Treatment of Energy Storage Resources in IRM Studies

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Agenda

- Preview the new Energy Storage Resources (ESRs) to be modeled in the upcoming IRM cycle
- Update on GE's proposal for modeling ESR's
- Possible interim simplified modeling approach



Resources Likely to be Included in the 2020 IRM

- Based on 2018 Gold Book*
 - Montauk Battery Storage Zone K
 - Requested CRIS: 5 MWs
 - East Hampton Battery Storage Zone K
 - Requested CRIS: 5 MWs

*https://www.nyiso.com/documents/20142/2226333/2018-Load-Capacity-Data-Report-Gold-Book.pdf/7014d670-2896-e729-0992-be44eb935cc2 (Table IV-1)



GE's Proposed ESR Model

- Monthly energy limitation
- Storage that can be carried over month to month
- Only used if there is a loss of load event

- Can accommodate limitations on:
 - Number of hours per year
 - Number of hours per month
 - Number of hours per day
 - Number of days per month
 - Number of days per year
 - Energy per month
 - Energy per day



NYISO Review

 Upon release, NYISO will review the GE ESR model with the NYSRC ICS



Simplified Model

- Pending validation of GE's model
- Model ESRs as artificial DSM shapes
 - Discharge into the system during peak times
 - Charge during off peak hours
- Adjust energy limits to meet expectations
 - Meet battery duration limits



Next Steps

- NYISO will notify ICS when the GE ESR model becomes available
- Testing of GE ESR model and interim approach
 - Report back to ICS beginning in April
- NYISO recommendation on ESR modeling method for the 2020 IRM



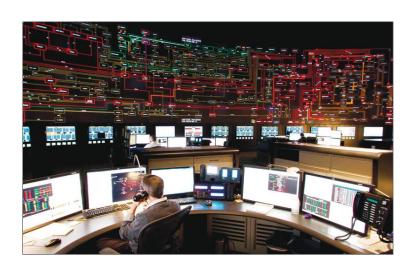
Questions?

Questions or comments can be sent to rcarlson@nyiso.com



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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