Final Minutes

New York State Reliability Council - Installed Capacity Subcommittee (ICS)
Meeting #302– April 2nd, 2025
Microsoft Teams

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 Wentlet (MEUA)	☐	☒
Mark Younger (Hudson Economics)	☐	☒
Hilme Athar (PSEG LI)	☐	☒
Thomas Primrose (PSEG LI)	☐	☒
Advisers/Non-member Participants:		
Gary Jordon (ICS Consultant)	☐	☒
John Adams (ICS Consultant)	☐	☒
Henry Fox (NYISO)	☐	☒
Dylan Zhang (NYISO)	☐	☒
Laura Popa (NYISO)	☐	☐
Max Schuler (NYISO)	☐	☐
Yvonne Huang (NYISO)	☐	☒
Otito Onwuzurike (NYISO)	☐	☐
Bianca Prinsloo (NYISO)	☐	☒
Lucas Carr (NYISO)	☐	☒

Sanket Milind Ulagadde (NYISO)	☐	☐
Mikaela Lucas (NYISO)	☐	☐
Ryan Carlson (NYISO)	☐	☒
Timothy Duffy (NYISO)	☐	☐
Heidi Nielsen (NYISO)	☐	☒
Abdul Mohammed (NYISO)	☐	☐
Brendan Long (NYISO)	☐	☐
Victoria Swider (NYISO)	☐	☐
Adam Evans (DPS)	☐	☐
Richard Quimby (DPS)	☐	☒
Randy Monica Jr. (DPS)	☐	☒
Wes Youmans (RRS/RCMS)	☐	☐
Herb Schrayshuen	☐	☐
Rick Gonzales	☐	☒
Alan Ackerman	☐	☐
Kristine Agati (Avangrid)	☐	☒
Leen Almadani (CHG&E)	☐	☐
Majdi Baccouche (NYSEG/RG&E)	☐	☐
Patrick Danner (NYPA)	☐	☒
Liam Baker	☐	☐
Garrett Bissell	☐	☒
Mike Cadwalader	☐	☒
Andrea Calo (CES)	☐	☒
Joe Coscia (Potomac Economics)	☐	☐
Caroline Decker	☐	☐
Christina Duong	☐	☒
Grant Flagler (Con Ed Energy)	☐	☒
Chris Hall	☐	☐
Karl Hofer (Con Edison)	☐	☐
Mariann Wilczek (PSEGLI)	☐	☒
Tim Lundin (LS Power)	☐	☐
Julia Popova (NRG)	☐	☒
Ricardo Galarza (PSM)	☐	☒

Elynor Reyes	☐	☒
Kathleen O'Hare	☐	☒
Jie Chen	☐	☐
Michael Swider	☐	☐
Benjamin Cohen	☐	☐
Lucy Khazanovich	☐	☒
David Mirabella	☐	☒
Mackenzie Poulton	☐	☒
Richard Bratton (IPP NY)	☐	☒
Josif Figueroa	☐	☐
Vincent Gabrielle	☐	☐
Haizhen Wang	☐	☒
Marisa Dougherty	☐	☐
Tomasz Dziedzic	☐	☐
Claudia Bustamente	☐	☐
Jared Anderson	☐	☐
Anand Chandrashekaran	☐	☐
Manny Panaligan	☐	☐
Mark Magliola	☐	☐
Mark Gaines	☐	☐
Pallavi Jain	☐	☒
Oyin Agunbiade	☐	☒
Andrew Gregory	☐	☐
Arjun Malhotra	☐	☐
Leila Nayar	☐	☐
Shah Saeed	☐	☐
Sushant Verghese	☐	☐
Kenneth Galarneau	☐	☒
John Norris	☐	☐
Benjamin ORourke	☐	☐
Leon Almadani	☐	☐
Syeda Lubna	☐	☐
Yannick Vennes	☐	☐

Jack Garrett ..... ☐ ..... ☒

Afreen Vahora ..... ☐ ..... ☒

Khatune Zannat (NPCC) ..... ☐ ..... ☐

Stephen Conant ..... ☐ ..... ☒

Keegan Guinn ..... ☐ ..... ☒

Nilkesh Gowalani ..... ☐ ..... ☒

Pramila Nirbhavane ..... ☐ ..... ☒

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

Two additional items identified:

- Gowanus and Narrows GTs IIFO Notice
- Discussion on Policy 2 posting guideline. Stakeholders asked if alternate NYSRC representative can do postings if there are unforeseen challenges.

