

Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)
April 28, 2026, ICS Meeting #316
Prepared for: May 8, 2026, EC Meeting #325
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4.1.1 TSL-LCR Working Group Update

R. Gonzales provided a brief update on the TSL/LCR working group covering group discussion items and background on the two current recommendations; PJM Emergency Assistance Limits, and Locational Operating Reserves. He noted that these items are examined in further detail in the subsequent impact analysis.

4.1.2 Impact Analysis on Updated EA Limit and OR Allocation

NYISO presented an impact analysis of the two recommendations from the TSL-LCR Working Group Update. The change package includes 40% reduced EA limits from PJM on the downstate controllable lines and increased Zone J operating reserves held at load shed in line with revised requirements post-CHPE. Tan45 testing on the 2026–2027 IRM Final Base Case (FBC) Special Sensitivity Case showed the two changes combined had no IRM impact, and increased Zones J/K LCRs by 0.90% and 0.17% respectively. The presentation is attached for additional detail.

M. Cadwalader asked what drove the need for EA limits to be reduced. NYISO elaborated on the excess reserve methodology from the EOP whitepaper report that drove the original broader PJM to NYCA bin-based limits, and the modeling limitations that necessitated line-specific limits. They noted this update improves alignment with the original EOP whitepaper on overall PJM- to NYCA emergency assistance recommendations. M. Mager expressed interest in G-J locality impact due to this change, and NYISO noted that they would update impact analysis to include that result.

ICS approved the updated line specific EA Limits and OR Allocation.

4.1.3 2027-2028 IRM Operating Reserves during Load Shedding

NYISO presented results of a periodic update on IRM Operating Reserves during Load Shedding. Based on updated analysis of 10-minute net load variability during the 10-hour summer peak load window and LOLE window, the NYISO recommends an update to the EOPs to increase the assumed 10-minute Operating Reserve withholding in EOP Step 8 to 450 MW (a 50 MW increase over the current 400 MW). The presentation is attached for additional detail.

M. Cadwalader asked NYISO to consider changing the verb “withholding” to a more apt verb. M. Mager asked for impact analysis with the 50 MW increase in “withholding”.

ICS approved the updated operating reserve withholding for the 2027-2028 IRM study.

4.1.4 Parametric Process Improvements Update

NYISO presented final recommendations on the Parametric Improvements Update. For load forecast updates NYISO recommends adoption of the parametric split methodology. For generation updates NYISO recommends maintaining the current parametric methodology. For transmission updates NYISO recommends maintaining the current parametric methodology, noting some material updates may warrant separate Tan45 assessment. This effort is associated with ICS goal A1.4.

ICS approved the Parametric Process Improvements Update. The presentation is attached for information and will return for approval at the next EC meeting.

4.1.5 Seasonal Topology Update

NYISO presented their Seasonal Topology Update procedure recommendations. The proposed procedure leverages the prior years “Sensitivity Case 2: No Internal NYCA Transmission Constraints” to identify transmission interfaces that have observed increases in flow during winter months. If these interfaces are constrained by summer limits in the prior year’s PBC, NYISO will consider a winter transfer limit update based on the most up-to-date NYISO studies available during PBC development for the current IRM study cycle. Seasonal transfer limits during FBC development will include any recommended updates from NYISO studies available after development of the PBC. This effort is associated with ICS goal A1.3.

W. Gunther asked if it would be simpler to update all limits seasonally, rather than just a subset. NYISO replied that current planning studies do not incorporate seasonal topology assumptions, so NYISO’s operating studies will be leveraged to inform winter topology inputs for the IRM study which requires some processing and interpretation.

ICS approved the Seasonal Topology process. The presentation is attached for information and will return for approval at the next EC meeting.

4.1.6 2026 ICS Preliminary SCR & DER Model Values

NYISO presented preliminary SCR response rates and max modeled capacity as well as DER values for incorporation in the PBC. The historical dataset for all zones now extends to activation duration limits of 7 hours. Overall max modeled SCR capacity decreased slightly to 679.6MW compared to 727MW in the IRM 2027-2027 FBC. NYISO also covered Distributed Energy Resource (DER) Aggregation Enrollments. 426.5 MW of DER Aggregations have passed Distribution Utility review as of April 2026 (all but 0.5 MW of which are in Zones A-E), down 54.1MW from the 2026-2027 FBC.

M. Mager asked for more detail on how SCR enrollments will be updated for FBC. NYISO noted that they will return in July to present final assumptions for the 2027-2028 FBC. He also asked at what point the NYISO will start “rolling” off older data since the current methodology includes data back to 2012. NYISO replied that they can consider this but cautions against excluding older data if it represents the only history of mandatory SCR activations extending to 7 hours. C. Wentlent asked if NYISO will consider winter 2025-2026 SCR calls, NYISO take this back to see if it can be incorporated. T. Primrose commented that Winter 2025-26 had more SCR calls than the history of the program combined in Winter.

