/kilowattmonth, the Responsible Market Party for such Installed Capacity Supplier shall be required to pay to the ISO an amount equal to 1.5 times the lesser of (A) the difference between the average Market-Clearing Price for the Mitigated Capacity Zone in the ICAP Spot Market Auctions for the relevant Comparison Period with and without the inclusion of the External Sale UCAP in those auctions, or (B) the difference between such average price and the clearing price in the External Reconfiguration Market for the relevant Comparison Period, times the total of (1) the amount of Mitigated UCAP not offered or sold as specified above, and (2) all other megawatts of Unforced Capacity in the Mitigated Capacity Zone under common Control with such Mitigated UCAP. The ISO will distribute any amounts recovered in accordance with the foregoing provisions among the LSEs serving Loads in regions affected by the withholding in accordance with ISO Procedures.

- Reasonably in advance of the deadline for submitting offers in an External 23.4.5.4.3 Reconfiguration Market the Responsible Market Party for External Sale UCAP may request the ISO to provide a projection of ICAP Spot Auction clearing prices for the Mitigated Capacity Zone over the Comparison Period for the External Reconfiguration Market. Such requests, and the ISO's response, shall be made in accordance with the deadlines specified in ISO Procedures. Prior to completing its projection of ICAP Spot Auction clearing prices for the Mitigated Capacity Zone over the Comparison Period for the External Reconfiguration Market, the ISO shall consult with the Market Monitoring Unit regarding such price projection. The Responsible Market Party shall be exempt from a physical withholding penalty as specified in Section 23.4.5.4.2, below, if at the time of the deadline for submitting offers in an External Reconfiguration Market its offers, if accepted, would reasonably be expected to produce net revenues from External UCAP Sales that would exceed the net revenues that would have been realized from sale of the External UCAP Sales capacity in the Mitigated Capacity Zone at the ICAP Spot Auction prices projected by the ISO. The responsibilities of the Market Monitoring Unit that are addressed in this section of the Mitigation Measures are also addressed in Section 30.4.6.2.8 of Attachment O.
- 23.4.5.5 Control of Unforced Capacity shall be rebuttably presumed from (i) ownership of an Installed Capacity Supplier, or (ii) status as the Responsible Market Party for an Installed Capacity Supplier, but may also be determined on the basis of other evidence. The presumption of Control from ownership can be rebutted by either: (1) the sale of Unforced Capacity from the Installed Capacity

Supplier in a Capability Period Auction or a Monthly Auction, or (2) demonstrating to the reasonable satisfaction of the ISO; provided, however, that if the presumption has not been rebutted, and if two or more Market Parties each have rights or obligations with respect to Unforced Capacity from an Installed Capacity Supplier that could reasonably be anticipated to affect the quantity or price of Unforced Capacity transactions in an ICAP Spot Market Auction, the ISO may attribute Control of the affected MW of Unforced Capacity from the Installed Capacity Supplier to each such Market Party. Prior to reaching its decision regarding whether the presumption of control of Unforced Capacity has been rebutted, the ISO shall provide its preliminary determination to the Market Monitoring Unit for review and comment. The responsibilities of the Market Monitoring Unit that are addressed in this section of the Mitigation Measures are also addressed in Section 30.4.6.2.9 of Attachment O.

23.4.5.6 Any proposal or decision by a Market Participant to retire or otherwise remove an Installed Capacity Supplier from a Mitigated Capacity Zone Unforced Capacity market, or to de-rate the amount of Installed Capacity available from such supplier, may be subject to audit and review by the ISO if the ISO determines that such action could reasonably be expected to affect Market-Clearing Prices in one or more ICAP Spot Market Auctions for the Mitigated Capacity Zone in which the Resource(s) that is the subject of the proposal or decision is located, subsequent to such action. Such an audit or review shall assess whether the proposal or decision has a legitimate economic justification or is based on an effort to withhold Installed Capacity physically in order to affect

prices. The ISO shall provide the preliminary results of its audit or review to the Market Monitoring Unit for its review and comment. If the ISO determines that the proposal or decision constitutes physical withholding, and would increase Market-Clearing Prices in one or more ICAP Spot Market Auctions for a Mitigated Capacity Zone by five percent or more, provided such increase is at least \$.50/kilowatt-month, for each such violation of the above requirements the Market Participant shall be assessed an amount equal to the product of (A) 1.5 times the difference between the Market Clearing Price for the Mitigated Capacity Zone in the ICAP Spot Market Auctions with and without the inclusion of the withheld UCAP in those auctions, and (B) the total of (1) the number of megawatts withheld in each month and (2) all other megawatts of Installed Capacity in the Mitigated Capacity Zone under common Control with such withheld megawatts. The requirement to pay such amounts shall continue until the Market Party demonstrates that the removal from service, retirement or de-rate is justified by economic considerations other than the effect of such action on Market-Clearing Prices in the ICAP Spot Market Auctions for the Mitigated Capacity Zone. The ISO will distribute any amount recovered in accordance with the foregoing provisions among the LSEs serving Loads in regions affected by the withholding in accordance with ISO Procedures. The responsibilities of the Market Monitoring Unit that are addressed in this section of the Mitigation Measures are also addressed in Section 30.4.6.2.10 of Attachment O.

23.4.5.7 Unless exempt as specified below, offers to supply Unforced Capacity from a Mitigated Capacity Zone Installed Capacity Supplier: (i) shall equal or

exceed the applicable Offer Floor; and (ii) can only be offered in the ICAP Spot Market Auctions. The Offer Floor shall apply to offers for Unforced Capacity from the Installed Capacity Supplier, if it is not a Special Case Resource, starting with the Capability Period for which the Installed Capacity Supplier first offers to supply UCAP; provided, however, that portion of a resource's UCAP (rounded down to the nearest tenth of a MW) that has cleared for any twelve, not-necessarily-consecutive, months shall cease to be subject to the Offer Floor requirement. Offer Floors shall be adjusted annually using the inflation rate component of the escalation factor of the relevant effective ICAP Demand Curves that have been accepted by the Commission.

- 23.4.5.7.1 Unforced Capacity from an Installed Capacity Supplier that is subject to an Offer Floor may not be used to satisfy any LSE Unforced Capacity Obligation for Mitigated Capacity Zone Load unless such Unforced Capacity is obtained through participation in an ICAP Spot Market Auction.
- 23.4.5.7.2 An Installed Capacity Supplier, in a Mitigated Capacity Zone for which the Commission has accepted an ICAP Demand Curve, shall be exempt from an Offer Floor if: (a) the price that is equal to the (x) average of the ICAP Spot Market Auction price for each month in the two Capability Periods, beginning with the Summer Capability Period commencing three years from the start of the year of the Class Year (the "Starting Capability Period") is projected by the ISO to be higher, with the inclusion of the Installed Capacity Supplier, than (y) the highest Offer Floor based on the Mitigation Net CONE that would be applicable to such supplier in the same two (2) Capability Periods (utilized to compute (x)),

- or (b) the price that is equal to the average of the ICAP Spot Market Auction prices in the six Capability Periods beginning with the Starting Capability Period is projected by the ISO to be higher, with the inclusion of the Installed Capacity Supplier, than the reasonably anticipated Unit Net CONE of the Installed Capacity Supplier. For purposes of the determinations pursuant to (a) and (b) of this section, the ISO shall identify Unit Net CONE and the price on the ICAP Demand Curve projected for a future Mitigation Study Period consistent with Section 23.4.5.7.4.
- 23.4.5.7.2.1 Promptly after Commission acceptance of the first ICAP Demand Curve to apply to a Mitigated Capacity Zone, the ISO shall make an exemption and Offer Floor determination for any NCZ Examined Project that is in a completed Class Year and has received CRIS.
- Examined Project that is in a Class Year that has not been completed prior to
  Commission acceptance of the first ICAP Demand Curve to apply specifically to
  the Mitigated Capacity Zone in which the NCZ Examined Project is located,
  provided the ISO has filed an ICAP Demand Curve pursuant to Services Tariff
  Section 5.14.1.2.11. The Indicative BSM Determination shall be computed using
  such ICAP Demand Curve for the Mitigated Capacity Zone concurrent with the
  determinations the ISO makes for Examined Facilities pursuant to Sections
  23.4.5.7.3.2 and 23.4.5.7.3.3. The ISO shall recompute the Indicative BSM
  Determination promptly after Commission acceptance of the first ICAP Demand
  Curve for the applicable Locality provided that such NCZ Examined Project (i)

received CRIS if the Class Year completed at the time the Commission accepts the Demand Curve, or (ii) has not been removed from the Class Year Deliverability Study if the Class Year is not completed. The Indicative BSM Determination is for informational purposes only. The exemption or Offer Floor for an NCZ Examined Project to which this Section applies shall be determined for such projects receiving CRIS using the Commission-accepted Locality Demand Curve.

