

2020 IRM Study: Preliminary Proposed Modeling Changes

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Objective

- Review Emergency Operating Procedures (EOPS) in the current IRM model
- Discuss changes proposed to be implemented in the RNA model



Current EOP Steps

- 1. Operating Reserves
- 2. SCR Load
- 3. SCR Gen
- 4. EDRP (No longer modeled in IRM 2020)
- 5. Manual Voltage Reduction
- 6. 30 Minute Reserve
- 7. Remote 5% Voltage Reduction
- 8. Voluntary Curtailment
- 9. Pubic Appeals
- 10. Emergency Assistance
- 11. 10 Minute Reserve
- 12. NYSRC EC Adjustment (Placeholder if needed)



NYISO RNA study

- RNA study assumptions are undergoing review as part of the study process
- RNA team presented certain initial study assumptions at the 2/27/2020 ESPWG meeting
 - https://www.nyiso.com/documents/20142/11030182/07%20202
 O_RNA_BaseCaseModelAssumptions.pdf/8a22b5c0-d7f5-2c8c-6eaa-2f752ec6f027



RNA Initial Proposed Changes

- Consolidate EOP Steps 2 and 3
 - Basis for separating SCR Load and SCR Gen resources no longer applicable
 - Operations calls these resources as a group
 - Very small (4th decimal) upward pressure on LOLE
- Recommendation to ICS to adopt



RNA Initial Proposed Changes - Cont'd

- Implement 15 SCR calls per year vs. 5 calls per month
 - Functionality introduced in updated GE MARS version
 - NYISO peak load period is end of July and beginning of August
 - These resources may be needed for more than 5 days in the month
 - NYISO's staff implementing distributed resource operations recommends
 15 calls per year
 - Small downward pressure on the LOLE
- NYISO will report impact of change to ICS at the next meeting with recommendation

RNA Maintenance Change

- RNA Study will remove the 50 MW summer maintenance assumption in the IRM model
 - Appropriate for the RNA study goals and long-term study period
- IRM model appropriately accounts for some level of scheduled maintenance to determine resource adequacy
 - ICS annually reviews the summer maintenance assumption
- NYISO Resource Adequacy recommends not adopting this change (i.e., continue to review summer maintenance annually and set the value as appropriate)



RNA Battery Modeling Under Evaluation

- RNA team is exploring various options, including MARS functionality
- IRM Model currently has only one front-of-the-meter battery storage facility (5 MW)
 - No recommendations at this time
 - Will keep ICS apprised of progress on modeling enhancements



Resource Adequacy - Proposed Changes

Remove EOP Step 4 - EDRP

- ICS agreed to remove EDRP resources from the IRM model
- Step 4 remained in model as an empty placeholder
- Recommend that the step be permanently removed

Merge EOP Steps 8 and 9

- Currently only Zone K has resources for Public Appeals
- Simplifies model and reduces runtime
- Can still maintain separate data reporting

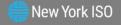


Proposed IRM EOP Steps

- 1. Operating Reserves
- 2. SCR Resources
- 3. Manual Voltage Reduction
- 4. 30 Minute Reserve
- 5. Remote 5% Voltage Reduction
- **6.** Public Appeals & Voluntary Curtailment
- 7. Emergency Assistance
- 8. 10 Minute Reserve
- 9. NYSRC EC Adjustment (placeholder if needed)



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 policymakers, stakeholders and investors in the power system



