

Establishing Zone J Operating Reserves

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Agenda

- Introduction
- Background
- Demand Curve Pricing
- Proposed Tariff Revisions

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Introduction

Introduction

- At the January 8, 2019 MIWG/ICAPWG meeting, NYISO proposed accelerating the market design and deploying a Zone J operating reserves requirement in June 2019.
- At the January 15, 2019 MIWG/ICAPWG meeting, NYISO proposed establishing a new Zone J reserve region with a 500 MW 10-minute and 1,000 MW 30-minute reserve requirement.
- This presentation will discuss NYISO's proposed operating reserve demand curve prices for the Zone J reserve products and the proposed tariff revisions for this initiative.

Background

Zone J Operating Reserves Timeline

- **An accelerated stakeholder engagement process and deployment timeline is required to implement a Zone J reserve requirement in June 2019.**
 - A customer impact assessment would not be separately completed for this component of the overall project prior to seeking stakeholder approval to implement a Zone J reserve requirement.
 - The NYISO will provide a more limited scope impact assessment specific to the Zone J reserve requirement prior to seeking a stakeholder vote on the proposal
- **Proposed schedule for accelerated deployment:**
 - January and February 2019 (MIWG/ICAPWG)
 - Present/discuss market design, associated tariff revisions, and market impacts.
 - March 2019
 - Seek stakeholder approval at BIC and MC.
 - April 2019
 - Assuming stakeholder approval, seek Board of Directors approval.
 - Assuming approval by the Board of Directors, file tariff revisions with FERC seeking approval to implement in June 2019.

More Granular Operating Reserves Timeline

- The Zone J reserve requirement is one of three components of the 2019 More Granular Operating Reserves project.
- The deliverable for the remaining two components (evaluating load pocket reserves and reviewing reserve performance) would remain a Market Design Complete in Q3 2019.
- A typical consumer impact assessment would be completed as part of the remaining components of the project.
- Proposed stakeholder engagement plan:
 - Q2 2019
 - Present/discuss Market Design Concept Proposal.
 - Q3 2019
 - Present/discuss complete Market Design proposal and associated tariff revisions.

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Background

- Establishing a separate Zone J Operating Reserves requirement was originally recommended in the 2017 State of the Market and 2018 Management Response to Analysis Group's *Capacity Resource Performance in the NYISO Markets: An Assessment of Wholesale Market Options* (Performance Assurance Management Response).
- Stakeholders also raised concerns regarding the current market design in connection with reviewing scarcity pricing outcomes during EDRP/SCR activations in summer 2018.

Zone J Operating Reserve Procurement

- The NYISO proposes to establish a new NYC reserve region and procure 500 MW of 10-minute reserves and 1,000 MW of 30-minute reserves in Zone J, consistent with NYSRC reliability rules for NYCA reliability.
- Creating a Zone J reserve region and associated reserve requirements has the potential to provide:
 - More efficient scheduling and procurement of resources.
 - Locationally specific market price signals for the necessary resource availability and flexibility to meet system reliability needs.
 - More efficient price signals during SCR/EDRP activations.

NYCA Operating Reserves with Zone J

NYCA (Zone A – K)	
A=most severe NYCA Operating Capability Loss (1310 MWs)	
10 Min Spinning Reserve	½ A=655 MWs NYSRC Rule
10 Min Total Reserve	A=1310 MWs NYSRC Rule
30 Min Reserve	2xA=2620 MWs NYSRC Rule