R. Bolbrock asked if there is an explanation for the differentiation in response rates between upstate and downstate SCR participants. M. Mager noted that the different regions may have different types of consumers (I.E. industrial vs aggregation groups). C. Wentlent asked if SCR performance has changed since many customers moved to the DER program. NYISO commented that this is the 2nd year where DERs were modeled, and that no noticeable performance change has been observed in SCRs since that transition occurred.

4.1.7 Generator Transition Rate Matrices: Software Transition

NYISO presented benchmarking results of the PowerGADS system that NYISO transitioned to following the retirement of the GADS OS software. Benchmarking efforts involved comparison of EFORDAPA (a resultant metric using the capacity states and transitional probabilities that are directly used in the MARS model) results for generators of both GADS OS and PowerGADS to the Equivalent Demand Forced Outage Rates (EFORDs) calculated using the NERC formula. Overall, the PowerGADS system produces a EFORDAPA metric closer to the NERC EFORD than the GADS OS. Some material differences were observed due to deliberate code enhancements as part of the transition to the PowerGADS system.

Stakeholders discussed the PowerGADS assumption that considers derates smaller than 5% of full capacity as the affected unit operating at full capacity.

4.1.8 Standard Error Analysis

G. Jordan presented a brief background on the temporarily lowered standard error (SE)/ confidence interval (CI) used in the 2026-2027 IRM FBC and an impact analysis of using a lower SE criteria. He presented results of testing convergence at various numbers of MARS replications showing $\sim\pm 0.1\%$ impact to the IRM/LCRs. He made a recommendation to adopt a SE criteria of 0.05 moving forward. The presentation is attached for additional background.

In discussion, W. Gunther noted that the characterization of tail events as a problem may not be accurate, and that they are events we should try to understand. He also noted that he would like to see more detail on expanded reliability statistics such as hourly loss of load expectation (LOLH) and expected unserved energy (EUE). He further added that a 0.1% difference in IRM is roughly equivalent to \$10 million which justifies the extra replications. C. Wentlent concurred that the small statistical difference can materialize in substantial cost. W. Gunther also noted that statistical standards applied to other items (such as operating reserves) are more rigorous than those applied here and indicated a strong desire to maintain technical standards. R. Gonzales noted that the larger and more frequent tail events in MARS should be a discussion at the EC, and that changes to standard error should be grounded in resource adequacy needs. T. Primrose expressed tentative support, recognizing a need to balance study completion with technical rigor. Stakeholders also commented that the lowered SE criteria would facilitate completion of additional sensitivity work. NYISO added that increased replications have downstream impact on processes such as capacity accreditation.

4.1.9 Winter Fuel Availability Constraints Modeling Review

NYISO presented a review of the ICF Study and Winter 2025-2026 cold weather operating experience for potential consideration in updating modeling assumptions for the winter fuel availability constraints model. NYISO noted that in an analysis of historical peak load days (2/3/2023 & 1/22/2025), the actual gas consumed by power generation was approximately 50% of the maximum theoretical gas-fired generation availability estimated by the ICF Study. NYISO also reiterated some of the factors not considered in the fuel assessment such as OFOs, variances in cold weather event duration, and events impacting key pipelines or fuel delivery logistics. NYISO recommends placing greater reliance on historical data when evaluating winter grid reliability, with some consideration of additional information from the ICF study such as gas supply changes from pipeline expansion projects. NYISO highlighted that the 1/29-2/9/26 operations (a very long sustained stretch of operation near 50/50 conditions) some fuel availability constraints were experienced, but $\sim 2,500$ MW of gas-only unit production from Load Zones F-K occurred. Next steps include updating the prior historical assessment of “available gas” and “available oil” to include data from winter 2025-2026 and identifying potential refinement of the winter fuel availability constraints model assumptions. Gas production is expected to be higher than in prior years, and Oil inventory level is expected to be maintained near historical levels. The presentation is attached for additional detail.

R. Gonzales asked for insight into the divergence between the ICF study and realized operations on gas. NYISO replied that operational constraints, timing of the gas and electric markets, and resources with long start-up notification times (resources committed by SRE may be miss gas nominations) are all contributing factors. C. Wentlent noted that the constitution pipeline was listed with a targeted in-service date, but lacks approval for permitting. He also asked for more detail on the specifics of pipelines evaluated for expansion by ICF. NYISO replied that no LDC expansion plans were explicitly studied, but that LDC design day demand would implicitly capture expansion plans.