- 23.4.5.7.2.3 Any NCZ Examined Project not exempt pursuant to 23.4.5.7.7 shall provide data and information requested by the ISO by the date specified by the ISO, in accordance with the ISO Procedures.
  - The ISO shall compute the reasonably anticipated ICAP Spot Market Auction forecast price based on Expected Retirements (as defined in subsection 23.4.5.7.2.3.1), plus each NCZ Examined Project.
- 23.4.5.7.2.3.1 Expected Retirements shall be determined based on any Generator that provided written notice to the New York State Public Service Commission that it intends to retire, plus any UDR facilities, or any Generator 2 MW or less that provided written notice to the ISO that it intends to retire.
- 23.4.5.7.2.3.2 The Load forecast shall be based on data used to develop the Indicative Locational Minimum Installed Capacity Requirement, and Special Case Resources based on data for the Mitigated Capacity Zone that is part of the Special Case Resource data set forth in the most-recently published Load and Capacity Data (Gold Book).

23.4.5.7.2.4 The ISO shall post on its website the inputs of the reasonably anticipated ICAP Spot Market Auction forecast prices determined in accordance with 23.4.5.7.2.3 (except for the posting of an input which would disclose Confidential Information), the Expected Retirements, and the NCZ Examined Projects, before the exemption or Offer Floor determination under this Section.

When the ISO is evaluating more than one NCZ Examined Project concurrently, the ISO shall recognize in its computation of the anticipated ICAP Spot Market Auction forecast price that Generators or UDR facilities will clear from lowest to highest, using for each NCZ Examined Project the lower of (i) its Unit Net CONE or (ii) the numerical value equal to 75 percent of the Mitigation Net CONE.

- 23.4.5.7.2.5 When evaluating NCZ Examined Projects pursuant to Sections
  23.4.5.7.2.1 or 23.4.5.7.2.2, the ISO shall seek comment from the Market
  Monitoring Unit on matters relating to the determination of price projections and
  cost calculations. The ISO shall inform the NCZ Examined Project of the Offer
  Floor or Offer Floor exemption determination or Indicative BSM Determination
  promptly. The responsibilities of the Market Monitoring Unit that are addressed
  in this Section 23.4.5.7.2.5 are also addressed in Section 30.4.6.2.11 of
  Attachment O.
- 23.4.5.7.2.6 If an NCZ Examined Project under the criteria in 23.4.5.7.2.1 or
  23.4.5.7.2.2 does not provide all of the requested data by the date specified by the
  ISO, the MW of CRIS received at that time by the project shall be subject to the

- Mitigation Net CONE Offer Floor for the period determined by the ISO in accordance with Section 23.4.5.7.
- 23.4.5.7.2.7 An NCZ Examined Project or Examined Facility located in more than one Mitigated Capacity Zone shall be evaluated pursuant to the tests in Section 23.4.5.7.2 or 23.4.5.7.3 (as applicable), calculating Mitigation Net CONE for the smallest Mitigated Capacity Zone that contains the Load Zone in which such NCZ Examined Project or Examined Facility is electrically located.
- 23.4.5.7.3 The ISO shall make such exemption and Unit Net CONE determination for each "Examined Facility" (collectively "Examined Facilities") which term shall mean (I) each proposed new Generator and proposed new UDR project, and each existing Generator that has ERIS only and no CRIS, that is a member of the Class Year that requested CRIS, or that requested an evaluation of the transfer of CRIS rights from another location, in the Class Year Facilities Study commencing in the calendar year in which the Class Year Facility Study determination is being made (the Capability Periods of expected entry as further described below in this Section, the "Mitigation Study Period"), (II) each (i) existing Generator that did not have CRIS rights, and (ii) proposed new Generator and proposed new UDR project, that is an expected recipient of transferred CRIS rights at the same location regarding which the ISO has been notified by the transferor or the transferee of a transfer pursuant to OATT Attachment S Section 23.9.4 that will be effective on a date within the Mitigation Study Period, (III) each proposed new Generator that (a) is either (i) in the ISO Interconnection Queue, in a Class Year prior to 2009/10, and has not commenced commercial operation or been canceled,

and for which the ISO has not made an exemption or Unit Net CONE determination, or (ii) not subject to a deliverability requirement (and therefore, is not in a Class Year) and (b) provides specific written notification to the ISO no later than the date identified by the ISO, that it plans to commence commercial operation and offer UCAP in a month that coincides with a Capability Period of the Mitigation Study Period. The term "Examined Facilities" does not include any facility exempt from an Offer Floor pursuant to the provisions of Section 23.4.5.7.7.

- 23.4.5.7.3.1 The commercial operation date to be used by the ISO solely for purposes of identifying the Examined Facilities will be determined by the ISO at the time of the Class Year Study as the date most-recently (A) identified by the project to the ISO in the Interconnection Facilities Study process or (B) reflected in the Interconnection Queue, or if neither of the foregoing is applicable, then the date identified by the project to the Transmission Owner to which it has proposed interconnecting.
- 23.4.5.7.3.2 The ISO shall compute the reasonably anticipated ICAP Spot Market

  Auction forecast price based on Expected Retirements (as defined in this subsection 23.4.5.7.3.2), plus each Examined Facility in 23.4.5.7.3 (I), (II), and (III).

Expected Retirements determined based on any Generator that provided written notice to the New York State Public Service Commission that it intends to retire, plus any UDR facility or Generator 2 MW or less that provided written notice to the ISO that it intends to retire.

The load forecast and Special Case Resources as set forth in the most-recently published Load and Capacity Data (Gold Book).

Before the commencement of the Initial Decision Period for the Class Year, the ISO shall post on its website the inputs of the reasonably anticipated ICAP Spot Market Auction forecast prices determined in accordance with 23.4.5.7.3.2, the Expected Retirements, and the Examined Facilities, before the Initial Project Cost Allocation.

When the ISO is evaluating more than one Examined Facility concurrently, the ISO shall recognize in its computation of the anticipated ICAP Spot Market Auction forecast price that Generators or UDR facilities will clear from lowest to highest, using for each Examined Facility the lower of (i) its Unit Net CONE or (ii) the numerical value equal to 75% of the Mitigation Net CONE.

23.4.5.7.3.3 All developers, Interconnection Customers, and Installed Capacity
Suppliers for any Examined Facility that do not request CRIS shall provide data
and information requested by the ISO by the date specified by the ISO, in
accordance with the ISO Procedures. For any such Examined Facility that is in a
Class Year but that only has ERIS rights after the Project Cost Allocation process
is complete, the ISO shall utilize the data first provided in its analysis of the Unit
Net CONE in its review of the project in any future Class Year in which the
Generator or UDR facility requests CRIS. The ISO shall determine the
reasonably anticipated Unit Net CONE less the costs to be determined in the
Project Cost Allocation or Revised Project Cost Allocation, as applicable, prior to
the commencement of the Initial Decision Period Class Year, and shall provide to

the Examined Facility the ISO's determination of an exemption or the Offer Floor. On or before the three (3) days prior to the ISO's issuance of the Revised Project Cost Allocation, the ISO will revise its forecast of ICAP Spot Market Auction prices for the Capability Periods in the Mitigation Study Period based on the Examined Facilities that remain in the Class Year for CRIS and the Examined Facilities that meet 23.4.5.7.3 (II) or (III). When evaluating Examined Capacity pursuant to this Section 23.4.5.7, the ISO shall seek comment from the Market Monitoring Unit on matters relating to the determination of price projections and cost calculations. The ISO shall provide to each project its revised price forecast for a Subsequent Decision Period no later than the ISO's issuance of a Revised Project Cost Allocation. The ISO shall inform the project whether the Offer Floor exemption specified above in this Section is applicable as soon as practicable after completion of the relevant Project Cost Allocation or Revised Project Cost Allocation, in accordance with methods and procedures specified in ISO Procedures. The responsibilities of the Market Monitoring Unit that are addressed in this section of the Mitigation Measures are also addressed in Section 30.4.6.2.11 of Attachment O.

23.4.5.7.3.4 If an Examined Facility under the criteria in 23.4.5.7.3 (II) or (III) has not provided written notice to the ISO on or before the date specified by the ISO, or any Examined Facility required to be reviewed does not provide all of the requested data by the date specified by the ISO, the proposed Capacity shall be subject to the Net CONE Offer Floor for the period determined by the ISO in accordance with Section 23.4.5.7.

