Establishing Zone J Operating Reserves

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Agenda

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- Background
- NYISO Recommendation

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.
- This presentation focuses on establishing a Zone J reserve requirement in the market by June 2019.
- This project is part of the 'More Granular Operating Reserves' project.

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.
- **Proposed schedule for accelerated deployment:**
  - January and February 2019 (MIWG/ICAPWG)
    - Present/discuss market design and associated tariff revisions.
  - March 2019
    - BIC and MC vote on market design.
  - 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.

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More Granular Operating Reserves Timeline

- The deliverable for evaluating load pocket reserves and reviewing reserve performance would be Q3 2019 Market Design Complete.
- A 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.

Background

Background

- This project has the potential to provide locationally specific market signals consistent with reliability needs.
- 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.

State of the Market Recommendations

- **Implementing Zone J Operating Reserves in the market could address the following recommendation from the 2017 State of the Market Report.[1]**
  - Potomac Economics recommended that the NYISO consider implementing local reserve requirements in New York City.

1. See Recommendation 2017-1 in the 2017 State of the Market Report, located at the following link: https://www.nyiso.com/documents/20142/2223763/2017-State-Of-The-Market-Report.pdf/cd4ee8a0-1989-dfa0-b53e-2d642c65e46d

Performance Assurance Management Response

- **The Performance Assurance Management Response[1] indicated that the NYISO should consider establishing and securing a separate 10 minute reserve requirement for New York City.**
  - New York State Reliability Council (NYSRC) reliability rules require that "[s]ufficient ten (10) minute operating reserves shall be maintained in the NYC zone" – NYSRC Reliability Rules.
  - Doing so would provide locationally specific market signals consistent with the reliability need.

1. Presentation: https://www.nyiso.com/documents/20142/1409110/Performance%20Assurance%20Feb%2021%20ICAPWG%20FINAL.pdf/a102c473-49bf-ef35-77fa-3f871782011c;
2. Management Response: https://www.nyiso.com/documents/20142/1409110/Performance%20Assurance%20Management%20Response%20Feb%2021%20MIWG%20FINAL.PDF/d0417e14-f437-c79c-a032-8a48191ae71d

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Summer 2018 EDRP/SCR Events

- **NYISO activated EDRP/SCR in Zone J three times in summer 2018 for operating reserve needs.**
  - Information on these activations and scarcity price outcomes were reviewed at the September 26, 2018 MC meeting and October 2, 2018 MIWG/ICAPWG meeting.
  - EDRP/SCR activations ranged from 480-495 MW each day.
  - Following these EDRP/SCR events, Potomac Economics reiterated in its Third Quarter 2018 report[1] its 2017 SOM recommendation that NYISO incorporate NYC reserve requirements into the market software.
- **During those EDRP/SCR activations, NYISO procured additional 30 minute reserves within Zone J consistent with the scarcity pricing rules.**
  - Average scarcity reserve requirement ranged from 326-337 MW each day.
  - Reserve shortage pricing was triggered in the market for only a handful of intervals, while the outcomes show that absent the EDRP/SCR activations, the NYC reserve needs would have been deficient frequently.
- **Following these activations, some market participants and Potomac Economics expressed support to include Zone J/NYC reserve requirements within the market as soon as possible.**

1. See slides 12 and 13 in Potomac Economics' "Quarterly Report on the New York ISO Electricity Markets Third Quarter of 2018" https://www.nyiso.com/documents/20142/2927097/NYISO-Quarterly-Report-2018-Q3.pdf/fea3f24e-d2ea-e497-58c3-3e8c4d5e4ce8

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NYSRC Reliability Rules[1]

- **NYSRC Rule G.B.R.3 requires roughly 500 MW of 10-minute operating reserve in NYC.**
  - Currently, SCUC produces a report which compares the amount of 10-minute reserve procured to the 500 MW requirement.
  - If this local reliability rule requirement is deficient, then the NYISO notifies Con Edison so that the transmission owner can take manual action to procure the necessary reserve.
- **The NYSRC rules, in Table C-2, requires 500 MW of 10-minute operating reserve and 1,000 MW of 30-minute operating reserves be procured in NYC for NYCA reliability.**
  - Currently, if these requirements are not satisfied by the procurement of other existing reserve requirements, NYISO Operations, working with Con Edison, will take manual action to procure the necessary reserves.
  - If a deficiency of this reserve requirement is forecasted, NYISO would evaluate activating SCR/EDRP resources, among other actions.
- **These requirements are not currently reflected in the NYISO's market software.**

