



Start-up Bids Treatment

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Agenda

- ◆ Background
 - *Issues identified*
- ◆ Rationale
- ◆ 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.
- ◆ Stakeholders expressed interest in delving into the motivation for allowing Generators to increase Start-up Bids in Real Time (RT).

Issues Identified

- ◆ The NYISO has identified two issues regarding the treatment of Start-up Bids:
 - Generators scheduled for Energy and/or Regulation services in the Day-Ahead Market (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.

The original prohibition rationale no longer applies

- ◆ The original prohibition for increasing Start-up Bids in Real Time (RT) corresponded to a limited software capability rather than a market design constraint.

Costs in the DA and RT may differ

- ◆ From a market design perspective, it is reasonable to allow Generators to reflect their actual RT Start-up costs.
 - *This is consistent with the treatment of RT incremental Energy Bids today.*
- ◆ Start-up costs can vary between DA and RT.
 - *Fuel prices, for example, might be highly volatile, and vary substantially.*

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*

Generator	A			B		
	Energy [\$/MWh]	Start-up [\$]	Total [\$]	Energy [\$/MWh]	Start-up [\$]	Total [\$]
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)		✗			✓	

Increasing Start-up Bids may enhance transparency

- ◆ Generators scheduled in the DAM receive payments for their DA start-up costs.
 - *Changes in RT to Start-up Bids would not affect these payments.*
- ◆ Nonetheless, increasing Start-up Bids would provide the NYISO with better information about the cost to commit the Generator in RT.

Increasing Start-up Bids may enhance market efficiency

- ◆ Additionally, the NYISO does not guarantee the DA commitment of fast-start resources.
 - *In RT, fast-start resources will be recommitted if necessary.*
 - A quick-start Generator may choose to purchase fuel DA or in RT. Nevertheless, the fact that resources are recommitted in RT if needed, may translate into an incentive to purchase fuel in RT.

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.

Next steps

- ◆ The NYISO intends to work with its stakeholders during Q1-2017 to develop tariff revisions to permit Generators with DA Energy or Regulation schedules to increase Start-up Bids.
- ◆ The NYISO will implement software logic to allow units to increase Start-up Bids in the RT market when scheduled for Reserve services in the DAM.

Questions/Feedback

Please contact
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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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