- 23.4.5.7.3.5 An Examined Facility for which an exemption or Offer Floor determination has been rendered may only be reevaluated for an exemption or Offer Floor determination if it meets the criteria in Section 23.4.5.7.3 (I) and either (a) enters a new Class Year for CRIS or (b) intends to receive transferred CRIS rights at the same location. An Examined Facility under the criteria in 23.4.5.7.3 (II) that did receive CRIS rights will be bound by the determination rendered and will not be reevaluated, and an Examined Facility under the criteria in 23.4.5.7.3 (III) will not be reevaluated.
- 23.4.5.7.3.6 If an Installed Capacity Supplier demonstrates to the reasonable satisfaction of the ISO that its Unit Net CONE is less than any Offer Floor that would otherwise be applicable to the Installed Capacity Supplier, then its Offer Floor shall be reduced to a numerical value equal to its Unit Net CONE.
- 23.4.5.7.4 For purposes of Section 23.4.5.7.2(b), the ISO shall identify the Unit Net

  CONE and the price on the ICAP Demand Curve projected for a future Mitigation

  Study Period using: (i) the escalation factor of the relevant ICAP Demand Curves

  for any year for which there are accepted ICAP Demand Curves; or (ii) the

  inflation rate component of the escalation factor of the relevant ICAP Demand

  Curve for any year for which the accepted ICAP Demand Curves do not apply.

  For purposes of Section 23.4.5.7.2(a), the ISO shall use the escalation factor of

  the relevant ICAP Demand Curves. Mitigation Net CONE for the each year after

  the last year covered by the most recent Demand Curves approved by the

  Commission shall be increased by the escalation factor approved by the

  Commission for such Demand Curves.

23.4.5.7.5 A Mitigated Capacity Zone Installed Capacity Supplier that is a Special Case Resource shall be subject to an Offer Floor beginning with the month of its initial offer to supply Installed Capacity, and until its offers of Installed Capacity have been accepted in the ICAP Spot Market Auction at a price at or above its Offer Floor for a total of twelve, not necessarily consecutive, months. A Special Case Resource shall be exempt from the Offer Floor if (a) it is located in a Mitigated Capacity Zone except New York City and is enrolled as a Special Case Resource with the ISO for any month within the Capability Year that includes March 31 in an ICAP Demand Curve Reset Filing Year in which the ISO proposes a New Capacity Zone that includes the location of the Special Case Resource, or (b) the ISO projects that the ICAP Spot Market Auction price will exceed the Special Case Resource's Offer Floor for the first twelve months that the Special Case Resource reasonably anticipated to offer to supply UCAP. If a Responsible Interface Party fails to provide Special Case Resource data that the ISO needs to conduct the calculations described in the two preceding sentences by the deadline established in ISO Procedures, the Special Case Resource will cease to be eligible to offer or sell Installed Capacity. The Offer Floor for a Special Case Resource shall be equal to the minimum monthly payment for providing Installed Capacity payable by its Responsible Interface Party, plus the monthly value of any payments or other benefits the Special Case Resource receives from a third party for providing Installed Capacity, or that is received by the Responsible Interface Party for the provision of Installed Capacity by the Special Case Resource. The Offer Floor calculation shall include any payment or the

value of other benefits that are awarded for offering or supplying Mitigated Capacity Zone Capacity, except for payments or the value of other benefits provided under programs administered or approved by New York State or a government instrumentality of New York State. Offers by a Responsible Interface Party at a PTID shall be not lower than the highest Offer Floor applicable to a Special Case Resource providing Installed Capacity at that PTID. Such offers may comprise a set of points for which prices may vary with the quantity offered. If this set includes megawatts from a Special Case Resource(s) with an Offer Floor, then at least the quantity of megawatts in the offer associated with each Special Case Resource must be offered at or above the Special Case Resource's Offer Floor. Offers by a Responsible Interface Party shall be subject to audit to determine whether they conformed to the foregoing Offer Floor requirements. If a Responsible Interface Party together with its Affiliated Entities submits one or more offers below the applicable Offer Floor, and such offer or offers cause or contribute to an decrease in UCAP prices in the Mitigated Capacity Zone of 5 percent or more, provided such decrease is at least \$.50/kilowatt-month, the Responsible Interface Party shall be required to pay to the ISO an amount equal to 1.5 times the difference between the Market-Clearing Price for the Mitigated Capacity Zone in the ICAP Spot Auction for which the offers below the Offer Floor were submitted with and without such offers being set to the Offer Floor, times the total amount of UCAP sold by the Responsible Interface Party and its Affiliated Entities in such ICAP Spot Auction. If an offer is submitted below the applicable Offer Floor, the ISO will notify the Responsible Market Party and the notification will identify the offer, the Special Case Resource, the price impact, and the penalty amount. The ISO will provide the notice reasonably in advance of imposing such penalty. The ISO shall distribute any amounts recovered in accordance with the foregoing provisions among the entities, other than the entity subject to the foregoing payment requirement, supplying Installed Capacity in regions affected by one or more offers below an applicable Offer Floor in accordance with ISO Procedures.

Resource shall be exempt from an Offer Floor if it was an existing facility on or before March 7, 2008. (b) A Generator or UDR project that was an existing facility on or before March 7, 2008. (b) A Generator or UDR project that was an existing facility on or before June 29, 2012, which: (i) is in a Mitigated Capacity Zone except New York City, and (ii) was grandfathered from the deliverability requirement at a certain quantity of MW of CRIS pursuant to Section 25.9.3.1 of OATT Attachment S ("Deliverability Grandfathering Process") shall be exempt from an Offer Floor for the MW quantity of CRIS that was provided through the Deliverability Grandfathering Process plus an additional 2 MW obtained through Section 30.3.2.6 of Attachment X to the OATT. If the Generator or UDR project subsequently received CRIS above the quantity established through the Deliverability Grandfathering Process, this exemption shall not apply to any such increase above the 2 MW allowed in Section 30.3.2.6 of Attachment X to the OATT.

23.4.5.7.7 For any Mitigated Capacity Zone except New York City:

- (I) Any existing or proposed Generator or UDR project that has the characteristics specified in this Section 23.4.5.7.7(I) shall be exempt from an Offer Floor with respect to the MW of CRIS that it received at the time, or for which it satisfied the specific CRIS transfer requirements stated in this Section. To be eligible for an exemption under this Section: (a) the existing or proposed Generator or UDR project's location must be included in the ISO's March 31 Filing in the ICAP Demand Curve Reset Filing Year in which a Mitigated Capacity Zone is first applied to such location; (b) prior to that March 31 Filing the existing or proposed Generator or UDR project must have both: (i) Commenced Construction and (ii) either (1) received the MW of CRIS in a Class Year that was completed or (2) submitted to the ISO a request for an Interconnection Agreement that specifically states that the Generator or UDR project will be requesting or has requested a transfer of a specific MW quantity of CRIS at the same location in accordance with Section 25.9.4 of OATT Attachment S (provided that the transfer is ultimately approved by the ISO and consummated); and (c) the existing or proposed Generator or UDR project must demonstrate to the ISO no later than the deadline established by the ISO that it satisfies the requirements of (b) (i) and (ii) above; and
- (II) An existing or proposed Generator or UDR project that is not subject to a deliverability requirement (and therefore, is not in a Class Year and does not receive CRIS MW) shall be exempt from an Offer Floor if it meets the following requirements prior to the ISO's March 31 Filing in an ICAP Demand Curve Reset Filing Year in which a Mitigated Capacity Zone is first applied to such location:

(a) has Commenced Construction, (b) has an effective Small Generator Interconnection Agreement pursuant to OATT Attachment Z, and (c) provides specific written notification to the ISO that it meets requirements (a) and (b) of this subsection 23.4.5.7.7(II) no later than the deadline established by the ISO.

The ISO shall consult with the Market Monitoring Unit prior to determining whether an existing or proposed Generator or UDR project has Commenced Construction. Prior to the ISO making its determination, the Market Monitoring Unit shall provide the ISO a written opinion and recommendation regarding whether an existing or proposed Generator or UDR project Commenced Construction. The responsibilities of the Market Monitoring Unit that are addressed in this section of the Mitigation Measures are also addressed in Section 30.4.6.2.11 of Attachment O. The ISO shall only make a determination pursuant to this Section for an existing or proposed Generator or UDR project for the Mitigated Capacity Zone's first application to the location of the project. The Market Monitoring Unit shall also provide a public report on its assessment of an ISO determination that an existing or proposed Generator or UDR project is exempt from an Offer Floor pursuant to this Section 23.4.5.7.7.

23.4.5.7.8 The ISO shall post on its website the identity of the project in a Mitigated

Capacity Zone and the determination of either exempt or non-exempt as soon as

the determination is final. Concurrent with the ISO's posting, the Market

Monitoring Unit shall publish a report on the ISO's determinations, as further

specified in Sections 30.4.6.2.11 and 30.10.4 of Attachment O to this Services

Tariff.

23.4.5.7.9 Mitigated UCAP that is subject to an Offer Floor shall remain subject to the requirements of Section 23.4.5.4, and if the Offer Floor is higher than the applicable offer cap shall submit offers not lower than the applicable Offer Floor.