1. NYSRC Reliability Rules: http://www.nysrc.org/pdf/Reliability%20Rules%20Manuals/RRC%20Manual%20V43%20Final%5b4070%5d.pdf

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NYISO Recommendation

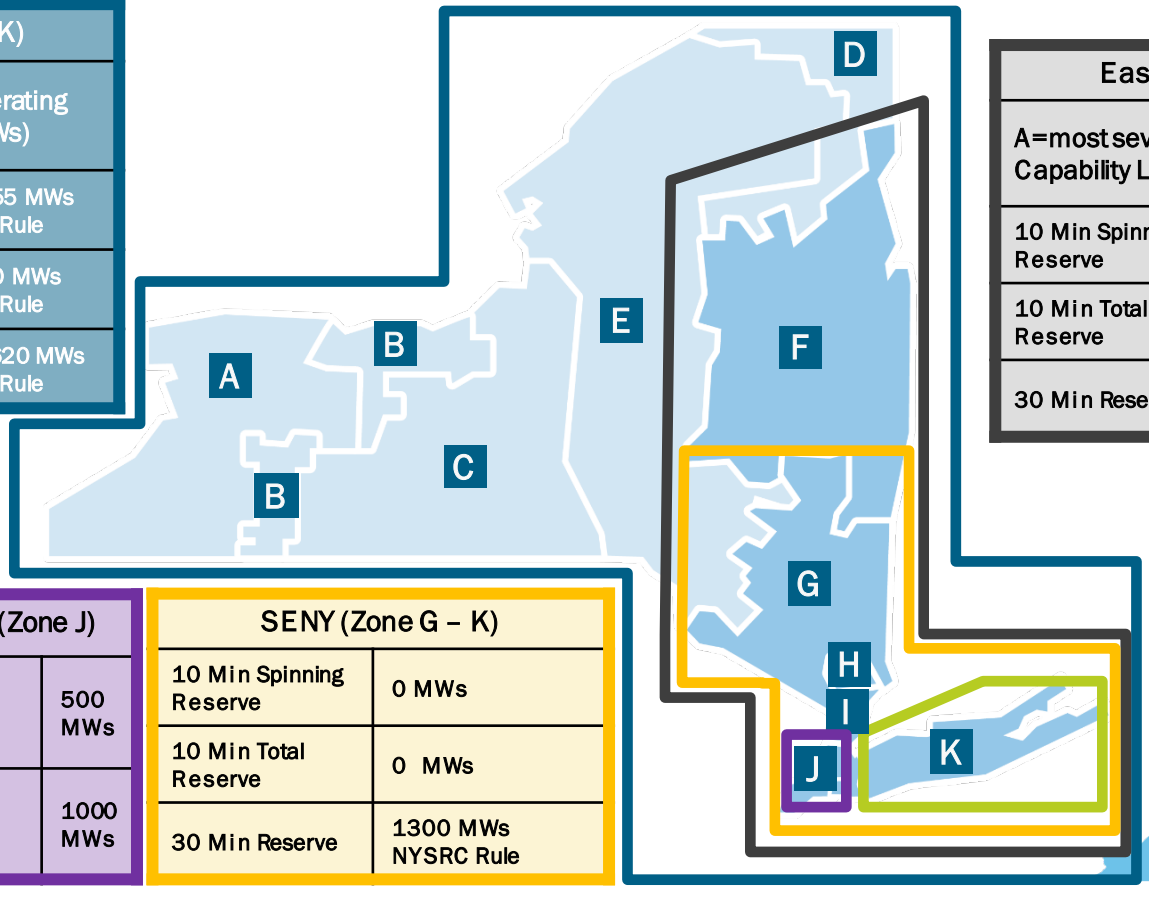
Zone J Operating Reserve Procurement

- **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

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



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

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

Zone J Operating Reserve Pricing

- **The NYISO is currently considering the appropriate operating reserve demand curve prices for NYC reserves and will present its proposed pricing as part of further discussions regarding this proposal.**
- **During Thunderstorm Alerts (TSA), the Zone J reserve requirements and associated demand curve prices 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.

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 has considered this request and agrees to 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.

Next steps:

Continue discussions at the January 24, 2019 MIWG/ICAPWG meeting.

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Feedback/Questions?

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- 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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