

Proposed Measure to Apply Mitigation to Generators Committed for Reliability

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11/23/2009

Introduction

- ◆ NYISO had requested feedback and alternative proposals from Market Participants
 - *We have not received any proposals..*
- ◆ Topics to be covered In this presentation:
 - *Background and summary of mitigation proposal*
 - *Topics raised during the tariff language presentation November 16*

Background: Generators Committed for Reliability Possess Market Power

- ◆ Outside of NYC, Generators that are committed for reliability outside of the normal economic dispatch
 - *Will possess market power, and*
 - *Receive revenues equal to their offer price (through LBMP or BPCG revenues)*
 - *Will therefore, have an incentive to raise their offer price*
 - This undermines a critical feature of the uniform price auction market design. Generators should have an incentive to offer at marginal cost in order to maximize their profits.

Mitigation Proposal

- ◆ Apply guarantee payment mitigation (substitute a reference level for the Generator's Bid) if the following conditions are met:
 1. *The Generator is located outside of the Constrained Area (New York City); and*
 2. *The Generator was committed to protect or maintain New York Control Area or local system reliability*
 - as a Day-Ahead Reliability Unit ("DARU"),
 - via a Supplemental Resource Evaluation ("SRE"), or
 - via an Out-of-Merit action

Or, if the Generator was dispatched Out-of-Merit to protect or maintain New York Control Area or local system reliability; and
 3. *the Supplier that owns or offers the Generator(s) is the only Supplier that can, or is the Supplier that has been designated to, solve the reliability need for which the Generator was committed or dispatched; and*

Mitigation Proposal (con't)

4. *One or more of the thresholds specified below are exceeded (mitigate each Bid or Bid component for which the proposed threshold is exceeded);*
 - exceeded the Generator's Minimum Generation Bid reference level by the greater of 10% or \$10/MWh, or
 - exceeded the Generator's Incremental Energy Bid reference level by the greater of 10% or \$10/MWh, or
 - exceeded the Generator's Start-Up Bid reference level by 10%, or
 - exceeded the Generator's minimum run time, start-up time and minimum down time reference level by more than one hour, or
 - exceeded the Generator's minimum generation MW reference level by more than 10%, or
 - decreased the Generator's maximum number of stops per day below the Generator's reference level by more than one stop per day, or to one stop per day.

Tariff Language

- ◆ An initial draft of the proposed tariff language was presented to MIWG on November 16
- ◆ A number of questions were raised. The following slides address the following questions/issues raised at that meeting;
 - *The basis of the proposed thresholds*
 - *How a generator needed for reliability, but not selected economically, recovers its costs*
 - *Notification timeframes*

Basis for the thresholds

- ◆ Generator's Minimum Generation Bid and Energy Bid thresholds: exceeding the reference level by the greater of 10% or \$10/MWh
 - *The purpose of the thresholds is to account for fluctuations in the costs a unit may face and to reduce the likelihood of unnecessary consultations. This threshold is not intended to permit recovery of fixed costs.*
 - *All units have the opportunity to request a consultation under Att H §3.3.3.1.*

Basis for the thresholds (cont.)

- *To establish the thresholds, we looked to our neighbors, and the volatility of natural gas prices*
 - For Day Ahead Reliability Units (DARU) we looked at the fluctuation of day to day natural gas prices.
 - In calculating the likelihood of over-mitigation, the NYISO examined day-over-day changes in Transco Z6 NY spot natural gas costs for the time period May 11, 2007 through October 7, 2009. The NYISO found that the daily price changes reflected spot natural gas price increases in excess of 10% on less than one day in twenty. (proprietary data used but similar data is available publicly)
 - Such changes in gas price would have increased the reference levels of a generator with a heat rate of 8,000 btu/kwh by 10% or more on 4.1% of the market days studied. Similarly, such changes in prices would have increased the reference prices of a generator with a heat rate of 13,000 btu/kwh by 10% or more on 4.2% of the market days studied.
 - In an effort to avoid imposing an unduly tight threshold on lower cost units, the NYISO's proposed threshold is the greater of a 10% or \$10/MWh increase over the applicable reference level.

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Basis for the thresholds (cont.)

- **For units committed via Supplemental Resource Evaluation (SRE) there are no intraday fuel cost indices available to perform a similar volatility analysis.**
 - The Reference Level Software (RLS) project is addressing this issue because fuel type and fuel price will be optional bid parameters indicating the fuel type and price applicable to that hour's operation
 - *Fuel type and price that are bid will index reference for market hour bid/reference pair*
 - *Bid parameters will override default definitions in cost based submittal*
 - *Fuel type and price can change on an hourly basis in real-time, must use the same fuel type/price for all hours of the DAM*
 - This will give MPs the ability to change their fuel type and price without requiring a reference update request –either routine or emergency (see the October 7 RLS Technical Conference presentation).

Basis for the thresholds (cont.)

- Physical Parameter Thresholds

	Current Full Conduct Thresholds (Att. H §2.1.3)	Proposed New Thresholds
Time based Parameters (Start Up Time, Minimum Run Time, Minimum Down Time)	An increase of 3 hours, or an increase of 6 hours in total for multiple time-based bid parameters.	Exceed the reference levels by more than one hour in aggregate
Bid parameters expressed in units other than time or dollars: Minimum Generation MW	A 100 percent increase for parameters that are minimum values, or a 50 percent decrease for parameters that are maximum values	Exceed the reference level by more than 10%.
Bid parameters expressed in units other than time or dollars: Max Stops		Decrease to below the Generator's reference level by more than one stop per day, or to one stop per day.