### 23.4.6 Virtual Bidding Measures

#### **23.4.6.1** Purpose

The provisions of this Section 23.4.6 specify the market monitoring and mitigation measures applicable to "Virtual Bids." "Virtual Bids" are bids to purchase or supply energy that are not backed by physical load or generation that are submitted in the ISO Day-Ahead Market in accordance with the procedures and requirements specified in the ISO Services Tariff.

To implement the mitigation measures set forth in this Section 23.4.6, the ISO shall monitor and assess the impact of Virtual Bidding on the ISO Administered Markets.

#### 23.4.6.2 Implementation

- 23.4.6.2.1 Day-Ahead LBMPs and Real-Time LBMPs in each load zone shall be monitored to determine whether there is a persistent hourly deviation between them in any zone that would not be expected in a workably competitive market.

  Monitoring of Day-Ahead and real-time LBMPs shall include examination of the following two metrics (along with any additional monitoring tools and procedures that the ISO determines to be appropriate to achieve the purpose of this Section 23.4.6):
  - (1) The ISO shall compute a rolling average of the hourly deviation of real-time zonal LBMPs from Day-Ahead zonal LBMPs. The hourly deviation shall be measured as: (zonal LBMP<sub>real time</sub> zonal LBMP<sub>day ahead</sub>). Each observation of the

- rolling-average time series shall be a simple average of all the hourly deviations over the previous four weeks, or such other averaging period determined by the ISO to be appropriate to achieve the purpose of this Section 23.4.6.
- (2) The ISO shall also compute the rolling average *percentage* deviation of real-time zonal LBMPs from Day-Ahead zonal LBMPs. This percentage deviation shall be calculated by dividing the rolling-average hourly deviation (defined in Section 23.4.6.2.1 (1) above) by the rolling-average level of Day-Ahead zonal LBMP over the same time period, using the averaging period(s) described in Section 23.4.6.2.1 (1), above.
- 23.4.6.2.2 If the ISO determines that (i) the relationship between zonal LBMPs in a zone in the Day-Ahead Market and the Real-Time Market is not what would be expected under conditions of workable competition, and that (ii) the Virtual Bidding practices of one or more Market Participants has contributed to an unwarranted divergence of LBMPs between the two markets, then the following mitigation measure may be imposed. Any such measure shall be rescinded upon a determination by the ISO that the foregoing conditions are not met.

# 23.4.6.3 Description of the Measure

23.4.6.3.1 If the ISO determines that the conditions specified in Section 23.4.6.2 exist, the ISO may limit the hourly quantities of Virtual Bids for supply or load that may be offered in a zone by a Market Participant whose Virtual Bidding practices have been determined to contribute to an unwarranted divergence of LBMPs between the Day-Ahead and Real-Time Markets. Any such limitation shall be set at such level that, and shall remain in place for such period as, in the

best judgment of the ISO, would be sufficient to prevent any unwarranted divergence between Day-Ahead and Real-Time LBMPs.

23.4.6.3.2 As part of the foregoing determination, the ISO shall request explanations of the relevant Virtual Bidding practices from any Market Participant submitting such Bids. Prior to imposing a Virtual Bidding quantity limitation as specified above, the ISO shall notify the affected Market Participant of the limitation.

# 23.4.6.4 Limitation of Virtual Bidding

If the ISO determines that such action is necessary to avoid substantial deviations of LBMPs between the Day-Ahead and Real-Time Markets, the ISO may impose limits on the quantities of Virtual Bids that may be offered by all Market Participants. Any such restriction shall limit the quantity of Virtual Bids for supply or load that may be offered by each Market Participant by hour and by zone. Any such limit shall remain in place for the minimum period necessary to avoid substantial deviations of LBMPs between the Day-Ahead and Real-Time Markets, or to maintain the reliability of the New York Control Area.

# 23.4.7 Increasing Bids in Real-Time for Day-Ahead Scheduled Incremental Energy

# 23.4.7.1 **Purpose**

This Section 23.4.7 specifies the monitoring applicable and the mitigation measures that may be applicable to a Market Party with submitted Incremental Energy Bids in the real-time market that exceed the Incremental Energy Bids made in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriated, for a portion of the Capacity of one or more of its Generators that has been scheduled in the Day-Ahead Market.

The purpose of the Services Tariff rules authorizing the submission of Incremental Energy Bids in the real-time market that exceed the Incremental Energy Bids made in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriate, of the portion of the Capacity of a Market Party's Generator that was scheduled in the Day-Ahead Market is to permit the inclusion of additional costs of providing incremental Energy in real-time Incremental Energy Bids for Generators scheduled in the Day-Ahead Market, where the additional costs of providing incremental Energy were not known prior to the close of the Day-Ahead Market.

### 23.4.7.2 Monitoring and Implementation

The ISO will monitor Market Parties for unjustified interactions between a Market Party's virtual bidding and the submission of real-time Incremental Energy Bids that exceed the Incremental Energy Bids submitted in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriate, for the portion of a Generator's Capacity that was scheduled in the Day-Ahead Market.

If the Market Party has a scheduled Virtual Load Bid for the same hour of the Dispatch

Day as the hour for which submitted real-time Incremental Energy Bids exceeded the

Incremental Energy Bids submitted in the Day-Ahead Market or mitigated Day-Ahead

Incremental Energy Bids where appropriate, for a portion of its Generator's Capacity that was scheduled in the Day-Ahead Market, and any such real-time Incremental Energy Bids exceed the reference level for those Bids that can be justified after-the-fact by more than:

- (i) the lower of 100/MWh or 300%
- (ii) If the Market Party's Generator is located in a Constrained Area for intervals in which an interface or facility into the area in which the Generator or generation is

located has a Shadow Price greater than zero, then a threshold calculated in accordance with Sections 23.3.1.2.2.1 and 23.3.1.2.2.2 of these Mitigation Measures;

and a calculation of a virtual market penalty pursuant to the formula set forth in Section 23.4.3.3.4 of these Mitigation Measures for the Market Party would produce a penalty in excess of \$1000, then the mitigation measure specified below in Section 23.4.7.3.1 shall be imposed for the Market Party's Generator, along with a penalty calculated in accordance with Section 23.4.3.3.4 of these Mitigation Measures. The application of a penalty under Section 23.4.3.3.4 of these Mitigation Measures shall not preclude the simultaneous application of a penalty pursuant to Section 23.4.3.3.3 of these Mitigation Measures.

#### 23.4.7.3 Mitigation Measure

- 23.4.7.3.1 If the ISO determines that the conditions specified in Section 23.4.7.2 exist the ISO shall revoke the opportunity for any bidder of that Generator to submit Incremental Energy Bids in the real-time market that exceed the Incremental Energy Bids submitted in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriate, for portions of that Generator's Capacity that were scheduled Day-Ahead.
- 23.4.7.3.1.1 The first time the ISO revokes the opportunity for bidders of a Generator to submit Incremental Energy Bids in the Real-Time Market that exceed the Incremental Energy Bids submitted in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriate, for portions of that Generator's Capacity that were scheduled Day-Ahead, mitigation shall be imposed for 90 days. The 90 day period shall start two business days after the

- date that the ISO provides written notice of its determination that the application of mitigation is required.
- 23.4.7.3.1.2 Any subsequent time the ISO revoked the opportunity for bidders of a
  Generator to submit Incremental Energy Bids in the Real-Time Market that
  exceed the Incremental Energy Bids submitted in the Day-Ahead Market or
  mitigated Day-Ahead Incremental Energy Bids where appropriate, for portions of
  that Generator's Capacity that were scheduled Day-Ahead, mitigation shall be
  imposed for 180 days. The 180 day period shall start two business days after the
  date that the ISO provides written notice of its determination that the application
  of mitigation is required.
- 23.4.7.3.1.3 If bidders of a Generator that has previously been mitigated under this Section 23.4.7.3 become and remain continuously eligible to submit Incremental Energy Bids in the Real-Time Market that exceed the Incremental Energy Bids submitted in the Day-Ahead Market or mitigated Day-Ahead Incremental Energy Bids where appropriate, for portions of that Generator's Capacity that were scheduled Day-Ahead, for a period of one year or more, then the ISO shall apply the mitigation measure set forth in Section 23.4.7.3 of the Mitigation Measures as if the Generator had not previously been subject to this mitigation measure.
- 23.4.7.3.1.4 Market Parties that transfer, sell, assign, or grant to another Market Party the right or ability to Bid a Generator that is subject to the mitigation measure in this Section 23.4.7.3 are required to inform the new Market Party that the Generator is subject to mitigation under this measure, and to inform the new Market Party of the expected duration of such mitigation.

