Final Minutes

New York State Reliability Council - Installed Capacity Subcommittee (ICS)
Meeting #307– September 3rd, 2025
Microsoft Teams and NYISO KCC

Attendees	**Present**	**Phone**
Members / Alternates:		
William Gunther (**Con Edison – ICS Chair**)	☒	☐
Brian Shanahan (National Grid)	☐	☐
Rich Bolbrock (Unaffiliated)	☒	☐
Clay Burns (National Grid)	☐	☐
Ruby Chan (CHG&E)	☐	☒
Richard Wright (CHG&E)	☐	☐
Sanderson Chery (Con Edison)	☐	☒
Ayman Elkasrawy (NYSEG/RG&E)	☐	☒
Jin Hao (NYSEG/RG&E)	☐	☐
Jim Kane (NYPA)	☐	☐
Anthony Abate (NYPA)	☒	☐
Mike Mager (MI)	☐	☒
Chris Wentlent (MEUA)	☐	☒
Hilme Athar (PSEG LI)	☐	☒
Thomas Primrose (PSEG LI)	☐	☒
Mike DeSocio (Luminary)	☐	☒
Advisers/Non-member Participants:		
Gary Jordan (ICS Consultant)	☒	☐
John Adams (ICS Consultant)	☐	☒
Henry Fox (NYISO)	☒	☐
Dylan Zhang (NYISO)	☒	☐
Laura Popa (NYISO)	☐	☒
Max Schuler (NYISO)	☐	☒
Yvonne Huang (NYISO)	☐	☒
Bianca Prinsloo (NYISO)	☒	☐
Lucas Carr (NYISO)	☒	☐

Sanket Milind Ulagadde (NYISO) ..... ☐ ..... ☐
Ryan Carlson (NYISO) ..... ☐ ..... ☒
Heidi Nielsen (NYISO) ..... ☒ ..... ☐
Brendan Long (NYISO) ..... ☐ ..... ☐
Carter Hempstead (NYISO) ..... ☒ ..... ☐
Garrett Bissell (NYISO) ..... ☒ ..... ☐
Kathleen O'Hare (NYISO) ..... ☐ ..... ☐
Josif Figueroa (NYISO) ..... ☐ ..... ☒
Pramila Nirbhavane (NYISO) ..... ☐ ..... ☐
Ethan Avallone (NYISO) ..... ☒ ..... ☐
Keegan Guinn (NYISO) ..... ☒ ..... ☐
Pallavi Jain(NYISO) ..... ☐ ..... ☐
Oyin Agunbiade (NYISO) ..... ☐ ..... ☐
Andrew Gregory (NYISO) ..... ☐ ..... ☐
Arjun Malhotra (NYISO) ..... ☐ ..... ☐
Claudia Bustamente (NYISO) ..... ☐ ..... ☐
Leila Nayar (NYISO) ..... ☐ ..... ☐
Sushant Varghese(NYISO) ..... ☐ ..... ☐
Diego Meucci (NYISO) ..... ☐ ..... ☐
Benjamin O'Rourke (NYISO) ..... ☐ ..... ☐
Jack Garrett (NYISO) ..... ☐ ..... ☐
Afreen Vahora (NYISO) ..... ☐ ..... ☐
Syeda Lubna (NYISO) ..... ☐ ..... ☐
Akin Aroge (NYISO) ..... ☐ ..... ☒
Manish Sainani (NYISO) ..... ☐ ..... ☐
Zach T. Smith (NYISO) ..... ☐ ..... ☐
Helena Frudit (NYISO) ..... ☐ ..... ☒
Chris Hamilton (NYISO) ..... ☐ ..... ☐
Aaron Markham (NYISO) ..... ☐ ..... ☐
Rajesh Subramanian (NYISO) ..... ☒ ..... ☐
Alexis Drake (NYISO) ..... ☒ ..... ☐
Ansa Altaf (NYISO) ..... ☐ ..... ☒
Mikaela Lucas (GE) ..... ☐ ..... ☐

