

Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)
September 3, 2025, ICS Meeting #307
Prepared for: September 12, 2025, EC Meeting #317
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4.1.1 2025 Final SCR Model Values and DER Model Values

NYISO presented an update on SCR and DER enrollment. SCR resources are only required to perform for 4 h even though events last 5-7 h. There was interest in the portion of resources that could perform for longer with an adequate incentive.

M. Mager asked when data from more than a decade ago will roll off the SCR response rates. The average is based on the most recent 5 individual years that each had a mandatory event in all zones and there have been many recent years without such an activation. 2012 will roll off in the next year or two. M. Cadwalader asked NYISO to prepare a table listing which 5 years are in the average.

G. Jordan questioned the assumption of zero SCR response for hours 6 and 7 in zones that have no historical calls lasting that long. Gary suggested a sensitivity conservatively assuming 65% and 50% response, respectively, to determine if there is a material impact on the IRM. M. Mager seconded this request, and A. Evans agreed and indicated that at minimum a sensitivity is needed. A. Evans also pointed out that assuming companies send people home for the day only to restart production in the evening is unrealistic. Another proposed estimation methodology is to assume the same response rate decline as zones that do have 7 h of historical data. G. Jordan agreed to develop a set of response rates for the missing hours and provide to NYISO. A. Evans indicated that an overly conservative assumption must be weighed against the cost to customers.

NYISO indicated that there was a 7 h SCR call for all zones earlier this year, which the existing process will capture next year. M. DeSocio pointed out that there is no basis for extrapolating a response rate beyond historical experience. He also indicated that any response beyond the existing SCR call window may already appear as a reduction in the load profile as the SCR response is not added back. Extending the response rates could lead to double counting. Y. Huang pointed out that load will naturally drop off in the evening with no additional SCR curtailment. T. Primrose indicated that using estimated values is not actionable this year and we need a rigorous process. He made an analogy with keeping outage data from before the Y49 cable was replaced and indicated we should follow our existing, more conservative process.

C. Wentlent asked if there have been any SCR events in the winter and if there were differences in duration. The two seasons were split out in the last presentation on the ELR whitepaper, which concluded that the periods were not sufficiently different to separate at this time. NYISO further clarified that there have been winter SCR calls, but they were not mandatory until this year and were excluded in the presented response rates.

M. Mager inquired about the quantity of resources that exist in the SCR program and are transitioning to DER participation. For zones A-E, the MW values are very similar at -361.9 MW and 361.4 MW, though NYISO clarified the similarity is more coincidental than directly correlated. These resources were previously SCRs but can have different declared values in the DER program. They are all Demand Side Resources, and per the whitepaper earlier this year will be modeled as ELRs aggregated by zone and duration. For other zones, there are no completed DER aggregations. NYISO's data is based on actual enrollments and does not assume any empirical losses due to recent fatigue.

A participant asked if DER modeling takes into consideration the \$50/MWh offer floor for DER/DSR energy dispatch. The MARS model does not consider economic dispatch; however, the LBMP would almost certainly be above that threshold if MARS is dispatching DERs.

Given the ongoing transition from SCR to DER participation, ICS discussed the appropriate inclusion rule for DER resources. G. Jordan suggested a resource that has begun the enrollment process and is expected to complete it should be included. M. DeSocio suggested the point at which customers are committed to participating. NYISO clarified that DER enrollment materials include utility bills and one-line diagrams, and it is clear they have the customer commitment upfront. The process does not lend itself to speculation - there is no way for a customer to back out once the enrollment is submitted and it would take 1.5 years to reenter the SCR program. The migration of existing SCR resources to the new DER program also points to a credible customer base. More nuanced inclusion criteria could include when the application is complete, when the application passes NYISO's review, and when the application passes the TO safety and reliability review.

A participant asked about the quantity of resources currently under review for DER enrollment and NYISO mentioned ~60 MW in Zone A and ~60 MW in Zone D, all of which are demand side resources. Other resources have also expressed interest in making the transition. M. Mager asked if SCR response rates will be refreshed with the significant change in the underlying resource base. The SCR response rates will remain unchanged despite the shift in SCR resources to DER participation. Y. Huang suggested NYISO bring additional details on SCRs to the next meeting, and ICS can decide as part of approving the FBC assumptions matrix.

