Reserves for Resource Flexibility

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Agenda

- Background
- Reserves for Resource Flexibility
- Timeline



Background



Background

- At the June 13, 2018 MIWG* meeting, the NYISO presented a high level market design concept proposal for "Reserve Procurement for Resilience."
 - The NYISO is targeting a more detailed market design concept proposal, leading to a completed market design this year.
- The name of this project is being revised to Reserves for Resource Flexibility.
 - This revision better reflects the goal of this market design, i.e. to incent resource and demand flexibility that supports grid resilience as we prepare for increased levels of nonemitting, weather-dependent generation.
 - The NYISO recommends implementation of Reserves for Resource Flexibility in 2020.

Link to the June 13, 2018 MIWG meeting presentation:

https://www.nviso.com/documents/20142/1403334/Reserve%20Procurement%20for%20Resilience%20June%20MIWG%20FINAL.pdf/47626d1e-a3e7-b781-9b6a-01b52a25e548



Background - Review of Previous Proposal

- The NYISO previously proposed procuring additional operating reserves when cost effective.
 - The additional reserves would be procured in both the DAM and RTM.
- The NYISO contemplates that any such additional reserve procurements would be in effect at all times.



Reserves for Resource Flexibility



Reserves for Resource Flexibility

- Today, the NYISO procures the amount of operating reserves to meet the minimum reliability standards established by NERC, NPCC, and NYSRC.
 - These reserves serve to bring transmission assets to Emergency Transfer Criteria after suffering a contingency.
 - Procuring additional 30 minute reserves in each reserve region would provide ready access to additional resource flexibility through a market-based mechanism to bring transmissions assets to Normal Transfer Criteria following a contingency.
 - Absent such a mechanism, out of market actions may be required to return facilities to Normal Transfer Criteria following a contingency.
- System volatility is expected to increase as the amount of non-emitting, weather-dependent generation increases within the NYCA.
 - Procuring additional 10 minute synchronous reserves in the NYCA reserve region would provide ready
 access to additional resource flexibility through a market-based mechanism to manage this volatility.
 - Absent such a mechanism, out of market actions may be required to manage this volatility on the grid.

Expected Benefits

- Additional reserves would provide more flexibility to respond to unforeseen grid conditions in real-time.
- Providing resources with a reserve schedule incents those resources to take additional steps to prepare for conversion from reserve to energy.
 - These steps, such as managing fuel and conducting maintenance, increase the likelihood that resources will be able to perform when called upon.
- Procuring additional reserves would allow the NYISO to introduce more gradual demand curve steps, signaling an approaching shortage of reserve procured for the minimum reliability standards as the system becomes more constrained.
 - This could provide a more stable price signal to which resources and load are better able to respond.

Next Steps



Next Steps

June 2019 ICAPWG/MIWG meetings

- Continue stakeholder discussions
- Present Market Design Concept Proposal (MDCP)

Q3 2019

- Continue stakeholder discussions
- Seek stakeholder approval of completed market design at BIC/MC
- **2020**
 - Implement Reserves for Resource Flexibility



The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- 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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