Matt Elkins (GE) ☐ ☐
Adam Evans (DPS) ☐ ☒
Richard Quimby (DPS) ☐ ☒
Randy Monica Jr. (DPS) ☐ ☐
Wes Yeomans (RRS/RCMS) ☐ ☐
Kristine Agati (Avangrid) ☐ ☒
Leen Almadani (CHG&E) ☐ ☒
Patrick Danner (NYPA) ☐ ☒
Andrea Calo (CES) ☐ ☒
Joe Coscia (Potomac Economics) ☐ ☐
Mike Cadwalader (Atlantic Economics) ☐ ☒
Grant Flagler (Con Ed Energy) ☐ ☒
Karl Hofer (Con Edison) ☐ ☒
Mariann Wilczek (PSEGLI) ☐ ☐
Lucy Khazanovich (PSEGLI) ☐ ☒
David Mirabella (PSEGLI) ☐ ☒
Manny Panaligan (PSEGLI) ☐ ☐
Mark Magliola (PSEGLI) ☐ ☐
Tim Lundin (LS Power) ☐ ☒
Julia Popova (NRG) ☐ ☒
Ricardo Galarza (PSM) ☐ ☐
Richard Bratton (IPP NY) ☐ ☒
Khatune Zannat (NPCC) ☐ ☐
Herb Schrayshuen (NYSRC) ☐ ☐
Vincent Gabrielle (RTO Insider) ☐ ☒
Aaron Breidenbaugh (C Power) ☒ ☐
Eve Marenghi (Luminary) ☐ ☒
Dominic Riendeau-Krause ☐ ☒
Rick Gonzales ☐ ☐
Caroline Decker ☐ ☒
Elynor Reyes ☐ ☒
Michael Swider ☐ ☐
Benjamin Cohen ☐ ☐

Mackenzie Poulton ..... ☐ ..... ☒
Haizhen Wang..... ☐ ..... ☐
Jared Anderson ..... ☐ ..... ☐
Mark Gaines..... ☐ ..... ☐
Kenneth Galarneau..... ☐ ..... ☒
John Norris ..... ☐ ..... ☐
Leon Almadani..... ☐ ..... ☐
Yannick Vennes..... ☐ ..... ☐
Stephen Conant ..... ☐ ..... ☒
Nilkesh Gowalani ..... ☐ ..... ☐
Matthew Schwall ..... ☐ ..... ☐
Stephanie Palmer ..... ☐ ..... ☐
James Pigeon ..... ☐ ..... ☒
John Haff ..... ☐ ..... ☒
Matthew Napoli..... ☐ ..... ☐
Ray Stalter..... ☐ ..... ☒
Alan Ackerman..... ☐ ..... ☐
Marisa Doherty..... ☐ ..... ☐
Scott Niemann ..... ☐ ..... ☐
Vaibhav Parekh ..... ☐ ..... ☐
Travis Atkinson ..... ☐ ..... ☒
Daniel Jerke ..... ☐ ..... ☒

1&2 Roll Call and Request for Additional Agenda Items – W. Gunther / T. Primrose

One additional agenda item raised, discussion of potential additional ICS meeting.

3. Approval of Previous Meeting Minutes – T. Primrose

Meeting minutes for previous meeting #306 were approved with no comments.

4. Review of Action Item List – W. Gunther

W. Gunther highlighted minor changes to action items:

- W. Gunther raised the topic of the summer maintenance assessment at the last EC.
- Three whitepapers remain scheduled for year-end completion.

5. Chair update on recent EC actions – W. Gunther

W. Gunther provided an update on the EC covering the following:

- Significant discussion occurred at EC over the 2.9% year over year IRM increase
- EC approved sensitivity list as presented
- EC expressed interest in public appeals and voluntary curtailment EOP steps
- EC discussed sensitivity based on 2024 maintenance presentation
- EC discussed delayed ICS postings

