Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)
July 10, 2025, ICS Meeting #305
Prepared for: July 18, 2025, EC Meeting #315
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4.1.1 Draft 2026 NYSRC Meetings Schedule
ICS reviewed the draft NYSRC 2026 meeting schedule and approved the ICS portion with four changes to avoid conflicts with NYISO committee meetings. For each conflict, the ICS meeting (and corresponding meeting material due date) moved forward one day.

- April 29, 2026 –> April 28
- August 26, 2026 –> August 25
- September 30, 2026 –> September 29
- November 18, 2026 –> November 17

4.1.2 CHPE ICAP Market Integration Considerations
M. Sainani (NYISO Capacity and New Resource Integration Market Design) provided an update on discussions at ICAP-WG around incorporating CHPE UDRs in the ICAP market if CHPE achieves commercial operation after the start of the 2026-2027 capability year. CHPE inclusion has significant impact on ICAP market parameters (TSL floors, LCRs, import rights, CAFs, seasonal parameters) and particularly would increase the NYC TSL by ~4% due to becoming the largest contingency. Misalignment between assumed CHPE availability and actual ICAP market participation creates significant unintended capacity market outcomes. NYISO's proposed solution introduced the concept of a "triggering resource" as one whose entry would change the contingencies used in determining TSL floors. If a "triggering resource" exists, a single IRM, as determined by the NYSRC, will apply for the entire Capability Year. Using the IRM FBC as a starting point, NYISO will prepare separate sets of ICAP market parameters (e.g., TSL floor values, LCRs, CAFs, and demand curves) with and without the triggering resource. NYISO will not change the status assumptions of any other resource as approved by the NYSRC and reflected in the IRM study results case. The alternate market parameters would apply if the IRM FBC includes the "triggering resource" but that resource does not commence commercial operations by the start of the corresponding capability year. After the "triggering resource" reaches commercial operation, NYISO would use the unadjusted market parameters while ensuring adequate notice to the markets. See attached presentation for more detail.

G. Jordan asked if removal of CHPE would be paired with inclusion of the Gowanus and Narrows barges. NYISO clarified that NYC barge status would not change from that assumed in the base case.

W. Gunther asked about the MARS implications of removing CHPE from a CHPE w/o barges base case. NYISO STAR studies have indicated the barges are needed for reliability in the absence of CHPE. NYISO indicated they expect the LCR Optimizer will solve and respect the relevant TSL floor. T. Primrose asked about the mechanics of the optimizer if the TSL floor exceeds available capacity. NYISO explained that the optimizer will add back capacity with shifting until the area is at the TSL floor.

M. Cadwalader pointed out that the NYISO proposal does not address inconsistencies if CHPE is assumed out of service in the IRM base case but subsequently enters service in summer 2026. M. DeSocio agreed that it is a concern. NYISO commented that they are actively evaluating that alternative scenario.

C. Wentlent asked about timing of tariff revisions to accompany this proposal. NYISO commented that tariff revisions are required, and they are targeting BIC presentation in August and filing in late-summer/early-fall.

4.1.3 6/24/25 Major Emergency Report

NYISO Operations presented on the June 24th Major Emergency (ME) event resulting from an operating reserve deficiency (less than one and one-half times the most severe contingency). This was precipitated by near 90/10 summer conditions, curtailment of ~2GW scheduled flows from neighboring balancing areas, and ~1,000MW of NY resource derates. Corrective actions included generation dispatch to optimize 30-min reserves, curtailment of non-firm sales, up to 1,960 MW of emergency energy purchases, and counting of voltage reduction relief as reserve. No load relief was required. At the time NYISO declared the ME, external interfaces were providing ~2,800 MW net interchange. NYISO Operations commented that there was likely no extra support available from neighboring regions unless NYCA margins deteriorated significantly and depleted 10-minute reserves or went into load shedding.

T. Primrose asked if curtailment of resources with UDR elections would be considered by the NYISO. NYISO replied that it is too preliminary for inclusion in this year's model, but it will be evaluated.

C. Wentlent asked about performance by fuel type over the heat wave. NYISO answered that wind and solar performed slightly better on 6/24 than assumed in the summer capacity assessment, but worse on 6/25. He also asked about overall performance of the existing fleet. NYISO Operations commented that unit unavailability was relatively in line with summer capacity assessment for 90/10 conditions.

M. Mager asked about demand response performance during the event. NYISO commented that initial estimates implied roughly 1,000 MW of response, which improved operating margins.

W. Gunther asked if NYISO Operations would recommend any changes to EA assumptions in the IRM model based on this experience. NYISO Operations commented that it is one data point, so it is worth looking into, but they aren't recommending any changes at this time.

4.1.4 ELR Whitepaper

NYISO provided an update on the ELR whitepaper. The output window for small energy limited resources (ELRs), energy storage resources (ESRs), and SCRs is based on the hourly loss of load expectation (LOLE) from the previous year's IRM study. NYISO Operations typically seeks to center the event period around the expected net load peak hour. At present, ELRs can dispatch too early (HB 14) and it may make sense to hold off until HB 15 or 16. Net peak load analysis determined that winter peak hours are similar to the summer peak hours for now. The NYISO proposed two methodologies for determining the start time for SCRs in the IRM model and asked ICS which they would like to see first.

