Out of Merit (OOM) Treatment

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 Background • Overview OOM Price Setting Eligibility OOM Operational Announcements Summary/ Next Steps

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Agenda



Background

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Background Stakeholders approved Hybrid GT Pricing Improvements at the September 28, 2016 Management Committee meeting* The NYISO was asked to return to a MIWG for clarification of: Which OOM types are eligible to set price Which OOM types are posted to the NYISO's **Operational Announcements**

*Link to the 9/28/2016 Management Committee meeting presentation: http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2016-09-28/Agenda%2007_Hybrid%20GT%20Pricing%20Improvements.pdf

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Overview



Overview

OOM actions by the NYISO fall into three action types, further classified based on the reason for the OOM

The OOM types in the table at right are currently in use

Note: OOM for Testing and START UP/ SHUT DOWN are two department after the market software has run.

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Action Type	OOM			
<section-header></section-header>	ISO VOLTAGE SUPPORT			
	OPS INTERVENE/MODIFY MINGEN			
	OPS INTERVENE/MODIFY UOL			
	OPS INTERVENE/MODIFY BOTH			
	COMMITTED FOR ISO RELIABILITY			
	ISO ENERGY LIMITED RES			
	OOM FOR RESERVES			
Gen Action	GEN REQUEST/MODIFY MINGEN			
	GEN REQUEST/MODIFY UOL			
	GEN REQUEST/MODIFY BOTH			
TO Action	OOM FOR TO RELIABILITY			
	TO VOLTAGE SUPPORT			

Note: OOM for Testing and START UP/ SHUT DOWN are two additional OOM types assigned by the NYISO's settlements



Price Setting Eligibility

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Price Setting Eligibility -Fundamentals A dispatchable resource in between Lower Operating Limit (LOL) and Upper Operating Limit (UOL) is eligible to set price, regardless of whether or not the

unit is OOM

Dispatchable resources at LOL or UOL cannot be marginal dispatchable between zero and UOL

 A GT operates at a single point (LOL equal to UOL) In the ideal dispatch, GTs are normally modeled as

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Price Setting Eligibility – GT Treatment GTs that are Out of Merited are eligible to set price, provided the OOM type allows commitment flexibility

- A GT with an OOM type that limits flexibility is modeled as having LOL equal to UOL in the pricing pass
 - This is effectively the same treatment as when a GT is not eligible to set price under the current hybrid GT pricing logic (the current hybrid GT pricing logic will be modified Q1 2017, see slide 21 of the Hybrid GT Pricing Improvements MC presentation for more information on the hybrid GT pricing logic)

If a GT is committed in Real Time to resolve a constraint that is modeled in the market software, then the GT will be eligible to set price



Price Setting Eligibility – GT Treatment

 A GT with the following OOM types is not eligible to set price **ISO** Action ISO Voltage Support Transmission Owner Action • TO Reliability TO Voltage Support

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OOM Operational Announcements

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OOM Operational Announcements The NYISO posts certain OOM notices on its website under Market & Operational Data, Reports & Information, **Operational Announcements*** Notices are posted for the following OOM types, except

- where noted:
 - ISO Action

 - OOM for Reserves (notice is not posted if the unit is a GT)
 - ISO Voltage Support
 - **TO Action**
 - TO Voltage Support OOM for TO Reliability

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Committed for ISO Reliability (notice is not posted if the unit is a GT)

*Link to Market & Operational Data: http://www.nyiso.com/public/markets_operations/market_data/re ports_info/index.jsp



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Summary/ Next Steps



Summary

Action Type	OOM	GT Eligible to Set Price?	Public Notice Posted?	Example Message
	ISO VOLTAGE SUPPORT	No	Yes	ISO REQUESTS HUNTLEY67 OUT OF MERIT. ISO VOLT SUPPORT AT START TIME 08/02/2007 10:00 FOR VOLTA SUPPORT @ GARDENVILLE / WESTERN VOLTAGES
	OPS INTERVENE/MODIFY MINGEN	Yes	No	N/A
	OPS INTERVENE/MODIFY UOL	Yes	Νο	N/A
	OPS INTERVENE/MODIFY BOTH	Yes	Νο	N/A
	START-UP/SHUT DOWN	Yes*	No	N/A
	NYISO GEN AUDIT	Yes*	No	N/A
	COMMITTED FOR ISO RELIABILITY	Yes	Yes, Unless the unit is a GT	ISO REQUESTS GILBOA3 OUT OF MERIT. COMMITED FO RELIABILITY AT START TIME 08/24/2016 12:00 FOR Secu
	ISO ENERGY LIMITED RES	Yes	No	N/A
	OOM FOR RESERVES	Yes	Yes, Unless the unit is a GT	ISO REQUESTS GILBOA 4 OUT OF MERIT. COMMITTED ISO RESERVES AT START TIME 02/01/2008 11:00 FOR 10 SYNC.
Gen Action	GEN REQUEST/MODIFY MINGEN	Yes	No	N/A
	GEN REQUEST/MODIFY UOL	Yes	Νο	N/A
	GEN REQUEST/MODIFY BOTH	Yes	No	N/A
TO Action	OOM FOR TO RELIABILITY	No	Yes	Metering Authority - New York State Electric & Gas REQU MILLIKEN2 OUT OF MERIT. OOM FOR TO RELIABILIT START TIME 07/06/2015 07:00 FOR security.
	TO VOLTAGE SUPPORT	No	Yes	Metering Authority - Niagara Mohawk UPDATES HUNTLEY OUT OF MERIT. TO VOLTAGE SUPPORT AT START TIM 08/02/2006 12:00 FOR Var support in western NY.

*Note: OOM for Testing and START UP/ SHUT DOWN are two additional OOM types assigned by the NYISO's settlements department after the market software has run

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 The Transmission & Dispatching Operations Manual describes OOM Generation at section 5.7.4* The NYISO will clarify its description of OOM types with the next round of updates to the Transmission & **Dispatching Operations Manual**

*Link to Transmission & Dispatching Operations manual: http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Operations/trans_disp.pdf **DRAFT – FOR DISCUSSION PURPOSES ONLY**

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Next Steps



interest and provide benefit to consumers by:

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

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