6. 2025 Final SCR Model Values and DER Model Values – C. Hempstead

C. Hempstead presented an update on the 2025 Final SCR Model Values and DER Model Values:

- Background on SCR modeling and calculation of SCR response rates, "translation factors", and activation duration limits by zone.
- Response rates have remained unchanged since the preliminary values that were presented at the April 29, 2025 ICS meeting.
- SCR max capacity declined in all Zones with significant drop in A-E region. Updates reflect changes in enrollment and declared values for ICAP, as well as the transition of certain resources to the DER participation model.
- DER Aggregations that have passed distribution utility review as of August 2025 total 361.4MW in regions A-E.
- NYISO recommends modeling the enrolled DERs in the 2026-2027 IRM FBC, consistent with the modeling framework identified in the Phase 1 "DER Whitepaper".
    - NYISO recommends applying the NYCA average Equivalent Demand Forced Outage Rate (EFORd) to new DERs modeled in the 2026-2027 IRM FBC.

NYISO noted that some resources are in the process of enrolling as DER resources.

M. Mager noted that performance obligation of SCRs is only 4 hours. Also asked about plans to "roll off" older SCR historical data from calculations considering increased data availability. NYISO noted that period selection criteria is to use most recent 5 years of data with a mandatory activation event for all zones (years without an event for all zones are excluded). M. Cadwalader asked for a table to demonstrate what period was chosen in calculation.

NYISO noted that SCR response is assumed to be zero for A-E hours 6-7 and Zones G-I, J hour 7. G. Jordan questioned this assumption and suggested a sensitivity case to determine IRM impact. M. Mager and A. Evans concurred with skepticism and support for sensitivity case. A. Evans emphasized that overly conservative assumptions have customer cost implications and that a sensitivity case is required. NYISO requested G. Jordan provide response rates for hours without historical SCR activation data to use for impact analysis of aforementioned response assumptions. G. Jordan agreed to provide a set of response rates.

NYISO noted that there was a 7 h SCR call for all zones earlier this year that will be captured in next years IRM process. 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 any of the events involved a winter SCR call. NYISO confirmed that they do. He followed up asking if the activation hours are different for winter and NYISO directed to July 10th ELR

presentation for more info. NYISO also noted that winter SCR calls were not mandatory until this year.

Stakeholders noted that DER aggregations for A-E almost exactly match SCR reduction in A-E. NYISO noted that all currently enrolled DER presented were previously SCR resources.

J. Popova asked if DER modeling considers offer floor for DER/DSR dispatch. Stakeholders noted that the MARS model is not an economic dispatch model but that conditions leading to DER dispatch would almost certainly lead to LBMPS above $50/MWh.

NYISO agreed to bring this topic back to the October ICS with clear DER inclusion rules reflecting ICS's willingness to model DER beyond only those that have passed distribution utility review. NYISO noted that DER enrollment process gives clear indication of customer commitment up-front and there is no way to back out once the enrollment process starts.

Stakeholders asked about the quantity of resources currently under review for DER enrollment and NYISO replied it is roughly 60MW each in Zones A/D. M. Mager asked if SCR response rates will be updated considering significant changes in resource base. NYISO replied that the response rates will remain the same. NYISO will bring additional info on SCRs to the next meeting for ICS review as part of approving the FBC assumptions matrix.

7. ELR Modeling Whitepaper-SCR Start Times – B. Prinsloo

B. Prinsloo provided an update on the ELR whitepaper covering the following:

- Background on ELR (including SCR) modeling in current IRM model
- Recap of proposed methodologies for determining an appropriate start time for SCRs in the IRM model methodologies for
    - Method 1: NYCA peak load hour, all SCRs starting HB15
    - Method 2: Grouped by Upstate (A-F) and Downstate (G-K). Upstate SCRs starting HB16, downstate SCRs starting HB14
- Parametric impact analysis of proposed methodologies. Method 1 shows .12% IRM reduction, method 2 shows .16% IRM reduction.
- For the 2026-2027 IRM FBC, the NYISO recommends updating the SCR start times for Load Zones A-F to HB16 and HB14 for Load Zones G-K to better align with operational practice and separate upstate and downstate net peak load/risk profiles.

M. Cadwalader commented that SCR start times should align with operations practices rather than what may be ideal operation from an IRM MARS model perspective. NYISO noted that method 2 aligns with operational capability and practice. NYISO also noted that peak load hour and SCR windows would be reviewed annually during the IRM process.

