



# **Start-up Bids Treatment**

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# Agenda

- ◆ Background
  - *Timeline*
  - *Issues Identified*
  - *Current Tariff provisions*
  - *NYISO's proposal*
- ◆ Tariff revisions
- ◆ Next Steps
- ◆ Questions/Feedback

# Background

- ◆ During the 1/17 MIWG, the NYISO presented to Stakeholders two self-identified issues regarding the treatment of Start-up Bids.
- ◆ The NYISO proposed to allow all Generators to increase Start-up Bids in Real Time (RT).
  - *During the 01/26 MIWG, the NYISO expanded on the rationale for its proposal*
- ◆ The NYISO presented its proposed changes to the DAMAP provisions at the 02/16 MIWG.
- ◆ The proposed Tariff revisions were presented at the 02/28 MIWG.

# Issues Identified

- ◆ The NYISO identified two issues regarding the treatment of Start-up Bids:
  - Generators scheduled for Energy and/or Regulation services in the DAM, have been able to inappropriately increase their Start-up Bids in RT. This occurs due to the order of precedence for single point and multi-point Start-up Bids.
  - Generators scheduled for Reserve services in the DAM, who should be allowed to increase Start-up Bids in RT, cannot do so.

# Different Types of Start-up Bids

- ◆ Generators can submit two types of Start-up Bids:
  - *Single point Start-up Bid*, which specifies the cost to start the Generator as part of hourly offers.
  - *Multi-point Start-up Bid*, which specifies the cost to start the Generator based on how long the Generator has been offline and how long it takes to start.
- ◆ If both types are submitted, the single point Start-up Bid takes priority over the multi-point Start-up Bid. The Bids are exclusive.

# **Energy and Regulation Bids Must Not Be Increased**

- ◆ Pursuant to NYISO's Market Administration and Control Area Services Tariff (MST), if a Generator is scheduled in the Day-Ahead Market ("DAM") to provide Energy and/or Regulation services, the Start-up Bids in Real-Time ("RT") must not exceed the Bids made in the DAM for any hour in which the Generator was scheduled. [Section 4.4.1.2.1, MST]



# Reserve Bids Can Be Changed

- ◆ In March 2011, the Attachment D of the NYISO's MST was removed.
- ◆ This change lifted the prohibition for Generators scheduled to provide reserves in the DAM to increase Start-up Bids in Real-Time.

# Allow Generators to increase Start-up Offers in RT

- ◆ The NYISO's proposal to address the issues identified allows all Generators scheduled in the Day-Ahead Market (DAM) to increase Start-up Offers in RT.
  - *Under the NYISO's proposal, if a Generator scheduled for Energy and/or Regulation in the DA that increased its Start-up Bid in RT was re-evaluated by RTC, then:*
    - That Generator would become ineligible for DAMAP for the hour in which it increased its Bid, as well as the two previous and following hours.
      - This is consistent with the current treatment of Incremental Energy Bids.



# Long term benefits

- ◆ Allowing Generators to increase Start-up Bids in RT regardless of the DA commitments, would result in more efficient RT scheduling decisions, and consequently, more efficient market outcomes.

# Tariff Revisions

- ◆ Section 4.4.1.2.1 – Real-Time Bids to Supply Energy and Ancillary Services, other than External Transactions
  - *The prohibition for DAM-scheduled Generators to increase Start-up Bids in RT is lifted.*

# Tariff Revisions

- ◆ Section 25 (Attachment J) – Determination of Day-Ahead Margin Assurance Payments and Import Curtailment Guarantee Payments
  - *New Section 25.2.2.5 added addressing the provisions for DAMAP eligibility of DAM-scheduled Generators, which are re-evaluated by RTC, and are providing Energy and/or Regulation Services.*
    - This section specifies that when a DA-scheduled Generator that is available for commitment by RTC increases its RT Start-up Bid, that Generator becomes ineligible for DAMAP for the hour in which it increased its Bid as well as the prior two hours and the following two hours.

# Next steps

- ◆ The NYISO intends to bring this proposal to the March MC meeting for action.
- ◆ The NYISO plans to implement the hereby described proposal by June 2017.

# Questions/Feedback

Please contact

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# Appendix A – How inefficient scheduling may occur

- ◆ Simplified scenario:
  - ◆ *The only bid components are Energy and Start-up costs*
  - ◆ *One-hour day*
  - ◆ *Quick-start Generators*
  - ◆ *Total Load equals 1 MWh*

<i>Generator</i>	<i>A</i>			<i>B</i>		
	<i>Energy [\$/MWh]</i>	<i>Start-up [\$]</i>	<i>Total [\$]</i>	<i>Energy [\$/MWh]</i>	<i>Start-up [\$]</i>	<i>Total [\$]</i>
DA offer [Energy + Start-up]	20	10	30	20	20	40
DA Schedule		✓			✗	
RT costs	25	20	45	20	20	40
RT Schedule (if allowed to increase)		✗			✓	



# Appendix B – DAMAP eligibility: Non-Quick-Start Units

- ◆ If a DAM-scheduled Generator does not have the capability to start in 30 minutes or less, its Start-up Offer is not re-evaluated in RT.
  - *Therefore, the NYISO does not propose any changes to DAMAP eligibility for such resources.*

# Appendix B – DAMAP eligibility: Quick-Start Units

- ◆ If a Generator does have the capability to start in 30 minutes or less, it is re-evaluated in RT.
  - *Therefore, if it increases its Start-up Offer in RT, it could be de-committed.*
    - Under the NYISO's proposal, if a Generator capable of starting in 30 minutes or less was scheduled in the DAM to provide energy and/or regulation, and it increases its Start-up Offer in RT, it would become ineligible for DAMAP.
    - If a Generator capable of starting in 30 minutes or less was scheduled in the DAM to provide non-synchronous reserves, its Start-up Offer would not have been considered for the award.
      - Consequently, under the NYISO's proposal it should remain eligible for DAMAP.

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- *Maintaining and enhancing regional reliability*
- *Operating open, fair and competitive wholesale electricity markets*
- *Planning the power system for the future*
- *Providing factual information to policy makers, stakeholders and investors in the power system*

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