3. Approval of Previous Meeting Minutes – T. Primrose

Meeting minutes for previous meeting #301 were approved with no comments.

4. Review of Action Item List – W. Gunther

No new action items were presented. The list was updated to reflect current completion status. Changes were minor updates on the status of some of the whitepapers

5. Chair update on recent EC actions – T. Primrose

T. Primrose provided an update on the EC covering the following:

- EC had minimal questions on the DER modeling whitepaper or the BTM Solar and ELM presentations
- EC broadly supported moving the 4/11 meeting in person to facilitate discussion on Fuel Availability Constraints Modeling, and urged that ICS have a thorough discussion on the topic at the 4/2 ICS

6. Proposal to move 4/30 ICS to 4/29 to avoid NYISO MC conflict- W. Gunther/M. Younger

ICS approved ICS 303 data change. G. Jordan noted that posting deadline would shift to 4/24.

7. IRM 2026-2027 PBC Parametric Results – H. Fox

H. Fox presented an update to the IRM 2026-2027 PBC parametric results. Material changes included Enhanced Load Modeling (ELM) and Behind the Meter (BTM) solar modeling. Net impact of material changes is a .96% increase in IRM.

8. IRM 2026-2027 PBC Assumptions Matrix – H. Fox

H. Fox presented an update to the IRM 2026-2027 PBC assumptions matrix. PBC assumptions matrix was updated to incorporate ELM and generation deactivations.

NYISO clarified that generation additions screening had not yet been conducted.

9. Fuel Availability Constraints Modeling Phase 2– L. Carr

L. Carr presented an update for the Fuel Availability Constraints Modeling Phase 2 covering:

- NYISO recommended updating the assumed level of "available oil" to 11,750 MW for the initial implementation of the fuel availability constraints modeling in the IRM study
    - Updated recommendation considers potential limitations imposed by certain air permits, as well as historical operating experience under tight winter operating conditions.
- Updated regression analysis identified a reduction to the "available gas" assumption of 100 MW for each of Tier 2-4 compared to the recommendations presented at the 3/5/2025 ICS meeting.
    - Tier 1 assumption was also updated to be calculated as 50% of the Tier 2 assumption as suggested at 3/5 ICS.
- Recommendation not to limit the dataset to historical winter peak load hours above 22,000 MW as this approach would drastically reduce the data used for the regression analysis
- NYISO implementation approach for 2026-2027 IRM:
    - For Preliminary Base Case (PBC), model fuel availability assumptions using the updated assumptions as a parametric step
    - Conduct Tan45 sensitivity analysis with the removal of the fuel constraint model to verify the modeling impact between PBC and FBC to verify impact
    - For FBC maintain same fuel availability assumptions as PBC unless changes to the F-K thermal generation fleet occur
- Tan45 analysis on IRM25-26 FBC + BTM Solar + ELM + Fuel Availability Constraints indicates slight IRM/LCR impact with ~1% of LOLE risk shifting to winter

M. Younger requested more detail on generator air permit analysis, specifically what duration was used as a cutoff. He suggested developing a specific cutoff for generators to be modeled as having available fuel in MARS. Also expressed concern that analysis has not been conducted in alignment with rules for firm fuel. M. Younger further expressed that NYISO MMA unit may have additional insights on permits.

NYISO clarified that their analysis involved working with operations to screen for permit limitations and reduced available oil if "significant permit limitations" existed. No specific cutoff was used. Y. Huang further clarified that the NYISO is not seeking to evaluate available oil against evolving firm fuel rules, but primarily evaluating against reported oil storage with some additional constraints suggested at the 3/5 ICS (air permits, etc…).