4.1.2 ELR Whitepaper – SCR Start Times

NYISO presented an update on their Energy Limited Resource (ELR) whitepaper. The weighted average summer peak load hour is determined by the top 6 peak load days weighted by bin probability to create a typical day. NYISO presented a single statewide start time for SCR resources (HB15) as one option versus distinct start times for upstate (HB 16) and downstate (HB 14). M. Cadwalader suggested the distinct start times was a better use of resources but that we should mimic what NYISO Ops does. NYISO Ops has started to look at net peaks across the system and does see different risk timing due to the prevalence of BTM solar upstate. NYISO indicated they will go with the distinct upstate and downstate start times. NYISO also committed to reviewing the peak load hour and SCR start time each year.

4.1.3 Winter Reliability Capacity Enhancements – NYISO Market Design Proposal

NYISO presented a courtesy update on recent ICAP-WG seasonal capacity market discussions including a new winter ICAP requirement. M. Mager asked about the impact on the NYSRC IRM study and G. Jordan had questions on the high winter reserve margin. There is no change to the annual NYSRC IRM setting process. The current IRM is calculated in terms of the summer peak load and the required annual capacity payment is spread over 12 months. The new winter reserve margin is a mathematical transformation of the NYSRC IRM to express the winter capacity requirements in terms of winter peak load. Conceptually, the approach is retaining the same generators year-round and adjusting the winter MW requirement for the higher generator ratings in analogy with the current demand curve W/S ratio.

Changes on the NYISO side include determining capacity market parameters on a seasonal basis. LCRs would be determined using the same annual optimization function. There was a question around differentiating non-firm thermal and solar CAFs to represent their different seasonal contributions. CAFs would continue to be determined on an annual basis due to issues with division by zero. Within the NYSRC IRM study, generators and UDR lines would follow the existing election timeline but have the option of submitting distinct summer and winter values.

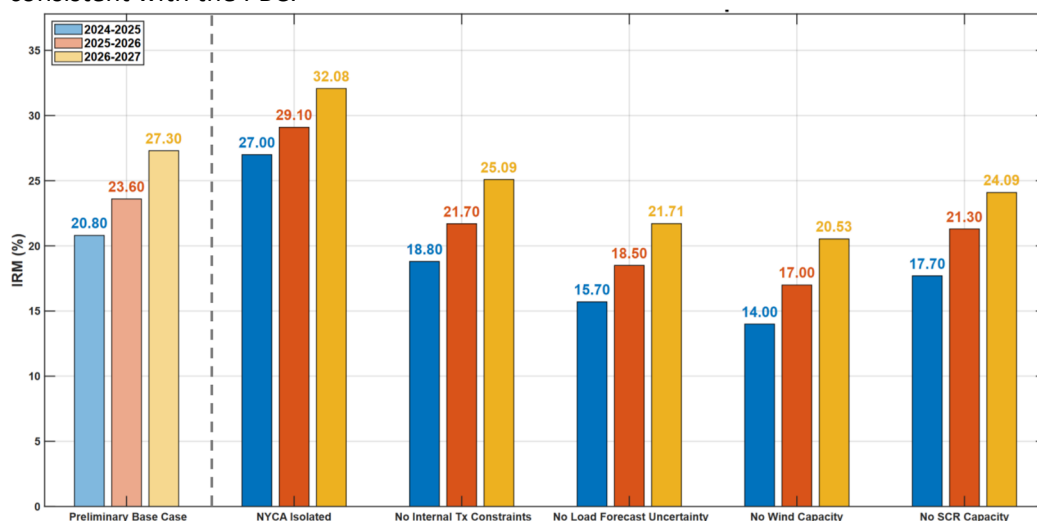
G. Jordan asked about the impact of winter gas constraints and Y. Huang indicated that is handled on the UCAP rather than ICAP side. Y. Huang suggested a goal of the ICS review is to confirm that the changes discussed above are compatible with existing NYSRC processes and rules.

4.1.4 IRM 2026-2027 PBC Results

ICS rereviewed the IRM PBC results from last month. ConEd and PSEG-LI confirmed they replicated the 0.1 LOLE using the masked database and found no issues during the database review. ICS approved the PBC IRM and parametric results per the established milestone schedule. This does not require EC approval.

4.1.5 IRM 2026-2027 PBC Sensitivities

NYISO presented completed PBC sensitivity results. The IRM increases ~3% across the standard five sensitivities, consistent with the PBC.