# **23.4.8 Duration of Mitigation Measures**

Except as specified in Section 23.4.5 of this Attachment H, any mitigation measure imposed as specified above shall expire not later than six months after the occurrence of the conduct giving rise to the measure, or at such earlier time as may be specified by the ISO.

#### 30.4 Market Monitoring Unit

# 30.4.1 Mission of the Market Monitoring Unit

The Market Monitoring Unit's goals are (1) to ensure that the markets administered by the ISO function efficiently and appropriately, and (2) to protect both consumers and participants in the markets administered by the ISO by identifying and reporting Market Violations, market design flaws and market power abuses to the Commission in accordance with Sections 30.4.5.3 and 30.4.5.4 below.

# 30.4.2 Retention and Oversight of the Market Monitoring Unit

The Board shall retain a consulting or other professional services firm, or other similar entity, to advise it on the matters encompassed by Attachment O and to carry out the responsibilities that are assigned to the Market Monitoring Unit in Attachment O. The Market Monitoring Unit selected by the Board shall have experience and expertise appropriate to the analysis of competitive conditions in markets for electric capacity, energy and ancillary services, and financial instruments such as TCCs, and to such other responsibilities as are assigned to the Market Monitoring Unit under Attachment O, and must also have sufficient resources and personnel to be able to perform the Core Functions and other assigned functions.

The Market Monitoring Unit shall be accountable to the non-management members of the Board, and shall serve at the pleasure of the non-management members of the Board.

#### **30.4.3** Market Monitoring Unit Ethics Standards

The Market Monitoring Unit, including all persons employed thereby, shall comply at all times with the ethics standards set forth below. The Market Monitoring Unit ethics standards set forth below shall apply in place of the standards set forth in the ISO's OATT Attachment F Code

of Conduct, and/or the more general policies and standards that apply to consultants retained by the ISO.

- 30.4.3.1 The Market Monitoring Unit and its employees must have no material affiliation with any Market Party or Affiliate of any Market Party.
- 30.4.3.2 The Market Monitoring Unit and its employees must not serve as an officer, employee, or partner of a Market Party.
  - 30.4.3.3 The Market Monitoring Unit and its employees must have no material financial interest in any Market Party or Affiliate of a Market Party. Ownership of mutual funds by Market Monitoring Units and their employees that contain investments in Market Parties or their Affiliates is permitted so long as: (a) the fund is publicly traded; (b) the fund's prospectus does not indicate the objective or practice of concentrating its investment in Market Parties or their Affiliates; and (c) the Market Monitoring Unit/Market Monitoring Unit employee does not exercise or have the ability to exercise control over the financial interests held by the fund.
  - 30.4.3.4 The Market Monitoring Unit and its employees are prohibited from engaging in transactions in the markets administered by the ISO, other than in the performance of duties under the ISO's Tariffs. This provision shall not, however, prevent the Market Monitoring Unit, or its employees, from purchasing electricity, power and Energy as retail customers for their own\_account and consumption.
  - 30.4.3.5 The Market Monitoring Unit and its employees must not be compensated, other than by the ISO, for any expert witness testimony or other commercial

- services, in connection with any legal or regulatory proceeding or commercial transaction relating to the ISO or to the markets that the ISO administers.
- The Market Monitoring Unit and its employees may not accept anything that is of more than *de minimis* value from a Market Party.
- 30.4.3.7 The Market Monitoring Unit and its employees must advise the Board in the event they seek employment with a Market Party, and must disqualify themselves from participating in any matter that could have an effect on the financial interests of that Market Party until the outcome of the matter is determined.
- 30.4.3.8 If the Market Monitoring Unit or any of its employees provide services to entities other than the ISO, the Market Monitoring Unit shall provide to the ISO's Board, and shall regularly update, a list of such entities and services. When the Market Monitoring Unit issues an opinion, report or recommendation to, for or addressing the ISO or the markets it administers that relates to, or could reasonably be expected to affect, an entity (other than the ISO) to which the Market Monitoring Unit or its employees provide services, the Market Monitoring Unit shall inform the ISO's Board of the opinion, report or recommendation it has issued, and that its opinion, report or recommendation relates to, or could reasonably be expected to affect, an entity to which the Market Monitoring Unit or its employees provide services.

# **30.4.4** Duties of the Market Monitoring Unit

The Market Monitoring Unit shall advise the Board, shall perform the Core Functions specified in Section 30.4.5 of Attachment O, and shall have such other duties and responsibilities

as are specified in Attachment O. The Market Monitoring Unit may, at any time, bring any matter to the attention of the Board that the Market Monitoring Unit may deem necessary or appropriate for achieving the purposes, objectives and effective implementation of Attachment O.

The Market Monitoring Unit shall not participate in the administration of the ISO's Tariffs, except for performing its duties under Attachment O. The Market Monitoring Unit shall not be responsible for performing purely administrative duties, such as enforcement of late fees or Market Party reporting obligations, that are not specified in Attachment O. The Market Monitoring Unit may (i) provide, or assist the ISO's efforts to develop, the inputs required to conduct mitigation, and (ii) assist the ISO's efforts to conduct "retrospective" mitigation (*see* Order 719 at PP. 369, 375) that does not change bids or offers (including physical bid or offer parameters) are considered in the ISO's market solution.

#### **30.4.5** Core Market Monitoring Functions

The Market Monitoring Unit shall be responsible for performing the following Core Functions:

- 30.4.5.1 Evaluate existing and proposed market rules, tariff provisions and market design elements and recommend proposed rule and tariff changes to the ISO, to the Commission's Office of Energy Market Regulation staff, and to other interested entities, including the New York Public Service Commission, and participants in the ISO's stakeholder governance process. Provided that:
- 30.4.5.1.1 The Market Monitoring Unit is not responsible for systematic review of every tariff and market rule; its role is monitoring, not audit.

- 30.4.5.1.2 The Market Monitoring Unit is not to effectuate its proposed market design itself.
- 30.4.5.1.3 The Market Monitoring Unit's role in recommending proposed rule and Tariff changes is advisory in nature, unless a Tariff provision specifically concerns actions to be undertaken by the Market Monitoring Unit itself.
- 30.4.5.1.4 The Market Monitoring Unit must limit distribution of issues or concerns it identifies, and its recommendations to the ISO and to Commission staff in the event it believes broader dissemination could lead to exploitation. Limited distributions should include an explanation of why further dissemination should be avoided at that time.
- 30.4.5.2 Review and report on the performance of the wholesale markets to the ISO, the Commission, and other interested entities such as the New York Public Service Commission and participants in its stakeholder governance process on at least a quarterly basis, and issue a more comprehensive annual state of the market report. The Market Monitoring Unit may issue additional reports as necessary.
- 30.4.5.2.1 In order to perform the Core Functions, the Market Monitoring Unit shall perform daily monitoring of the markets that the ISO administers. The Market Monitoring Unit's daily monitoring shall include monitoring of virtual bidding.
- 30.4.5.2.2 The Market Monitoring Unit shall submit drafts of each of its reports to the ISO for review and comment sufficiently in advance of the report's issuance to provide an effective opportunity for review and comment by the ISO. The Market Monitoring Unit may disregard any suggestions with which it disagrees.

The ISO may not alter the reports prepared by the Market Monitoring Unit, nor dictate the Market Monitoring Unit's conclusions.

- 30.4.5.3 Identify and notify the Commission staff of instances in which a Market Party's or the ISO's behavior may require investigation, including, but not limited to, suspected Market Violations.
- with § 35.28(g)(3)(iv) of the Commission's regulations (or any successor provisions thereto) the Market Monitoring Unit shall submit a non-public referral to the Commission in all instances where it has obtained sufficient credible information to believe a Market Violation has occurred. Once the Market Monitoring Unit has obtained sufficient credible information to warrant referral to the Commission, the Market Monitoring Unit shall immediately refer the matter to the Commission and desist from further investigation of independent action related to the alleged Market Violation, except at the express direction of the Commission or Commission staff. The Market Monitoring Unit may continue to monitor for repeated instances of the reported activity by the same or other entities and shall respond to requests from the Commission for additional information in connection with the alleged Market Violation it has referred.
- 30.4.5.3.2 The Market Monitoring Unit is not required to refer the actions (or failures to act) listed in this Section 30.4.5.3.2 to the Commission as Market Violations, because they have: (i) already been reported by the ISO as a Market Problem under Article 3.5.1 of the ISO Services Tariff; and/or (ii) because they pertain to actions or failures that: (a) are expressly set forth in the ISO's Tariffs;

