## 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, or require the Market Party to use the default bid or bid parameter in the Bids it submits 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.

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. However, the ISO shall perform the Day-Ahead guarantee payment impact test for Generators that are committed in the Day-Ahead Market for local reliability, and that are not located in a Constrained Area, at the 50% increase Constrained Area threshold specified in Section 23.3.2.1(2) of these Mitigation Measures.

23.4.3.3.3.1.3 Day-Ahead Reliability Commitments in a Constrained Area Consistent with Section 23.5.2 of these Mitigation Measures, the conduct and impact thresholds for In-City Generators committed in the Day-Ahead Market for local reliability shall each be zero.

#### 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

Each of tThe Market Party's Bids for a Generator will be treated as having a Real-Time Market LBMP impact if (1) 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 (2) the lesser of (x) the Generator's Bid, or (y) the reference level that was actually used to test the Bid for LBMP impact in the Real-Time Market for that hour, wasis greater than or equal to the real-time LBMP at the PTID that represents 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.

However, the ISO shall perform the real-time guarantee payment impact test for Generators that are committed outside the ISO's economic merit order selection process via a SRE, and that are not located in a Constrained Area, at the 50%

increase Constrained Area threshold specified in Section 23.3.2.1(2) 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 Minimum Generation Bid or 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 Generatorsh = 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 23.4.3.3.2.2 or 23.4.3.3.2.3 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<sub>gh</sub> =  $\underline{\text{the lesser of the Market Party's Bids or}}$  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  $MWh_{gh} = MWh$  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.