- Method 1: NYCA peak load hour
- Method 2: Grouped by upstate (A-F) and downstate (G-K)

W. Gunther and M. Mager expressed interest in seeing method 2 first but that seeing both is preferable. M. Cadwalader and M. DeSocio asked which methodology aligns with Operations. NYISO answered that Operations will differentiate between upstate and downstate (I.e. aligning with method 2).

W. Gunther asked why MARS doesn't optimize ELR/SCR dispatch internally. G. Jordan answered that MARS does not have "look ahead" functionality. T. Primrose cautioned that even if this functionality existed, it may not be ideal due to perfect foresight in the model allowing for optimization beyond what operations can realistically achieve.

4.1.5 CHPE and Fuel Constraints

NYISO provided an update on CHPE and fuel availability constraints modeling including no changes to the previously proposed modeling approach. Given ample HQ resources in the summer, the curtailable aspect of CHPE modeling that was the subject of significant prior discussion may not have a material impact. Based on ICS discussion, the 2026-2027 IRM PBC should represent CHPE as in-service and the Gowanus 1 & 2 and Narrows 2 & 3 generators as out-of-service. The alternative option with CHPE out-of-service and the barges in-service should be a high-priority Tan 45 sensitivity. Without providing the results, NYISO indicated that fuel constraints in isolation shift ~5% of LOLE risk to winter while the combination of fuel constraints and CHPE shift ~15% of LOLE risk to the winter.

C. Wentlent asked to what months winter risk is confined. NYISO responded preliminarily that it is largely in January/February. C. Wentlent asked the NYISO to follow up on any pivotal supplier rules that would require HQ to provide spare capacity to Zone J.

4.1.6 Extreme Weather RA Modeling – BTM Solar Update

NYISO provided an update on extreme weather RA modeling incorporating BTM solar into previous analysis. Addition of 5,980MW of BTM solar capacity historical production data shows a similar trend to what was seen previously in the low output counts analysis and does not materially change the results of the previous work.

G. Jordan asked if LOLE results would be presented to accompany these results to help define the extreme weather attributes that contribute to risk (e.g., lulls during certain periods of the year). NYISO commented that MARS test cases were not run to accompany this update and cautioned against a results-oriented metric.

4.1.7 GE MARS New Version Evolutions

M. Elkins from GE Vernova presented the GE MARS version evolution from V4.14 to V5.7, consistent with the software upgrade ICS is implementing this year. There have been 14 enhancements and 24 bug fixes including a patch to enable database masking for TO review. Most of these changes have occurred over the past year.

W. Gunther asked about any major feature improvements NYISO is not currently using. GE responded that the goal of all improvements is to be helpful and hybrid resources are a big area of improvement.

T. Primrose asked for further details on a bug for energy storage units with cycle efficiency less than 1. GE stated that they would follow up but that if it was a large issue, it would have been obvious in the results. He also asked if there are any significant unresolved bugs in the current release; GE clarified that there aren't any.

W. Gunther asked if any of the changes address the increasing number of replications required to meet statistical tolerances in recent IRM cases. GE indicated runtime is a current focus and Y. Huang reiterated the computational challenges NYISO faces. G. Jordan noted that if the MARS cases converge in less replications than required, Policy 5 has no provision to reduce the number of replications. W. Gunther took an ICS action item assigned to G. Jordan to determine if we can lower the number of replications.

4.1.8 2026-2027 IRM Study Proposed Sensitivity List

NYISO presented a list of proposed sensitivity cases for the 2026-2027 IRM PBC. Standard annual sensitivities include NYCA isolated, no internal NYCA transmission constraints, no LFU, no wind capacity (all wind), and no SCR capacity. Base case assumption sensitivities include no winter fuel availability constraints (Tan 45) and CHPE + barges alternative assumptions (Tan 45).

G. Jordan commented that number of replications required should be investigated for sensitivity cases and parametric cases. NYISO will follow up and consider conducting sensitivities and intermediary base case model updates at lower replications that can still meet the standard error requirement.

4.1.9 2026-2027 IRM PBC Parametric Results

NYISO presented an update for the IRM 2026-2027 PBC parametric results covering the following:

- Material changes: New generator screening, 2025 BTM solar shapes, 2026 solar adjusted load shapes, MARS version 5.7.3765 update.
- Parametric results currently stand at 24.9% IRM, 77.5% NYC, 88.3% LHV, 109.9% LI as compared to the 2025-2026 FBC of 24.4% IRM, 75.6% NYC, 86.9% LHV, and 107.3% LI.

Major updates to come are CHPE inclusion, Gowanus & Narrows deactivations, winter fuel availability constraints, LFU, and externals + Policy 5 adjustments.

4.1.10 2026-2027 IRM PBC Assumptions Matrix – EC Approval Item

NYISO presented updates to the IRM 2026-2027 PBC assumptions matrix covering new generator screening, NYCA load and LFU model, import and export transactions, internal and external topology, EA assumptions, deactivations and removals, CHPE, fuel constraints, EDRs, SCRs, EOPs/EOP structure, external control areas, MARS model update, and 5-year EFORDs for resources. As mentioned above, the PBC reflects CHPE as in service and Gowanus/Narrows GTs as out of service. D. Zhang noted that fuel availability constraints (attachment G7) were updated from what was originally approved by the EC to account for generation fleet changes, as discussed at the April EC meeting. ICS approved the PBC assumptions matrix as presented and request EC approval at this time.