P. Nirbhavane from NYISO operations commented in support of NYISO available fuel estimate and that they did not identify air permit issues following a review of the Title V air permits of a majority of units. C. Wentlent indicated that some generators have per MMBTU emission limits while others have negotiated annual tonnage caps. He further added that the NYISO needs to look into NSR settlements for annual tonnage caps.

Mike Mager commented that NYISO available fuel estimates have changed several times and urged caution if the intent is to lock in assumptions for the FBC. He also indicated a level of concern with relying on the first firm fuel elections as well.

G. Jordan commented that current implicit model assumption is that all units are firm since there are no fuel constraints and that doing nothing carries that assumption forward which is not reasonable.

M. Mager inquired as to what would happen if a unit impacted by permit limitations was needed to maintain system reliability. R. Bolbrock commented that short of abuse, there is a fair likelihood that air permit waivers would be granted. M. Younger expressed that the system should not be planned in a way that counts on air permit waivers.

Y. Huang reiterated that the overall goal for the first year of fuel constraints is to develop a reasonable set of assumptions and provide stability between the PBC and FBC. M. Younger followed up with concerns about this set of assumptions breaking market-reliability feedback loop. He pointed out that locking the current firm fuel estimate will lead to a very high non-firm CAF and many resources will consequently elect non-firm.

R. Gonzales commented that capacity limitations in MARs are driving some of the breaks between firm fuel duration requirements, and modeled illustrative derates and it is up to the NYISO to convince stakeholders what is reasonable. Also expressed a desire for sensitivity work surrounding oil availability.

M. Younger expressed concern that not updating available gas regression to historical winter peak load hours above 22,000 MW is not ideal. Also suggested that NYISO IRM team consult with NYISO internal regression experts. Several stakeholders expressed concern about tier 1 gas assumption increase from previous proposal in addition to the use of ½ of the tier 2 value.

M. Cadwalader noted the limited predictive power of regressions as presented. R. Gonzales asked about pegging the Tier 1 bin at half the Tier 2 bin level, and NYISO confirmed the regression would predict zero and there are no historical data points in that load bin.

ICS reached a collective recommendation to back M. Younger's proposal to update the available gas regression to exclude points below 22,000MW. Stakeholders expressed a need for Tan45 analysis of updated approach to go to the EC. NYISO agreed to update analysis for 4/11 EC presentation.

Several stakeholders expressed a need for available fuel model stability in advance of the August 1st fuel elections deadline (with the exception of generation fleet changes or other significant objective factors) because generators will be making elections based on this modeling construct.

10. DER Whitepaper – B. Prinsloo

B. Prinsloo noted that there was only one minor editorial comment on the DER whitepaper. ICS approved the whitepaper and it will go to EC for approval.

11. ELR Whitepaper – B. Prinsloo

B. Prinsloo presented on the ELR Modeling and Output Limitation review covering the following:

- Background on current ELR modeling and scope of overall ELR review
- Background on findings of the 2021 NYSRC ICS Whitepaper on ELR modeling
- Next steps:
  - Maintain current assumption to lift the output limitation for ES and small EL3 at HB14 for 2026-2027 IRM
  - Focus on assessment of the ELR modeling and utilization of SCRs in MARS.
  - Continue to work with GE on potential MARS improvements on the ELR functionality for implementation beyond 2025.

R. Bolbrock noted that optimization of storage in MARS beyond what operations will do may not be desirable.

12. BTM Solar and Enhanced Load Modeling (ELM) Whitepaper – D. Zhang

D. Zhang presented an initial draft whitepaper on BTM Solar and Enhanced Load Modeling (ELM) formally memorializing the ICS 301 presentation on the BTM Solar and ELM model improvements.

Stakeholders noted that the BTM Solar and Enhanced Load Modeling (ELM) construct is a significant improvement.

J. Popova requested clarification on why the LOLE distribution from this study shifting risk earlier in the day was not used in the ELR whitepaper.

13. Additional Agenda Items

Gowanus and Narrows IIFO notice was discussed. NYISO to provide additional analysis at ICS 303 in addition to discussion on CHPE and other peakers.

Next Meeting

Meeting #303 –Tuesday, April 29th, 2025, 10 am – NYISO KCC and MS Teams