Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)
June 4, 2025, ICS Meeting #304
Prepared for: June 13, 2025, EC Meeting #314
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4.1.1 Load Forecast Uncertainty (LFU) Model Updates

NYISO presented an updated LFU analysis recommending no change to the summer multipliers and a slight change to the winter multipliers. Last summer's peak day was less severe than average (~20th percentile), whereas this past winter was more severe (~70th percentile). For the winter, the highest load bin shifts up 0.24% and the lowest up 1.28%. Other bins shifted within this range. NYISO has not yet completed an IRM impact assessment. As winter fuel constraints will be part of the PBC model, updating the winter LFUs is expected to impact the IRM.

4.1.2 Gold Book Load Forecast Impact

The NYCA coincident peak in the 2025 Gold Book increased 510.9 MW (+1.6%) from the 2024 Fall Load Forecast; this is driven by a 349 MW increase in zone D (+50.4%). The zone D increase is due to large loads. Parametric analysis suggests a 0.6% decrease to the IRM and 0.5-1% increases in the LCRs. The load growth increases the denominator in the IRM definition.

4.1.3 CHPE Modeling Assumptions

NYISO presented updated CHPE modeling assumptions in the context of recent ICS/EC discussions and will analyze both with and without CHPE scenarios in parallel. Similar discussions are ongoing at ICAP-WG, including the potential for distinct market parameters tailored to before and after CHPE enters service.

NYISO proposed modeling CHPE capacity import using the curtailable contract functionality in GE MARS. This change allows using the availability of the HQ control area rather than a dummy generator with a forced outage rate. The modeling also includes applying 5.8%-line unavailability and assumes zero capacity and EA during all 6 months of the winter capability period, as previously discussed.

- G. Jordan supported the curtailable contract modeling approach.
- M. DeSocio questioned the curtailable aspect and suggested that HQ load would curtail before the capacity contract and the only source of curtailment would be a transmission limitation.
- T. Primrose pointed out a potential incompatibility of the curtailable approach with external area Policy 5 adjustments. These adjustments ensure neighboring regions are no better than their LOLE criteria, which could eliminate resources that exist today and could provide EA over CHPE. NYISO indicated the NPCC-provided HQ case is winter peaking and the adjustment was not a huge concern given the limited overlap with NY summer risk.
- W. Gunther suggested that HQ may have some resource availability during non-peak winter periods. NYISO indicated narrowing the 6-month period of EA unavailability could be a future modeling improvement, but it would not have significant impact given the absence of LOLE outside peak periods.
- M. Mager can understand limiting HQ capacity provided in the winter but questioned the disallowance of EA when HQ has available resources in the model.
- M. DeSocio asked about NYISO's experience getting power from HQ on cold days. NYISO indicated that the NY and HQ winter peaks are highly correlated, NY has provided support via Chateauguay in recent years, and HQ also forecasts significant winter growth. W. Gunther indicated that recent flows may be related to a drought in HQ. Y. Huang indicated that EA is not a typical flow and asked how much we want to depend on neighbors.

ICS will continue the discussion on CHPE modeling and aim to finalize the PBC assumption next month.

4.1.3.1 Assumption of Winter EA from HQ

Related to the CHPE discussion, NYISO recommended updating the winter EA assumption from HQ to 0 MW, which will be implemented through reducing the transfer capability across all HQ interfaces to 0 MW during winter months.

- The recommendation is based on the NPCC seasonal assessment for HQ and NYISO's operation experience of significant energy exporting to HQ during winter season in recent years.
- W. Gunther suggested that NY could export capacity from zone D to HQ and simultaneously import capacity from HQ to zone J along CHPE. This approach does not depend on HQ generation resources.

The topic of retiring the Gowanus and Narrows barges also came up as related to the CHPE modeling. ICS discussed the combined assumption of CHPE in with barges out. Several sensitivities were discussed about different assumptions with the barges and interaction with CHPE assumption, and D. Zhang indicated resource challenges with multiple sensitivities with full Tan 45 treatment. ICS discussed the potential sensitivity case with the opposite of the combined assumption, i.e., CHPE out with barges in.

4.1.4 Extreme Weather Resource Adequacy Modeling

NYISO presented on work done in collaboration with EWWG to study extreme weather impacts on resource adequacy. The IRM study currently uses the past 5 years of renewable data, which may not capture the full variability of these resources. NYISO examined the past 10 years using a combination of DNV and production data. NYISO presented different ways to characterize years based on extreme weather, including annual average, peak period, and counts below a 10% threshold. W. Gunther asked if NYISO also considered the sequential count of low renewable periods; NYISO indicated they had presented those results to EWWG and that it was not a significant issue currently given the small amount of storage on the system. J. Hoff asked about the impact of growing BTM solar shifting the peak hour later at night; NYISO will need to reexamine. NYISO also presented an outcome-driven approach of testing each year in MARS and selecting which is worse, showing the LOLE result is driven by renewable output during the 10 highest load hours. NYISO indicated that low average capacity factors and high low output counts are more reasonable metrics to identify extreme weather years. G. Jordan asked if NYISO would recommend the IRM study continue using the last 5 year's data or switch to 10 years for a better perspective as run time was not impacted; NYISO indicated they are currently collecting feedback and not ready to make a recommendation. G. Jordan suggested the limited, 0.17%, IRM difference using the past 5 or 10 weather years indicates there is not an urgent need to change the number of weather years used in MARS.

4.1.5 Topology Update

NYISO presented updates to the ratings on several transmission lines with no objections from ICS.

- Dysinger East forward limit: -175 MW
- West Central reverse limit: +25 MW
- Moses South forward limit: +850 MW
- Central East forward limit: +75 MW for all Oswego Complex combinations
- Sprain Brook Dunwoodie South forward limit: -175 MW

4.1.6 New Generator Inclusion Screening

NYISO presented the methodology behind their generator inclusion screening and results thereof. Of the 13 new projects included in the past three IRM studies, 6 failed to achieve the June 1st commercial operations date criteria. One resource was also missed – the Pomona ESR. For this year's study, NYISO recommended inclusion of 15 MW Arthur Kill Energy Storage 1 and 3 MW Pomona ESR. Development of assumptions related to CHPE for the 2026-2027 IRM study will continue over the upcoming ICS and EC meetings.

4.1.7 IRM 2026-2027 PBC Assumptions Matrix and Parametric Results

NYISO presented an updated version of their PBC assumptions matrix and associated parametric results. Material updates since last month include cable transition rates, Gold Book load and DMNC values, thermal EFORds, and the Sprain Brook Dunwoodie South topology update. See attached parametric analysis for IRM impacts and non-material changes. Remaining notable adjustments include external area adjustments, CHPE, fuel constraints, and an updated MARS version. The updated version is needed to implement fuel constraints but currently results in a significant

slowdown in runtime.

4.1.8 Policy 5 Updates – EC Approval Item

J. Adams presented a final draft of Policy 5 updates. No comments were received from the version circulated to ICS and EC last month and ICS had no additional questions at the meeting. ICS requests that EC approve these updates per the established milestone schedule.