

October 6th, 2021 ICS Meeting #252

Prepared for: September 15th, 2021 EC Meeting
Prepared by: Brian Shanahan, ICS Chairperson

1. Fall Peak Load Forecast

NYISO presented Fall load forecast for the 2021-22 IRM Study. ICS reviewed and approved the peak load forecast for use in the final IRM base case:

NYCA: 32,139 MW

HV: 15,193 MW

NYC: 10,944 MW

LI: 5,159 MW

2. Transmission Owner Quality Assurance Review:

NYISO, along with Con Edison and PSEG-LI discussed their findings from review of the 2021-22 Preliminary Base Case. Con Edison and PSEG-LI reported no major findings with only minimal corrections, mainly editorial, required. The ICS accepted this review result.

3. Public Appeal Load Reduction Survey.

The ICS reviewed EC comments to the proposed questions to be asked of Transmission Owners and made slight revisions, shown in the following set of questions. These will be sent by the ICS Chair to the individual ICS TO representatives, with a requested response by December 10th, 2021.

1. Did your company call for Public Appeals to reduce load this past summer (note, by public appeals we mean something that is not part of explicit load reduction programs)?
2. If you did call for load reductions, approximately how much reduction do you believe was achieved, and how did you estimate the amount of load reduction that you received? Please describe your confidence in this estimate.
3. Was there any overlap between the reductions that you achieved from your public appeals and load reductions from customers that participate in the NYISO SCR or other supplier programs?
4. Was the load reduction from public appeals on the date that the NYISO has identified as being either the NYCA system peak or your Locality peak? If it was,

are you planning to include the public appeals load reduction in your weather normalized loads?

5. Do you believe that you would be able to get the same level of response to public appeals on any summer weekday with peak type conditions?

4. 2021 IRM Final Assumptions Matrix:

ICS reviewed and approved the Final Assumptions Matrix for the 2021-22 IRM Study and is provided for Executive Committee review & approval.

Executive Committee Action Requested:

Review and Approval of the 2021 Final IRM Assumptions Matrix.

5. 2021 IRM PBC Sensitivity Case Results

ICS reviewed and approved the 2021-22 IRM Preliminary Base Case Sensitivity results. The results are attached and will be included in the Final IRM Report. A discussion of the ELR Sensitivity is provided as a separate item.

Of note, LIPA also discussed a sensitivity request related to the availability of the Y49/Y50s cables. The ICS agreed with the prudence of adding this Sensitivity to be evaluated as part of the PBC and Final Base Case, pending definition of the Sensitivity with PSEG-LI assistance on an expedited basis.

Executive Committee Action Requested:

EC Review of 2021 IRM PBC Sensitivity Case Results

6. Special Sensitivity Using GE MARS in Modeling ELRs

Previously, the ELR Whitepaper showed improved performance in the Loss-of-Load-Expectation (LOLE) results and expected Emergency Operating Procedures (EOP) usages using the enhanced MARS ELR model with defined output window.

The ELR Whitepaper recommended that in the 2022-2023 IRM study, ELRs are modeled using the fixed output shapes in the Final Base Case (FBC), and a sensitivity case using enhanced MARS ELR model with TC-4C configurations.

With the approved Preliminary Base Case (PBC), NYISO performed a sensitivity case using the TC-4C configuration with MARS ELR model as recommended in the Whitepaper. Results (below) are compared with the PBC on Margins and SCR usages on a Tan45 basis. NYISO also performed a Tan45 comparison using the test cases used in the ELR Whitepaper.

Summary:

IRM	<ul style="list-style-type: none"> • GE MARS ELR model reduces the PBC IRM by 0.8%. • The reduction in the IRM is slightly higher (0.1%-0.2%) than the ELR Whitepaper test cases
Preliminary LCRs	<ul style="list-style-type: none"> • There are minor increases in the preliminary LCRs, up to 0.1% • The ELR Whitepaper test cases showed no impact on the preliminary LCRs
SCR Usage	<ul style="list-style-type: none"> • The SCR usage in the ELR Sensitivity case reduces by about 20%. • In the ELR Whitepaper test cases, the reduction in the SCR usage is under 15% <p>*The 2022-2023 IRM includes the reallocation of the reserves, which lowers the SCR usage</p>

Recommendations:

- The NYISO propose following the recommendations in the ELR Whitepaper for the 2022-2023 IRM FBC:
 - Model the ELRs using fixed output shapes in the FBC.
 - Perform a sensitivity case of the FBC using the GE MARS ELR model with the recommended TC-4C configuration.
- Coordinate with GE to implement improvements to the GE MARS functionality in capturing unit outage rates in all unit types.
- Prepare for full adoption of the GE MARS ELR model starting in the 2023-2024 IRM
 - Determine that there are no other unintended consequences with the GE MARS ELR model.
 - Confirm final modeling configuration, which includes combining TC-4C with unit outage rates and other possible improvements.