R. Bolbrock asked about the NYCA isolated case and why it showed a similar impact to the last two years despite tightening tie benefits. NYISO suggested this is related to the CHPE assumption and that in the distant past, NYCA isolated had a much larger impact than the current ~5%. Within the no internal transmission constraints sensitivity, NYISO presented flows and mentioned that the model prioritizes Marcy South (E-G) over the combination of Central East (E-F) and Capital Hudson (F-G). M. Cadwalader confirmed that the forward and reverse values represent maximum flows. For the no SCR sensitivity, M. Cadwalader confirmed that the 1,030 MW of capacity removed is the net of removing SCRs and adding back capacity to reach 0.1 LOLE.

4.1.6 IRM 2026-2027 Special Sensitivities Results

NYISO presented additional analysis on the three special sensitivities as described below.

Sensitivity Case 6: No Winter Fuel Availability Constraints

NYISO illustrated the interaction between winter fuel availability constraints and CHPE. Winter fuel constraints introduce winter risk to the model and addition of summer-only CHPE leads to removal of year-round capacity. G. Jordan asked why winter fuel availability constraints increased summer LOLE. The answer is that in certain replications winter fuel constraints used up the 3 days/year limit for public appeals and voluntary industrial curtailment earlier in the year. Currently, the MARS model runs on a calendar rather than capability year.

Sensitivity Case 7a: Barges + No CHPE

ICS discussion focused on how the PBC (with CHPE) differs from this sensitivity. G. Jordan raised the issue of adding summer-only capacity but removing year-round capacity to return to 0.1 LOLE. M. Cadwalader indicated increased winter risk is an inevitable consequence of adding summer-only resources with an annual reliability criterion. Y. Huang suggested the capacity shifting is consistent with adding CHPE and removing the barges, which leads to 12% of the annual risk showing up in the winter. G. Jordan questioned if separate seasonal criteria should be used.

Sensitivity Case 7b: Barges + CHPE Both Included

M. Mager asked why adding year-round firm fuel resources to NYC increased the IRM to 27.8%. The primary driver is the impact of the barges on the NYCA and Zone J average EFORD.

R. Bolbrock suggested that NYISO investigate rounding given the range of significant figures presented and include footnotes for counterintuitive results.

4.1.7 EOPs - Voluntary Curtailments and Public Appeals

NYISO presented additional sensitivity analysis on the EOPs with annual call limits. There was a question on why a large fraction of EOPs now occur in Jan, Feb and Dec rather than the summer. Winter risk is often a capacity issue while

summer risk is often a transmission issue. Thus, the winter period is more reliant on EA even though LOLE is higher in the summer.

A participant suggested there is already significant pushback in 2025 on the number of SCR calls and the potential for calls to increase going forward is concerning. NYISO clarified that the high projected calls in the figures are for low probability load bins 1 and 2.

Some additional comments are as follows. T. Primrose asked if NYISO could provide more data on the internals of the SCR black box to assess curtailment potential. NYISO indicated the data comes from TOs. T. Primrose indicated that public appeals are only used in Zone K and that ICS should not increase the annual limit from 3 days/year. He could be open to allocating 1 to the winter and 2 to the summer. M. Mager indicated current public appeals modeling is conservative because it only represents one TO. M. Mager indicated the voluntary industrial curtailments assumption needs to change and suggested 3 days in the winter and 3 in the summer. NYISO indicated the MARS model can only do annual or monthly limits. G. Jordan mentioned 3 days/month could work given not all months have LOLE risk and asked for the monthly profile with the 3 days/month limit. Gary also mentioned that GE is updating the model to simulate capability years, and at present it may be possible to set the EA limit to 0 calls at the start of the year and then change the annual limit to 3 calls in April.

4.1.8 IRM 2026-2027 FBC Assumption Matrix

NYISO presented the initial final base case assumptions matrix with limited changes since the PBC. A participant asked about the PJM MARS database not being updated. This is because PJM did not renew their MARS license.

4.1.9 IRM 2026-2027 FBC Results

NYISO presented an initial FBC parametric analysis showing UDR elections decreasing the IRM by 0.26% (-1.15% in NYC and +0.55% in LI). Changes to the SCR MW enrollments decreased the IRM by 1.22%. There were also 3 non-material changes.

4.1.9 Additional Agenda Items

ICS discussed the potential to schedule an additional virtual ICS meeting between the 10/1 regular ICS meeting and 10/9 EC meeting approving the FBC assumptions matrix. The purpose would be to approve the fall load forecast if LFTF is unable to complete their reconciliation by the 10/1 ICS (occurred last year). ICS tentatively agreed to meet on Friday 10/3 directly after any special LFTF meeting.