*Note: Not proposing a new threshold for Ramp Rates

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Basis for the thresholds (cont.)

- ◆ Current average bid based references by unit type (this is provided for discussion only and does not reflect the variation across units)
 - *Quick start and 30 min units*
 - Minimum Run time 1 hour
 - Minimum Down Time 1 to 2 hours
 - Start-up Notification Time 0 and 30 minutes
 - Max Stops per Day 3
 - *Combined Cycle and Combustion Units*
 - Minimum Run time 3 to 8 hours
 - Minimum Down Time 1 to 4 hours
 - Start-up Notification Time 3 hours
 - Max Stops per Day 1
 - *Fossil Fuel Units*
 - Minimum Run time 20+ hours
 - Minimum Down Time 35+ hours
 - Start-up Notification Time 12 hours
 - Max Stops per Day 1

Basis for the thresholds (cont.)

- ◆ How do the thresholds compare to those in ISO-NE?
 - *Time Based Offer Parameters*
 - An increase greater than 2 hours or greater than 6 hours for a combination of such time based parameters.
 - Ex; minimum run time, minimum down time, start up time
 - *Offer Parameters Expressed Other than in Time or Dollars*
 - 100% increase for minimum values
 - Ex: minimum generation MW
 - 50% decrease for maximum values
 - Ex: max stops per day

Cost Recovery

- ◆ How does a generator needed for reliability but not selected economically recover its costs?
 - *This question is addressed in the NYISO's October 13, 2009 filing in Docket No. ER09-1682. This slide attempts to summarize the NYISO's response in that docket.*
 - *Any Generator that is committed for reliability will, at minimum, be permitted to recover its actual marginal costs, and will have an opportunity to receive additional economic commitments to the extent it is available for additional dispatch.*
 - *For Generators that are not otherwise economically viable, but are needed for reliability, Section 8.9 of Attachment Y to the OATT authorizes the NYISO Board, in consultation with the New York Department of Public Service ("DPS"), to identify "an imminent threat to the reliability of the New York power system" and, once an imminent threat is determined, to require the appropriate Transmission Owner or Owners to propose an appropriate "Gap Solution" outside the normal reliability planning cycle.*
 - Other entities, including Generators, can also submit proposed Gap Solutions.

Cost Recovery (cont.)

- *If the operation of one of the generators is needed to prevent an imminent threat to the reliability of the New York State Bulk Power Transmission Facilities, and if such a Generator would cease operations because it is not able to recover its legitimate going-forward costs, then the predicate for the use of an Attachment Y Section 8.9 Gap Solution would be met.*
- *Section 13.6 of Attachment Y provides for the recovery of the costs of a Gap Solutions that are not transmission projects; such as the funding of a reliability must-run arrangement with a given Generator in appropriate circumstances.*
- *There is no need to permit Generators to exercise market power in the energy, ancillary services, or capacity markets in order to make necessary cost recovery payments to Generators that are genuinely needed for the reliability of the bulk power system and that are not able to recover their legitimate going-forward costs.*

Notification Timeframes

- ◆ Proposed that for MinGen, SU or IE the NYISO would send an email or other notifications to potentially impacted Market Participant within 10 business days after the relevant market day.
- ◆ Proposed that for Time based parameters and for MinGen MW and max stops per day, the NYISO would send an e-mail within 20 business days.
 - *This is anticipated to be a manual process and we need the time to complete the manual process.*
 - Time based parameters, MinGen MW and Max Stops per day require additional analysis
 - The NYISO is willing to consider shortening notice of conduct violations for physical/operating parameters to 10 days based on market participant feedback, by defining the required notification as notice that the operating parameters submitted for a reliability-committed generator exceeded the relevant conduct threshold(s).

Proposed Phased Implementation

- ◆ Phase 1: Implementation of measures for units committed for reliability via SRE or DARU for units located outside of the Constrained Area where the supplier is the only Supplier that can, or is the Supplier that has been designated by a transmission owner to solve, the reliability need.
 - *This would effectively expand the proposed rate schedule M-1 measure to a larger set of offers.*
 - *This mitigation is an after-the-fact mitigation of Bid Production Cost Guarantees.*
- ◆ Phase 2: Continued implementation for Units committed or dispatched via OOM (and not committed via SRE or DARU).
- ◆ Future phases (subject to project prioritization)
 - *Implementation of targeted LBMP mitigation for units dispatched to solve newly reflected reliability constraints outside NYC.*

Proposed Timeline

- ◆ Market Issues Working Group:
 - *September 14, October 26, November 16, November 23, special meeting early December (if needed), December 18*
- ◆ Business Issues Committee:
 - *December or January*
- ◆ Management Committee:
 - *January or February*
- ◆ Board of Directors:
 - *February or March*
- ◆ File with the Commission:
 - *end of March*
- ◆ First phase:
 - *Targeted implementation June 2010 –*
 - implementation of SRE and DARU units
 - implementation of OOM dispatch above an SRE or DARU commitment.
- ◆ Future phases:
 - *Schedule to be determined.*

Next Steps

- ◆ Feedback
 - *Written comments can be sent to Leigh Bullock lbullock@nyiso.com.*
 - Identify in the document whether you want the comments to be kept confidential or want them to be posted
- ◆ Review revised proposed Tariff language for SRE and DARU committed units (including generators that are dispatched OOM following a SRE or DARU commitment) at the December 18, 2009 MIWG (or at a special meeting if needed).



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for the state's bulk electricity system.

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