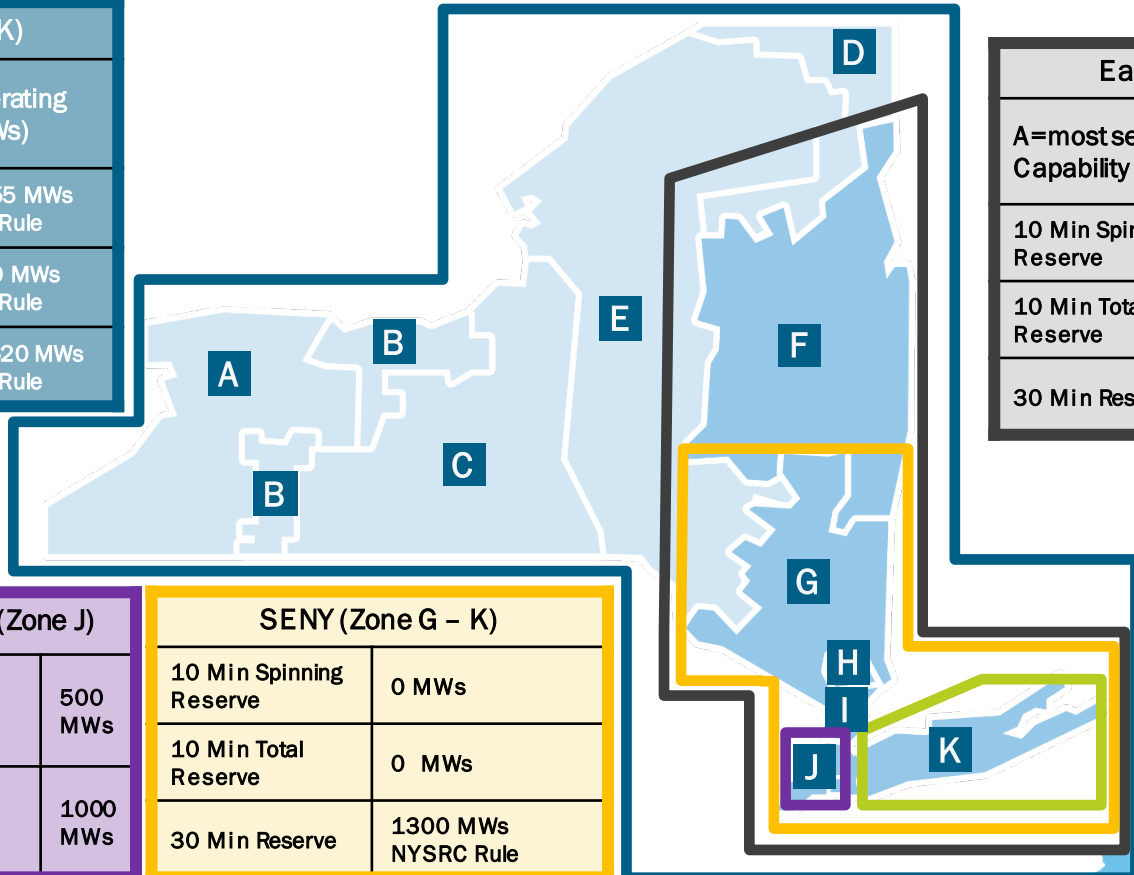
East (Zone F – K)	
A=most severe NYCA Operating Capability Loss (1310 MWs)	
10 Min Spinning Reserve	¼ A=330 MWs NERC, NPCC Rule
10 Min Total Reserve	1200 MWs NYSRC Rule
30 Min Reserve	1200 MWs NERC, NPCC Rule

A	WEST
B	GENESE
C	CENTRL
D	NORTH
E	MHK VL
F	CAPITL
G	HUD VL
H	MILLWD
I	DUNWOD
J	N.Y.C.
K	LONGIL

NYC (Zone J)	
10 Min Total Reserve	500 MWs
30 Min Reserve	1000 MWs

SENY (Zone G – K)	
10 Min Spinning Reserve	0 MWs
10 Min Total Reserve	0 MWs
30 Min Reserve	1300 MWs NYSRC Rule

Long Island (Zone K)	
10 Min Spinning Reserve	0 MWs
10 Min Total Reserve	120 MW NERC, NPCC Rule
30 Min Reserve	270 – 540 MWs Max limits NYSRC Rule



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Understanding the Market Impacts

- During the January 8, 2019 working group meeting, stakeholders requested that the NYISO consider providing information on the implications for including a Zone J Operating Reserve requirement within the energy market.
 - Stakeholders agreed that this does not need to take the form of a formal Consumer Impact Analysis.
- The NYISO will provide information regarding the impacts of including Zone J Operating Reserve requirements within the energy market.
 - The NYISO plans to provide this information by the end of February 2019.

Zone J Operating Reserve Pricing

Zone J Operating Reserve Pricing

- **As discussed at the January 15, 2019 MIWG/ICAPWG meeting, during Thunderstorm Alerts (TSA), the Zone J reserve requirements would not change.**
 - Today the SENY 30-minute demand curve price is \$500/MW at all times.
 - During a TSA, the SENY 30-minute operating reserve requirement is reduced to 0 MW from 1,300 MW.
 - This would allow for an expedited implementation.
 - The NYISO will further consider whether changes to the NYC reserve demand curve pricing and/or requirements are necessary/appropriate during TSAs as part of the larger More Granular Operating Reserves project.
- **At the January 15, 2019 MIWG/ICAPWG meeting, stakeholders requested an analysis into the impact of not changing Zone J reserve requirements during a TSA.**
 - The NYISO's impact analysis will include intervals during which a TSA was in effect.