- (b) involve objectively identifiable behavior; and (c) trigger a sanction or other consequence that is expressly set forth in the ISO Tariffs and that is ultimately appealable to the Commission. The actions (or failures to act) that are exempt from mandatory referral to the Commission are:
- 30.4.5.3.2.1 failure to meet a Contract or Non-Contract CRIS MW Commitment pursuant to Sections 25.7.11.1.1 and 25.7.11.1.2 of Attachment S to the ISO OATT that results in a charge or other a sanction under Section 25.7.11.1.3 of Attachment S of the ISO OATT;
- 30.4.5.3.2.2 Black Start performance that results in reduction or forfeitures of payments under Rate Schedule 5 to the ISO Services Tariff;
- 30.4.5.3.2.3 any failure by the ISO to meet the deadlines for completing System Impact Studies, or any failure by a Transmission Owner to meet the deadlines for completing Facilities Studies, under Sections 3.7 and 4.5 of the ISO OATT that results in the filing of a notice and/or the imposition of sanctions under those provisions;
- 30.4.5.3.2.4 failure of a Market Party to comply with the ISO's creditworthiness requirements set forth in Attachment K of the ISO Services tariff, or other action, that triggers sanctions under Section 7.5 of the ISO Services Tariff or Section 2.7.5 of the ISO OATT, specifically: (i) failure of a Market Party to make timely payment under Section 7.2.2 of the ISO Services Tariff or Section 2.7.3.2 of the ISO OATT that triggers a sanction under Sections 7.5.3(i) or 7.5.3(iv) of the ISO Services Tariff, or Sections 2.7.5.3(i), 2.7.5.3(iv), or 2.7.5.4 of the ISO OATT; (ii) failure of a Market Party to comply with a demand for additional credit support

under Article 26.6 of Attachment K of the ISO Services Tariff that triggers a sanction under Section 7.5.3(i) of the ISO Services Tariff or Section 2.7.5.3(i) of the ISO OATT; (iii) failure of a Market Party to cure a default in another ISO/RTO market under Sections 7.5.3(iii) of the ISO Services Tariff, or Section 2.7.5.3(iii) of the ISO OATT that triggers a sanction under either of those tariff provisions; (iv) failure of a Market Party that has entered into a Prepayment Agreement with the ISO under Appendix K-1 to Attachment K to the ISO Services Tariff to make payment in accordance with the terms of the Prepayment Agreement that triggers a sanction under the Prepayment Agreement or 7.5.3(i) of the ISO Services Tariff; and (v) failure of a Market Party to make timely payment on two occasions within a rolling twelve month period under Section 7.5.3(iv) of the ISO Services Tariff, or Section 2.7.5.3(iv) of the ISO OATT that triggers a sanction under either of those provisions.

- 30.4.5.3.2.5 bidding in a manner that results in a penalty under Section 23.4.3.3.4 of the Market Mitigation Measures.
- 30.4.5.3.2.6 submission of inaccurate fuel type information into the Day-Ahead Market that results in a penalty under Section 23.4.3.3.3 of the Market Mitigation Measures.
- 30.4.5.3.2.7 submission of inaccurate fuel type and/or fuel price information into the Real-Time Market that results in a penalty under Section 23.4.3.3.4 of the Market Mitigation Measures.

To the extent the above list enumerates specific Tariff provisions, the exclusions specified above shall also apply to re-numbered and/or successor provisions thereto. The Market

Monitoring Unit is not precluded from referring any of the activities listed above to the Commission.

- 30.4.5.4 Identify and notify the Commission staff of perceived market design flaws that could be effectively remedied by rule or tariff changes.
- 30.4.5.4.1 In compliance with § 35.28(g)(3)(v) of the Commission's regulations (or any successor provisions thereto) the Market Monitoring Unit shall submit a referral to the Commission when the Market Monitoring Unit has reason to believe that a market design flaw exists, that the Market Monitoring Unit believes could effectively be remedied by rule or tariff changes.
- 30.4.5.4.1.1 If the Market Monitoring Unit believes broader dissemination of the possible market design flaw, and its recommendation could lead to exploitation, the Market Monitoring Unit shall limit distribution of its referral to the ISO and to the Commission. The referral shall explain why further dissemination should be avoided.
- 30.4.5.4.1.2 Following referral of a possible market design flaw, the Market Monitoring Unit shall continue to provide to the Commission additional information regarding the perceived market design flaw, its effects on the market, any additional or modified observations concerning the Market Monitoring Unit's proposed market rule or tariff change, any recommendations made by the Market Monitoring Unit to the ISO, its stakeholders, Market Parties or state public service commissions regarding the perceived market design flaw, and any actions taken by the ISO regarding the perceived market design flaw.

# 30.4.6 Market Monitoring Unit Responsibilities Set Forth Elsewhere in the ISO's Tariffs

# **30.4.6.1** Supremacy of (Attachment O)

Provisions addressing the Market Monitoring Unit, its responsibilities and its authority, have been centralized in Attachment O. However, provisions that address the Market Monitoring Unit can also be found in the Market Mitigation Measures that are set forth in Attachment H to the ISO Services Tariff, and elsewhere in the ISO's Tariffs. In the event of any inconsistency between the provisions of Attachment O and any other provision of the ISO OATT, the ISO Services Tariff, or any of their attachments and schedules, with regard to the Market Monitoring Unit, its responsibilities and its authority, the provisions of Attachment O shall control.

# 30.4.6.2 Market Monitoring Unit responsibilities set forth in the Market Mitigation Measures

30.4.6.2.1 The ISO and its Market Monitoring Unit shall monitor the markets the ISO administers for conduct that the ISO or the Market Monitoring Unit determine constitutes an abuse of market power but that does not trigger the thresholds specified in the Market Mitigation Measures for the imposition of mitigation measures by the ISO. If the ISO identifies or is made aware of any such conduct, and in particular conduct exceeding the thresholds for presumptive market effects specified in Section 23.3.2.3 of the Market Mitigation Measures, it shall make a filing under § 205 of the Federal Power Act, 16 U.S.C. § 824d (1999) ("§ 205") with the Commission requesting authorization to apply appropriate mitigation measures. Any such filing shall identify the particular conduct the ISO believes warrants mitigation, shall propose a specific mitigation

measure for the conduct, shall incorporate or address the recommendation of its Market Monitoring Unit, and shall set forth the ISO's justification for imposing that mitigation measure. The Market Monitoring Unit's reporting obligations are specified in Sections 30.4.5.3 and 30.4.5.4 of Attachment O. *See* Market Mitigation Measures Section 23.1.2.

- 30.4.6.2.2 The ISO and the Market Monitoring Unit shall monitor the ISO

  Administered Markets for other categories of conduct, whether by a single firm or by multiple firms acting in concert, that have material effects on prices or guarantee payments in an ISO Administered Market. *See* Market Mitigation

  Measures Section 23.2.4.4.
- 30.4.6.2.3 If (i) the ISO determines, following consultation with the Market Party and review by the Market Monitoring Unit, that the Market Party or its representative has, over a time period of at least one week, submitted inaccurate fuel type or fuel price information that was, taken as a whole, biased in the Market Party's favor, *then* the ISO shall cease using the fuel type and fuel price information submitted to the ISO's Market Information System along with the Generator's Bid(s) to develop reference levels for the affected Generator(s) in the relevant (Day-Ahead or real-time) market for the durations specified in Sections 23.1.4.7.8.1, 23.3.1.4.7.8.2, and 23.3.1.4.7.8.3 of the Mitigation Measures. *See* Section 23.3.1.4.7.8 of the Market Mitigation Measures
- 30.4.6.2.4 When it has the capability to do so, the ISO shall determine the effect on prices or guarantee payments of questioned conduct through the use of sensitivity analyses performed using the ISO's SCUC, RTC and RTD computer models, and