8. Winter Reliability Capacity Enhancements- NYISO Market Design Proposal – A. Drake

A. Drake provided a presentation on NYISO's Winter Reliability Capacity Enhancements Market Design Proposal:

- Background on project objective and project status.
- Market Design Concept Proposal including:
    - Distinct seasonal UDR elections with one for the Summer Capability Period and one for the Winter Capability Period.
    - Seasonal NYCA Minimum ICAP Requirements including updates to NYISO's ICAP market processes.
        - Summer NYCA Minimum ICAP Requirement =NYCA Summer Forecasted Peak Load x(1 + IRM)

        - Winter NYCA Minimum ICAP Requirement = NYCA Winter Forecasted Peak Load x (1+ Winter Reserve Margin)
    - Example seasonal NYCA and Locality Minimum Installed Capacity Requirements calculation.
    - There is no change suggested for the annual NYSRC IRM setting process.
- The NYISO is evaluating if calculating seasonal transmission security limit (TSL) floor values will be necessary to account for seasonal differences in parameter assumptions such as, but not limited to, load forecast and bulk power transmission limits.
- The LCR study process, including inputs to the LCR optimizer such as the final IRM base case, the NYSRC-approved IRM, the targeted LOLE, and TSL floor values, will remain unchanged.
    - If seasonal TSLs are adopted, a process to account for both summer and winter TSL floor values will need to be developed.

ICS will review to ensure that this proposal is fully consistent with 1 day in 10 years reliability requirement as well as existing NYSRC processes and rules.

Stakeholder discussion occurred regarding the meaning of the winter ICAP requirement and its relevance in a system with winter LOLE risk. G. Jordan inquired if there was any impact with winter fuel constraints. NYISO replied that fuel constraints are handled on UCAP side rather than ICAP side.

Stakeholders inquired about changes to CAF process with seasonal requirements. NYISO responded that CAFs would remain an annual construct. UDR election timeline also to remain the same, but with possibility of distinct winter and summer elections.

9. IRM PBC 2026-2027 Results (Approval Item)– W. Gunther

W. Gunther raised the IRM PBC 2026-2027 Results as an approval item:

- ConEd and PSEGLI confirmed TO review of masked databases with no data issues
- GE confirmed validation of the database

ICS approved the 2026-2027 PBC results and parametric results.

10. 2026-2027 IRM PBC Sensitivities– A. Altaf/ R. Subramanian

A. Altaf presented 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 assumptions change sensitivities include no Winter Fuel Availability Constraints (Tan45), Barges + No CHPE (Tan45), and Barges + CHPE both included (Tan45). Also covered a detailed breakout of additional data on each of the sensitivities including visualizations.

NYISO clarified that for flow visualizations under S02, max flows are plotted in each direction for each month. Also clarified that Y-axis measurement in S03 charts is days/yr LOLE.

W. Gunther asked for NYISO to provide a list of priority drivers in MARS along the lines of position in the MIF driving distribution of EA or interface flows.

Stakeholders inquired about impact of NYCA isolated case relative to prior years which show similar impact despite more restrictive tie benefits assumptions. NYISO implied that this is likely due to CHPE assumption and that the current impact of 5% is significantly smaller than many years ago.

11. IRM 2026-2027 Special Sensitivities Results – L. Carr

L. Carr presented additional details on the Tan45 special sensitivities for the 2026-2027 IRM PBC. Special sensitivities include no Winter Fuel Availability Constraints (S6), Barges + No CHPE (S7a), and Barges + CHPE (S7b).

