

June 2nd, 2021 ICS Meeting #247

Prepared for the June 2nd, 2021 EC Meeting – Brian Shanahan

1. Status of 2021 IRM Study

- Continued to populate the draft assumptions matrix
- Began the process of building the 2021 IRM Preliminary Base Case (PBC)
- Updated PBC Topology and Load Shapes
- Updated SCR performance and LFU bins
- An initial list of IRM Sensitivities was reviewed.
- Generation changes were presented for 2021-22 for model inclusion (Gold Book data updates).
  - There was considerable discussion related to the use of new generator registration status as part of the screening procedure to decide whether or not to include new generators in the upcoming year IRM determination. The main concern is that new generators may be excluded from the PBC (or FBC) a based on early progress (or lack thereof) in achieving registration – which isn't required until 3-5 months prior to a projected in-service date although the exclusion/inclusion decision is necessary 6-12 months ahead of time (for example, June 2022 for the 2022 IRM). The ICS initiated Action Item 247-1 to track resolution of this issue prior to the end of 2021.

2. Preliminary Base Case – the NYISO has completed several parametric cases. NYISO expects to complete many of the remaining cases for the 6/29/21 meeting. Certain data will not become available until July (e.g., SCR registrations and other EOP data) and will be put into the parametric study process at that time..

3. White Paper Progress Updates – – B. Shanahan

- Operating Reserves Distribution in the IRM Study
  - While reviewing 2021 FBC results, the NYISO identified that EOP activations were being triggered to address zonal deficiencies while reserve capacity was still available
  - MARS withholds resource capacity based upon zonal reserve allocation input data and releases it back to the model in EOP steps 3 and 8.

- In actual operation, reserves would be re-distributed dynamically based upon system needs and resource capabilities
- The ELR fixed injection model currently does not reflect the flexibility to increase output in response to reserve allocations
- NYISO performed simulations, maintaining total reserve requirements but using alternative zonal allocations which shifted reserves to generator surplus zones
- This case resulted in a significant reduction in EOP activations while maintaining a 0.1 LOLE

The ICS endorsed using Case 4 (Model Based on EC Run) as it provides a significant reduction in EOP usage and is a method supported by NYISO Operations.

- **LFU\_Study\_Phase\_2\_Scope\_Review**

A Phase 2 LFU study scope will follow up on select Phase 1 recommendations and include work on Load Shapes. The Phase 1 Load Forecast Uncertainty (LFU) Study focused largely on the analysis of weather distributions and their impacts on the year-over-year variability of NYCA and regional peak loads.

Proposed LFU Study Scope:

- Historical Load Shape Duration Analysis
- Phase 1 Follow Up Analyses
- Additional Modeling Analyses

Whitepaper Timeline:

- Start: May 2021
- Historical Load Shape Analysis – July 2021
- Phase 1 Follow-Up Analysis – August 2021
- Additional Modeling Analyses – October 2021
- White Paper Draft: November 2021

4. The High Renewable Case Phase II Study and the ELR White Paper were updated to reflect changes requested at the May Executive Committee meeting. The changes were editorial in nature and intended to reflect that these two documents are NYSRC products prepared by the NYISO.

Executive Committee Action Requested:

Review / Approve Updated High Renewable Case Phase II Study and the Energy Limited Resource White Paper.

5. Initial ICS Comments on the NYSRC Corporate Goal document.