- such other computer modeling or analytic methods as the ISO shall deem appropriate following consultation with its Market Monitoring Unit. *See* Market Mitigation Measures Section 23.3.2.2.1.
- 30.4.6.2.5 Pending development of the capability to use automated market models, the ISO, following consultation with its Market Monitoring Unit, shall determine the effect on prices or guarantee payments of questioned conduct using the best available data and such models and methods as they shall deem appropriate. *See* Market Mitigation Measures Section 23.3.2.2.2.
- 30.4.6.2.6 If through the application of an appropriate index or screen or other monitoring of market conditions, conduct is identified that (i) exceeds an applicable threshold, and (ii) has a material effect, as specified above, on one or more prices or guarantee payments in an ISO Administered Market, the ISO shall, as and to the extent specified in Attachment O or in Section 23.3.3.2 of the Market Mitigation Measures, contact the Market Party engaging in the identified conduct to request an explanation of the conduct. If a Market Party anticipates submitting bids in a market administered by the ISO that will exceed the thresholds specified in Section 23.3.1 of the Market Mitigation Measures for identifying conduct inconsistent with competition, the Market Party may contact the ISO to provide an explanation of any legitimate basis for any such changes in the Market Party's bids. If a Market Party's explanation of the reasons for its bidding indicates to the satisfaction of the ISO that the questioned conduct is consistent with competitive behavior, no further action will be taken. Market Parties shall ensure that the information they submit to the ISO, including but not

limited to fuel price and fuel type information, is accurate. Except as set forth in Section 23.3.1.4.7.7 of the Market Mitigation Measures, the ISO may not retroactively revise a reference level to reflect additional fuel costs if a Market Party or its representative did not timely submit accurate fuel cost information. Unsupported speculation by a Market Party does not present a valid basis for the ISO to determine that Bids that a Market Party submitted are consistent with competitive behavior, or to determine that submitted costs are appropriate for inclusion in the ISO's development of reference levels. Consistent with Sections 30.6.2.2 and 30.6.3.2 of the Plan, the Market Party shall retain the documents and information supporting its Bids and the costs it proposes to include in reference levels. A preliminary determination by the ISO shall be provided to the Market Monitoring Unit for its review and comment, and the ISO shall consider the Market Monitoring Unit's recommendations before the ISO issues its decision or determination to the Market Party. Upon request, the ISO shall consult with a Market Party or its representative with respect to the information and analysis used to determine reference levels under Section 23.3.1.4 of the Market Mitigation Measures for that Market Party's Generator(s). If cost data or other information submitted by a Market Party indicates to the satisfaction of the ISO that the reference levels for that Market Party's Generator(s) should be changed, revised reference levels shall be proposed by the ISO, communicated to the Market Monitoring Unit for its review and comment and, following the ISO's consideration of any recommendation that the Market Monitoring Unit is able to timely provide, communicated to the Market Party, and implemented by the ISO

as soon as practicable. Changes to reference levels addressed pursuant to the terms of Section 23.3.3.1.4 of the Market Mitigation Measures shall be implemented on a going-forward basis commencing no earlier than the date that the Market Party's consultation request is received. *See* Market Mitigation Measures Sections 23.3.3.1.1 through 23.3.3.1.5.

- 30.4.6.2.7 With regard to a Market Party's request for consultation that satisfies the requirements of Sections 23.3.3.3.1.4 and 23.3.3.3.1.7 of the Market Mitigation Measures, and consistent with the duties assigned to the ISO in Section 23.3.3.3.1.7.1 of the Market Mitigation Measures, a preliminary determination by the ISO regarding the Market\_Party's consultation request shall be provided to the Market Monitoring Unit for its review and the ISO shall consider the Market Monitoring Unit's recommendations in reaching its decision. *See* Market Mitigation Measures Section 23.3.3.3.1.7.1 and 23.3.3.3.1.7.2.
- 30.4.6.2.8 Reasonably in advance of the deadline for submitting offers in an External Reconfiguration Market and in accordance with the deadlines specified in ISO Procedures, the Responsible Market Party for External Sale UCAP may request the ISO to provide a projection of ICAP Spot Auction clearing prices for a Mitigated Capacity Zone over the Comparison Period for the External Reconfiguration Market. Prior to completing its projection of ICAP Spot Auction clearing prices for a Mitigated Capacity Zone over the Comparison Period for the External Reconfiguration Market, the ISO shall consult with the Market Monitoring Unit regarding such price projection. See Market Mitigation Measures Section 23.4.5.4.3.

- 30.4.6.2.9 Prior to reaching its decision regarding whether the presumption of control of Unforced Capacity has been rebutted, the ISO shall provide its preliminary determination to the Market Monitoring Unit for review and comment. *See*Market Mitigation Measures Section 23.4.5.5.
- 30.4.6.2.10 Any proposal or decision by a Market Participant to retire or otherwise remove an Installed Capacity Supplier from a Mitigated Capacity Zone Unforced Capacity market, or to de-rate the amount of Installed Capacity available from such supplier, may be subject to audit and review by the ISO if the ISO determines that such action could reasonably be expected to affect Market-Clearing Prices in one or more ICAP Spot Market Auctions for a Mitigated Capacity Zone subsequent to such action. Such an audit or review shall assess whether the proposal or decision has a legitimate economic justification or is based on an effort to withhold Installed Capacity physically in order to affect prices. The ISO shall provide the preliminary results of its audit or review to the Market Monitoring Unit for its review and comment. See Market Mitigation Measures Section 23.4.5.6.
- 30.4.6.2.11 When evaluating a request by a Developer or Interconnection Customer pursuant to Section 23.4.5.7 of the Market Mitigation Measures, the ISO shall seek comment from the Market Monitoring Unit on matters relating to the determination of price projections and cost calculations. <u>As required by Section 23.4.5.7.8 of Attachment H to this Services Tariff, the Market Monitoring Unit shall prepare a written report confirming whether the ISO's Offer Floor and exemption determinations and calculations conducted pursuant to Section</u>

23.4.5.7.2 of the Market Mitigation Measures were conducted in accordance with the terms of the Services Tariff, and if not, identifying the flaws inherent in the ISO's approach. This report shall be presented concurrent with the ISO's posting of its mitigation exemption determinations. Pursuant to Section 23.4.5.7.7 of the Market Mitigation Measures, the ISO shall also consult with the Market Monitoring Unit when evaluating whether any existing or proposed Generator or UDR project in a Mitigated Capacity Zone, except New York City, shall be exempted from an Offer Floor under that Section. Prior to the ISO making an exemption determination pursuant to Section 23.4.5.7.7, the Market Monitoring Unit shall provide the ISO a written opinion and recommendation. The Market Monitoring Unit shall also provide a public report on its assessment of an ISO determination that an existing or proposed Generator or UDR project is exempt from an Offer Floor under Section 23.4.5.7. See Market Mitigation Measures Section 23.4.5.7.

## 30.4.6.3 Market Monitoring Unit responsibilities set forth in the ISO Services Tariff

- 30.4.6.3.1 The ICAP Demand Curve periodic review schedule and procedures shall provide an opportunity for the Market Monitoring Unit to review and comment on the draft request for proposals, the independent consultant's report, and the ISO's proposed ICAP Demand Curves. *See* ISO Services Tariff Section 5.14.1.2.5.
- 30.4.6.3.2 The new capacity zone periodic review shall provide an opportunity for the Market Monitoring Unit to review and comment on the NCZ Study, and any proposed NCZ tariff revisions. See ISO Services Tariff Sections 5.16.1.3 and 5.16.4.

30.4.6.3.3 The Bid Restriction, specified in ISO Services Tariff Section 21.5.3.1, shall be the subject of a periodic, but no less frequent than annual, review by the Market Monitoring Unit, which review shall be presented to the ISO and to Market Participants. The review shall include, but not be limited to, an evaluation of whether an increase in the Bid Restriction, or its elimination, would provide incentives to raise offers for Regulation Movement substantially above levels that would be anticipated in an efficient market and whether the Bid Restriction prevents appropriate cost recovery. With its review, the Market Monitoring Unit shall recommend continuation, adjustment or elimination of the Regulation Movement Bid Restriction. See ISO Services Tariff Section 21.5.3.

## 30.4.6.4 Market Monitoring Unit responsibilities set forth in the Rate Schedules to the ISO Services Tariff.

### 30.4.6.4.1 Responsibilities related to the Regulation Service Demand Curve

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 in Section 15.3.7 of Rate Schedule 3 to the ISO Services Tariff. 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 90 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.

After the first year the Regulation Service Demand Curve is in place, the ISO shall perform periodic reviews, subject to the scope requirement specified in Section 15.3.7 of Rate Schedule 3 to the ISO Services Tariff, 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. *See* Section 15.3.7 of Rate Schedule 3 to the ISO Services Tariff.

#### 30.4.6.4.2 Responsibilities related to the Operating Reserves Demand Curves

In order to respond to operational or reliability problems that arise in real-time, the ISO may procure any Operating Reserve product at a quantity and/or price point different than those specified in Section 15.4.7 of Rate Schedule 4 to the ISO Services Tariff. 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 in Section 15.4.7 of Rate Schedule 4 to the ISO Services Tariff in order to avoid future operational or reliability problems it may temporarily modify them for a period of up to 90 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.

After the first year the Operating Reserves Demand Curves are in place, the ISO shall perform periodic reviews, subject to the scope requirement specified in Section 15.4.7 of Rate Schedule 4 to the ISO Services Tariff, and the Market Monitoring Unit shall be given the opportunity to review and comment on the ISO's periodic reviews of the Operating Reserve Demand Curves. *See* Section 15.4.7 of Rate Schedule 4 to the ISO Services Tariff.

## 30.4.6.5 Market Monitoring Unit responsibilities set forth in the Attachments to the ISO Services Tariff (other than the Market Mitigation Measures).