- Illustrative example of interaction between Winter Fuel Availability Constraints and CHPE
- S06 showed a 1.8% decrease to the IRM and eliminated all winter LOLE risk from the model
- S07a showed a 0.7% decrease to the IRM and 3.2% decrease to the Load Zone J locational capacity requirement (LCR)
    - Load Zone J LCR decrease is driven largely by the reduction in net ICAP supply in the load zone (~737 MW) resulting from the removal of CHPE and addition of the barges
- S07b showed a 0.5% increase to the IRM and 1.3% increase to the Load Zone J LCR
    - Primary driver of the increase in both IRM and Load Zone J LCR is the impact of the barges on the NYCA and Load Zone J average Equivalent Demand Forced Outage Rate (EFORd)
    - Inclusion of the barges in the datasets does increase the amount of total available fuel assumed in the winter fuel availability constraints modeling, but the overall winter LOLE increases because the increase to the assumed levels of available fuel is outweighed by the increase in modeled capacity and the impact to the EFORd values

G. Jordan asked for clarification on why winter fuel availability constraints impact summer LOLE in illustrated example. NYISO clarified that this is because in the current model, winter consumes some EOP activations so less are available for summer. Stakeholder discussion occurred regarding future implications of adding seasonal capacity within the annual shifting construct of Tan45.

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 asked for future presentations to list possible explanations for counterintuitive results (such as increase in Zone K LCR without winter fuel availability constraints). Also requested that the NYISO look into presenting a standard number of significant digits.

12. EOPs - Voluntary Curtailments and Public Appeals – L. Carr

L. Carr presented a review of Voluntary Curtailment and Public Appeals EOP steps in the IRM model covering the following:

- Background on EOP steps and frequency of implementation in the 2026-2027 IRM PBC
- Overview of test results for combinations of restrictions on Voluntary Curtailment and Public Appeals EOP steps (vs current 3 call per year limit)
    - Allowing an unlimited quantity of calls provided the greatest reliability benefit and lowest resulting IRM.
    - Unlimited Voluntary Curtailments and Public Appeals allow for 1.26% IRM reduction
    - Unlimited Voluntary Curtailments and 3 calls/year Public Appeals allow for 0.90% IRM reduction
    - 3 calls/month limit on Voluntary Curtailments and Public Appeals allow for 0.44% IRM reduction
- With unlimited calls, expected number of Voluntary Curtailments (probability weighted) was 3.4 calls/year with 34.6 calls/year in bin 1.

- Without a seasonal EOP call limit in GE MARS, loosening the restrictions to unlimited or 3 calls/month brings the model closer to the desired seasonal structure to better align with the grid operation experience and modeled reliability risks.

M. Mager voiced that current public appeals model is highly conservative because it only represents relief for one TO. Also strongly suggested a change to the assumptions, supporting 3 days in winter and 3 days in summer for voluntary industrial curtailment. NYISO indicated that this is not possible in current MARS version which is limited to annual or monthly limits. G. Jordan noted that GE is updating the model to support capability years, and that modeling workarounds may exist.

T. Primrose voiced concerns regarding fatigue in voluntary curtailments following repeated calls. Also expressed significant concerns with allowing Zone K public appeals more than 3X per year. He indicated a willingness to shift seasonality of assumptions (I.E. 1 call in winter and 2 calls in summer) but strongly urged against increasing annual call limitations.

One stakeholder 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.

13. IRM 2026-2027 FBC Assumptions Matrix - R. Subramanian

R. Subramanian presented an update for the IRM 2026-2027 FBC assumptions matrix. Noted that there is no update to the peak load forecast yet and no change to summer maintenance assumptions. Item 23 was added as a new item to cover DERs.

Stakeholder discussion noted that PJM no longer updates their MARS database as they did not renew their MARS license.

14. IRM 2026-2027 FBC Results - R. Subramanian

R. Subramanian presented an update for the IRM 2026-2027 FBC results.

- Material updates include: Unforced Capacity Deliverability Rights (UDR) Elections, Special Case Resources (SCR) MW Update
- Parametric result stands at 25.77% IRM, 79.37% NYC, 88.88% LHV, 107.49% LI

15. Additional Agenda Items

No major additional agenda items identified.

W. Gunther noted that LTFT is scheduled for 9/29 which is very close to the 10/1 ICS meeting. Possible days for additional ICS to accommodate load reconciliation if not previously available are 10/3 and 10/7. Load forecast needs to go to EC for approval on 10/9. ICS tentatively agreed to scheduling additional meeting on 10/3.

Next Meeting

Meeting #308 –Wednesday, October 1st, 2025, 10 am –NYISO KCC and MS Teams