

Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)

Sept 4, 2024, ICS Meeting #293

Prepared for: Sept 13, 2024, EC Meeting #305

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4.1.1 IRM 2025 PBC Results

ICS approved the PBC Table 6-1 parametric analysis and PBC IRM per the milestone schedule. ICS and EC had previously reviewed both.

4.1.2 IRM 2025 Sensitivities

NYISO presented results for all approved PBC sensitivities. Results for the standard five sensitivities show similar trends to last year shifted up or down based on the base case IRM/LCR values. Sensitivities 6 and 7 were the subject of separate presentations. Mr. Younger proposed and NYISO will evaluate performing an additional analysis outside the IRM sensitivities involving the Oswego Complex that relates to transmission security analysis by the next ICS meeting.

4.1.3 Gas Constraints Sensitivity

NYISO presented winter gas constraint results based on the current PBC. Implementing gas constraints with 11,000 MW available oil, the IRM increases by 0.9% and with 8,000 MW available oil the IRM increases by 7.2%. Winter gas constraints also increased LCRs, particularly zone J due to the higher concentration of fossil units impacted by fuel availability constraints. The observed IRM/LCR increases are higher than the corresponding values in the Gas Constraints Modeling Whitepaper based on last year's FBC. The larger observed increase is due to a more constrained system including EOP and EA assumption updates. NYISO also presented the LOLE risk distribution by season and time of day: 8% of risk occurs in the winter with 11,000 MW available oil and 51% in the winter with 8,000 MW oil. The 8,000 MW oil case also exhibits risk at 7 am.

4.1.4 BTM Solar Modeling Sensitivity

Modeling BTM solar as a supply resource increased the IRM by 1.05% due to the probabilistic nature of the model and increased randomness. The Tan 45 J LCR increased by 0.90% and K LCR by 1.62%. Zone K has almost double the BTM solar as Zone J.

4.1.5 2025-2026 IRM FBC Assumptions Matrix

NYISO presented an initial version of the FBC assumptions matrix including reporting corrections for Arthur Kill GT1 and cable outage rates. NYISO updated SCR reporting with Zone F separated from Zones A-E. Beyond the current IRM cycle, ICS also discussed updating OSW generation profiles.

4.1.6 Tan45 Methodology Review

NYISO presented additional analysis of the CHPE + 6,000 MW OSW sensitivity. To probe the low point approach, NYISO evaluated each zone for capacity added or removed to reach 0.1 LOLE. NYISO suggested a distinction between excess UCAP and risk as the basis for shifting capacity, e.g., zone B is dependent on excess UCAP in zone C. Mr. Younger also pointed out that capacity loss can occur outside zones with excess, e.g., Danskammer Generating Station. NYISO presented additional insight into the flat Tan 45 curve. NYISO briefly reviewed the founding principles of the Tan 45 method and initiated the discussion on potential alternative methodologies, including the LCR Optimizer used to set LCRs. Future meetings will be discussing phase 2 scope and next steps as the ICS agreed that Tan45 methodology will fail to identify a unique IRM/LCR anchor point under likely future conditions.

4.1.7 RA Modeling Improvement 2025 Strategic Plan

NYISO presented initial recommendations for near- and longer-term priorities including continued study of Tan 45 improvements, winter fuel availability/risks, improved modeling of energy limited resources, extreme weather, and use of synthetic load shapes. Mr. Zhang from NYISO will present NYISO's recommendations (attached).

One additional suggestion brought up at ICS is reincorporating maintenance scheduling due to the increased possibility of winter LOLE events with gas constraints. The gas constraints market implementation next year provides an additional motivation. NYISO indicated they were resource limited and NYSRC/ICS will need to prioritize efforts. There was an audience suggestion to consider if NYISO needs additional resources given the ongoing significant developments.