#### 30.4.6.5.1 Responsibilities related to Transmission Shortage Cost

The ISO may periodically evaluate the Transmission Shortage Cost to determine whether it is necessary to modify the Transmission Shortage Cost to avoid future operational or reliability problems. The ISO will consult with its Market Monitoring Unit after it conducts this evaluation.

If the ISO determines that it is necessary to modify the Transmission Shortage Cost in order to avoid future operational or reliability problems the resolution of which\_would otherwise require recurring operator intervention outside normal market scheduling procedures, in order to avoid among other reliability issues, a violation of NERC Interconnection Reliability Operating Limits or System Operating Limits, it may temporarily modify it for a period of up to 90 days, provided however the ISO shall file such change with the Commission pursuant to § 205 of the Federal Power Act within 45 days of such modification. 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 and shall explain the reasons for the change. *See* Section 17.1.4 of Attachment B to the ISO Services Tariff.

# 30.4.6.5.2 Responsibilities under Appendix 4 to the Operating Protocol for the Implementation of Commission Opinion No. 476 (the "Operating Protocol")

The ISO and PJM and their Market Monitoring Units shall, to the extent compatible with their respective tariffs and with any other market monitoring procedures that they have filed with the Commission:

- 30.4.6.5.2.1 Conduct such investigations as may be necessary to ensure that gaming, abuse of market power, or similar activities do not take place with regard to power transfers under the 600/400 MW contracts;
- 30.4.6.5.2.2 Conduct investigations that go into the region of the other ISO jointly with the ISO, PJM and both Market Monitoring Units;
- 30.4.6.5.2.3 Inform each other of any such investigations; and
- 30.4.6.5.2.4 Share information related to such investigations, as necessary to conduct joint investigations, subject to the requirements of Section C of Appendix 4 to the Operating Protocol and Section 30.6.6 of Attachment O.

See Section A of Appendix 4 to Attachment M-1 to the ISO Services Tariff.

- 30.4.6.6 Market Monitoring Unit responsibilities set forth in the ISO OATT
- 30.4.6.7 Market Monitoring Unit responsibilities set forth in the Rate Schedules to the ISO OATT
- 30.4.6.8 Market Monitoring Unit responsibilities set forth in the Attachments to the ISO OATT

#### 30.4.6.8.1 Responsibilities related to Transmission Shortage Cost

The ISO may periodically evaluate the Transmission Shortage Cost to determine whether it is necessary to modify the Transmission Shortage Cost to avoid future operational or reliability problems. The ISO will consult with its Market Monitoring Unit after it conducts this evaluation.

If the ISO determines that it is necessary to modify the Transmission Shortage Cost in order to avoid future operational or reliability problems the resolution of which would otherwise require recurring operator intervention outside normal market scheduling procedures, in order to avoid among other reliability issues, a violation of NERC Interconnection Reliability Operating Limits or System Operating Limits, it may temporarily modify it for a period of up to 90 days, provided however the ISO shall file such change with the Commission pursuant to \$205 of the Federal Power Act within 45 days of such modification. 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 and shall explain the reasons for the change. *See* Section 17.1.4 of Attachment B to the Services Tariff.

30.4.6.8.2 Following the Management Committee vote, the draft Reliability Needs

Assessment (RNA), with working group, Operating Committee, and Management

Committee input, will be forwarded to the ISO Board for review and action.

Concurrently, the draft RNA will be provided to the Market Monitoring Unit for its review and consideration of whether market rules changes are necessary to address an identified failure, if any, in one of the ISO's competitive markets. *See* Section 31.2.3.2 of Attachment Y to the ISO OATT.

- 30.4.6.8.3 Following the Management Committee vote, the draft Comprehensive Reliability Plan (CRP), with working group, Operating Committee, and Management Committee input, will be forwarded to the ISO Board for review and action. Concurrently, the draft CRP will also be provided to the Market Monitoring Unit for its review and consideration of whether market rule changes are necessary to address an identified failure, if any, in one of the ISO's competitive markets. *See* Section 31.2.6.2 of Attachment Y to the ISO OATT.
- 30.4.6.8.4 Following the Management Committee vote, the draft Congestion

  Analysis and Resource Integration Study (CARIS), with Business Issues

  Committee and Management Committee input, will be forwarded to the ISO

  Board for review and action. Concurrently, the draft CARIS will be provided to the Market Monitoring Unit for its review and consideration. *See* Section 31.3.2.2 of Attachment Y to the ISO OATT.
- 30.4.6.9 Market Monitoring Unit responsibilities set forth in other documents that have been formally filed with the Commission.

#### 30.4.7 Availability of Data and Resources to Market Monitoring Unit

30.4.7.1 The ISO shall ensure that the Market Monitoring Unit has sufficient access to ISO resources, personnel and market data to enable the Market Monitoring Unit to carry out its functions under Attachment O. Consistent with

- Section 30.6.1 of Attachment O, the Market Monitoring Unit shall have complete access to the ISO's databases of market information.
- 30.4.7.2 Any data created by the Market Monitoring Unit, including but not limited to reconfiguration of the ISO's data, will be kept within the exclusive control of the Market Monitoring Unit. The Market Monitoring Unit may share the data it creates, subject to the limitations on distribution of and obligation to protect the confidentiality of Protected Information that are contained in Attachment O, the ISO Services Tariff, and the ISO's Code of Conduct.
- 30.4.7.3 Where data outside the ISO's geographic footprint would be helpful to the Market Monitoring Unit in carrying out its duties, the Market Monitoring Unit should seek out that data (with assistance from the ISO, where appropriate).

#### 30.10 Reports

#### **30.10.1** Annual Reports

The Market Monitoring Unit shall prepare and submit to the Board an annual report on the competitive structure of, market trends in, and performance of, other competitive conditions in or affecting, and the economic efficiency of, the New York Electric Markets. Such report shall include recommendations for the improvement of the New York Electric Markets or of the monitoring, reporting and other functions undertaken pursuant to Attachment O and the Market Mitigation Measures. A copy of the report shall be forwarded by the Board to each of the Interested Government Agencies, with such comments or other remarks as the Board shall deem appropriate. Copies of the report shall be made publicly available by the Board by posting them on the ISO's web site, subject to redaction or other measures necessary for the protection of Protected Information.

#### **30.10.2 Ouarterly Reports**

In addition to the annual report, the Market Monitoring Unit shall issue three quarterly reports that are less extensive than the annual report. Each quarterly report shall provide timely updates to the annual report, emphasizing issues of concern to the Market Monitoring Unit.

Quarterly reports shall be distributed in the same manner as the annual report.

#### 30.10.3 Report on Virtual Bid and Offer Market Design and Rules

The Market Monitoring Unit shall monitor and assess the impact of virtual bids and offers on the competitive structure and performance of, and the economic efficiency of, the ISO Administered Markets. Such monitoring and assessment shall include the effects, if any, of virtual bids and offers on any automated mitigation procedures, or any mitigation measures

specified in Section 23.5 of the Market Mitigation Measures. An assessment of the market impacts of virtual bids and offers shall be included in the annual report required by Section 30.10.1, above, and in a quarterly report when the Market Monitoring Unit deems appropriate.

#### **30.10.4** Reports on Offer Floor or Exemption Determinations

The Market Monitoring Unit shall prepare a written report confirming whether the ISO's Offer Floor and exemption determinations and calculations conducted pursuant to Sections 23.4.5.7.2 and 23.4.5.7.7 of the Market Mitigation Measures were conducted in accordance with the terms of the Services Tariff, and if not, identifying the flaws inherent in the ISO's approach. The Market Monitoring Unit's report shall be presented concurrently with the ISO's posting of the exempt/non-exempt determinations.

#### **30.10.5** Conference Calls

The Market Monitoring Unit shall participate in regular conference calls for the presentation of market data and analyses of the type regularly gathered and prepared by the Market Monitoring Unit under Attachment O, subject to limitations on dissemination of Protected Information. Market Participants, staff of the Commission and the New York Public Service Commission, and representatives of the ISO may attend such conference calls.

#### 30.10.65 Other Reports or Filings

The Market Monitoring Unit, with the assistance of the MMA, where appropriate, shall prepare such other periodic or other reports on any matters within their purview as the Market Monitoring Unit determines are necessary, or as may be requested by the Board, the CEO or the CEO's designee, the COO, or any of the Interested Government Agencies. Unless the Board or the Interested Government Agency requesting such report specifies to the contrary, copies of

such reports shall be made publicly available by the Board, subject to redaction or other measures necessary for the protection of Protected Information. All reasonable fees and expenses for the preparation of reports or other filings relating to the New York Electric Markets that are requested by an Interested Government Agency from the Market Monitoring Unit, or that are requested by an Interested Government Agency from a former Market Monitoring Unit with respect to conditions or conduct occurring in or relating to the period during which the person, persons or entity receiving the request served as the Market Monitoring Unit, shall be borne by the ISO.