Proposed Measure to Apply Mitigation to ROS Generators Committed for Reliability

Dr. Nicole Bouchez
Manager, Market Mitigation and Analysis
New York Independent System Operator

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Outline

Topics to be covered In this presentation:

1. Background.
2. Proposed Mitigation Measure and Tariff Changes.
3. Schedule and Next Steps.

The Appendix includes supporting information.

Generators Committed for Reliability Possess Market Power

- Outside of NYC, Generators that are committed for reliability outside of the normal economic dispatch
  - *Often have local market power*
    - When there is a single Supplier (or very limited number of Suppliers) that can meet the reliability need
    - When the reliability need is well understood and/or when the majority of the Generator's operation is a result of reliability commitments.
  - *These Generators receive revenues equal to their offer price (through LBMP or BPCG revenues)*
  - *Therefore, they 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.

ROS Thresholds too Lenient

- The current "Rest of State" conduct and impact thresholds are too lenient to adequately mitigate reliability committed or reliability dispatched Generators.
- ROS Thresholds:
  - *Conduct = an increase in the bid above the reference level by the lesser of $100/MWh or 300%.*
  - *Impact =*
    - an increase of 200 percent or $100 per MWh, whichever is lower, in the hourly Day-Ahead or Real-Time Energy LBMP at any location, or of any other price in an ISO Administered Market; or
    - an increase of 200 percent in guarantee payments to a Market Party for a day.

NYISO's 9/4/09 Section 205 Filing

- Sections 1(b) and 3.2.3 of the NYISO's Market Mitigation Measures ("MMM") require the NYISO to look for abuses of market power that do not exceed the conduct and impact thresholds that must be met for the NYISO to mitigate a bid or offer, but that, nevertheless, depart significantly from the conduct that would be expected under competitive market conditions.
- If the NYISO identifies conduct;
  - *that departs significantly from the conduct that would be expected under competitive market conditions, and*
  - *causes either*
    - an increase of 100 percent in the hourly day-ahead or real-time energy LBMP at any location, or of any other price in an ISO Administered Market; or
    - an increase of 100 percent in guarantee payments to a Market Party for a day,
  - *then the NYISO is <u>required</u> to make a Federal Power Act ("FPA") Section 205 filing.*

Section 205 Filing (con't)

- On 9/4/2009 the NYISO made a section 205 filing proposing to prospectively apply new mitigation rules to three specifically identified Generators.
  - *As explained in its filing, the NYISO and its Market Advisor believe that the Generators exceeded the 1(b) and 3.2.3(2) thresholds.*
- In the filing the NYISO committed to develop, with its stakeholders, an appropriate mitigation measure to apply to Generators/Suppliers that are pivotal when they are committed or dispatched for reliability.
- The proposed measure narrowly addresses the market power concerns and neither changes the OATT Att. Y process nor is intended to establish legitimate going-forward costs.
- The proposed mitigation measures were discussed at the following stakeholder meetings
  - *September 8 – Overview of filing and proposed measures*
  - *October 21- Overview of proposed measures*
  - *November 16 – Review of proposed tariff language*
  - *November 23 – Discussion of basis for proposed thresholds*
  - *December 3 – Discussion of generator retirements/Att. Y process*
  - *December 17- Specific questions/ Review of proposed tariff language*

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"), or
   - via a Supplemental Resource Evaluation ("SRE"),

   *Or, after commitment via DARU or SRE, if the Generator was **further** dispatched above its Minimum Generation point Out-of-Merit to protect or maintain New York Control Area or local system reliability; and*

3. *One of the following four (i) – (iv) conditions must be satisfied in order for mitigation to be applied:*
   - *i. the Market Party (including its Affiliates) that owns or offers the Generator is the only Market Party that could solve the reliability need for which the Generator was committed or dispatched, or*
   - *ii. the Generator was the only resource designated by a Transmission Owner to solve a local reliability need, or*
   - *iii. when evaluating an SRE, the NYISO only received Bids from one Market Party (including its Affiliates), or*
   - *iv. when evaluating a DARU, if the Market Party was notified of the need for the reliability commitment of its Generator prior to the close of the Day-Ahead Market.*

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.

Proposed Phased Implementation

- Summer 2010 – Targeted for 1 June 2010
  - *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+: Future phases (subject to project prioritization and requiring additional tariff changes)
  - *Continued implementation for Units committed or dispatched via OOM (and not committed via SRE or DARU).*
  - *Implementation of targeted LBMP mitigation for units dispatched to solve newly reflected reliability constraints outside NYC.*

Schedule and Next Steps

- Market Issues Working Group:
  - *September 14, October 26, November 16, November 23, December 3, December 17*
- Business Issues Committee:
  - *January 6*
- Management Committee:
  - *January 20*
- Board of Directors:
  - *February*
- File with the Commission:
  - *February / March*
- First phase:
  - *Targeted implementation June 2010 –*
    - implementation of SRE and DARU units
    - implementation of OOM dispatch above an SRE or DARU commitment.

Appendices

A - Basis for the thresholds

B - Generators the mitigation measure will apply to

C - Cost Recovery

D - Mitigated bids or bid components will be used in all aspects of the generator's settlement

A-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 it 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.

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**

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

B- Generators the mitigation measure will apply to

- This mitigation measure will only apply to SRE and DARU committed units or, if the Generator was committed via DARU or SRE and the Generator was further dispatched above its minimum generation point Out-of-Merit (OOM) to protect or maintain New York Control Area or local system reliability;
  - *Had initially proposed to extend the mitigation measure to all OOM committed or dispatched units.*
  - *Based on a technical review of the complexity of implementation combined with a lower likelihood of exercise of market power, OOM-committed units will not be included*
    - The NYISO will continue to actively monitor the bids of OOM units and will propose a revised mitigation measure if concerns are identified.
    - The proposed measure **does not** include units that have their DARU or SRE commitments temporally extended via an OOM for reliability.

Generators the mitigation measure will apply to (cont.)

- Pivotal units and units who have been informed they will be needed prior to DAM-bid close
  - *The mitigation measure will apply to Pivotal Units – Generator(s) where the Supplier that owns or offers the Generator(s) is the only Supplier that can solve the reliability need for which the Generator was committed or dispatched.*
  - *The mitigation measure will also apply when a single Supplier/Generator is identified by a Transmission Owner as necessary to address a local reliability need.*
  - *The proposed mitigation measure will apply to generators that are notified prior to DAM bid close (for DARU units) or prior to HAM bid close (for SRE units) that their unit will be required for reliability (either Local or NYISO)*
    - If the NYISO has bids from multiple suppliers to evaluate for a DARU commitment, it will not ordinarily notify the potential suppliers prior to the close of the DAM.
    - If the NYISO requests SRE bids from multiple suppliers that are each capable of addressing a reliability concern, it will not apply the proposed Section 3.1.2(c) mitigation measure to the bid it selects following economic evaluation in the SRE process.

C- Cost Recovery

- How does a 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.*

NEW YORK INDEPENDENT SYSTEM OPERATOR

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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