Proposed Zone J Operating Reserve Pricing

New York Region	Operating Reserve Type	Demand Curve Amount (MW)	Demand Curve Price (\$)
NYCA	10 Spin Reserve	All	\$775
	10 Total Reserve	All	\$750
	30 Minute Reserve	300	\$25
		655	\$100
		955	\$200
Remainder	\$750		
East	10 Spin Reserve	All	\$25
	10 Total Reserve	All	\$775
	30 Minute Reserve	All	\$25
SENY	10 Spin Reserve	All	\$25
	10 Total Reserve	All	\$25
	30 Minute Reserve	All	\$500
LI	10 Spin Reserve	All	\$25
	10 Total Reserve	All	\$25
	30 Minute Reserve	All	\$25
NYC/Zone J	10 Spin Reserve	All	\$25
	10 Total Reserve	All	\$25
	30 Minute Reserve	All	\$25

- The NYISO is proposing to establish operating reserve demand curves that assign a \$25/MWh value to the proposed reserve requirements for Zone J.
- The NYISO recognizes that the activation of SCR/EDRP resources to protect Zone J reserves represents a \$500/MWh action.
 - This implies that a \$500/MWh demand curve price for Zone J reserve products could, in the longer-term, be an appropriate value to consider.
- However, as previously noted, to facilitate an implementation for June 2019, the NYISO is not proposing to revise the Zone J reserve requirements during TSA events.
- Use of a \$500/MWh demand curve price, absent further evaluating the appropriate reserve requirements during TSA events, could result in unnecessarily high pricing outcomes during such events.

Zone J Operating Reserve Pricing

- **Similar to the approach that was taken with the implementation of the SENY reserve region, the NYISO proposes to initially implement a \$25/MWh demand curve price for Zone J reserves as part of an accelerated June 2019 implementation.**
 - Potential revisions to the Zone J reserve demand curve prices and the treatment of the Zone J reserve requirements during TSA events will be further evaluated and discussed in the broader context of the More Granular Operating Reserves project.
- **A preliminary investigation reveals that sufficient reserves to meet the proposed requirements are often scheduled on units in NYC under the current design without the need for out-of-market actions.**
 - Implementing a Zone J reserve region with a \$25/MWh demand curve value represents an incremental enhancement and would support more efficient pricing during Zone J SCR/EDRP activations.

Proposed Tariff Revisions

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Proposed Tariff Revisions

- The establishment of a Zone J reserve region and associated reserve requirements would require changes to the following tariff sections:
 - MST 2.15
 - MST 15.4
 - MST 15.6
 - OATT 1.15
- The proposed tariff revisions are posted with today's meeting materials.

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Proposed Tariff Revisions

■ MST 2.15: Definitions

- Proposed changes to the term “Operating Reserve Demand Curve” to remove unnecessary language that is already addressed in Section 15.4.7 of Rate Schedule 4 of the MST.

■ OATT 1.15: Definitions

- Proposed removal of unnecessary duplication of language between the MST and OATT by instead providing cross-references to the MST definitions of “Operating Reserves” and “Operating Reserve Demand Curve”.

MST 15: Rate Schedules

- **Proposed changes within Rate Schedule 4 (MST Section 15.4) and Rate Schedule 6 (MST Section 15.6):**
 - **Proposed Revisions to MST Rate Schedule 4**
 - Revisions to reserve region descriptions and reserve clearing price calculations to account for a NYC reserve region (Sections 15.4.1.1, 15.4.4.1, 15.4.5.1, 15.4.6.1, and 15.4.7)
 - Revisions to scarcity pricing rules to account for a NYC reserve region (Section 15.4.6.1.1)
 - Establishment of Operating Reserve Demand Curves for a NYC reserve region (Section 15.4.7)
 - Ministerial revisions (Sections 15.4.1.2.2, 15.4.1.2.3, 15.4.2.1, and 15.4.6.1.1)
 - **Proposed Revisions to Rate Schedule 6**
 - Revisions to the payment calculations for Quick Start Reserve providers to utilize NYC reserve prices (Section 15.6.5.1)
 - Ministerial revision (Section 15.6.4)

Next steps:

Continue discussions at February 2019 MIWG/ICAPWG meetings.

Feedback/Questions?

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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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