

Draft Minutes

**New York State Reliability Council - Installed Capacity Subcommittee (ICS)
Meeting #301– March 5th, 2025
Microsoft Teams**

Attendees **Present** **Phone**

Members / Alternates:

William Gunther (Con Edison – ICS Chair)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Brian Shanahan (National Grid)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rich Bolbrock (Unaffiliated)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Clay Burns (National Grid).....	<input type="checkbox"/>	<input type="checkbox"/>
Ruby Chan (CHG&E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Richard Wright (CHG&E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sanderson Chery (Con Edison).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ayman Elkasrawy (NYSEG/RG&E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Jin Hao (NYSEG/RG&E).....	<input type="checkbox"/>	<input type="checkbox"/>
Jim Kane (NYPA)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Anthony Abate (NYPA)	<input type="checkbox"/>	<input type="checkbox"/>
Mike Mager (MI)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chris Wentlet (MEUA).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mark Younger (Hudson Economics)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hilme Athar (PSEG LI).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Thomas Primrose (PSEG LI).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Advisers/Non-member Participants:

Gary Jordon (ICS Consultant)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
John Adams (ICS Consultant)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Henry Fox (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dylan Zhang (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Laura Popa (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Max Schuler (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Yvonne Huang (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Otito Onwuzurike (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Bianca Prinsloo (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lucas Carr (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

Jack Garrett.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Afreen Vahora.....	<input type="checkbox"/>	<input type="checkbox"/>
Khatune Zannat (NPCC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Stephen Conant	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No additional agenda items identified.

3. Approval of Previous Meeting Minutes – T. Primrose

Meeting minutes for previous meeting #300 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.

- Action item 299-1 was completed.
- Minor editorial updates were made to the action items list and Gantt chart.

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

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

- EC approved a Policy 5 straw poll voting change for bundling with other Policy 5 changes in June.
- EC approved the ICS milestone schedule
- Ongoing discussion on fuel constraints modeling in the IRM model continued. EC members are divided with some supporting NYISO proposal, some supporting IPPNY proposal and some requesting more information or supporting deferral of fuel constraints for another year.

M. Younger proposed deferring discussion on fuel election vs fuel estimate modeling to April to allow for further ICAPWG discussion and the attendance of NYISO VPs.

6. DER Whitepaper – B. Prinsloo

B. Prinsloo presented an update on the DER whitepaper covering the following:

- NYISO implemented its new market participation model for DER to participate in the NYISO-administered markets in April 2024, and these resources have not been modeled in the IRM study before.
- Background regarding the three resource aggregation types
- Two potential modeling principles:
 - Principle 1: Combine single resource type Aggregations that have energy duration limitations and DER Aggregations consisting of DSR only or mixed generation resources into one unit by zone, technology type, and duration limitation.
 - Principle 2: Combine single resource type Aggregations without energy duration limitations by zone and technology type.

- NYISO recommendation not to model any potential enrollments of expected DER for the 2025-2026 IRM study. For the 2026-2027 IRM study cycle, resources enrolled as DER will be included in the IRM study based on the ICS approved modeling for DER.

Stakeholders requested the NYISO to follow up on whether some resources that receive ancillary service revenues must transition to switch to DER participation.

Following the ICS meeting, the NYISO provided the following update in response to the above request for clarification from stakeholders:

The most recent information can be found in the NYISO 2024 Annual Report on Demand Response, located under <https://www.nyiso.com/demand-response> [nyiso.com] navigate to DR05- NYISO Semi-Annual Demand Response Report/ 2025

Page 21:

Section VI. Updates on 2024 Demand Response Initiatives

*.. Consistent with market rules proposed by the NYISO in Docket No. ER19-2276-000, et al., and accepted by the Federal Energy Regulatory Commission (“Commission”) on January 23, 2020, the NYISO began transitioning Resources from both the DSASP and the DADRP to the DER and Aggregation participation model. 14 In preparation for the retirement of the DSASP and DADRP, the NYISO stopped accepting DSASP and DADRP Resource applications beginning April 16, 2024, when the DER and Aggregation participation model was made available. The NYISO is working to support a smooth transition of DSASP and DADRP Providers and their Resources to the DER and Aggregation participation model, as DSASP and DADRP Resources will ultimately be required to transition or withdraw from the market. **The NYISO is sunseting DADRP and DSASP as part of the transition to the DER and Aggregation participation model. The current sunset date for DADRP and DSASP is targeted for October 31, 2025.***

7. BTM Solar and Enhanced Load Modeling (ELM) – M. Lucas

M. Lucas presented an update on BTM Solar and Enhanced Load Modeling (ELM) covering the following:

- ICS developed a methodology to model Behind-the-Meter (BTM) solar explicitly as a supply resource in the installed reserve margin (IRM) model.
 - The impact of BTM solar needs to be “added back” to the load shapes and peak forecast to provide load modeling on a gross basis
 - BTM solar production also needs to be reflected as generation using 5 years of historical production profiles consistent with the modeling of other intermittent resources
 - Model necessitated enhanced load modeling procedure for 2025
- Load modeling improvement effort will focus on seasonal specific load modeling to reflect summer and winter peak forecasts in the IRM model
- Proposed ELM load shape adjustment workflow: Energy Adjustment → NCP adjustment → CP adjustment → G-J Locality peak adjustment → NCP correction → Energy Recalibration

- Implementation of BTM solar and ELM on 2025-2026 IRM FBC increases IRM by .8%, with J, G-J, and K LCRs increasing by .46%, .34% and 1.47% respectively
- Implementation of the combined modeling of BTM solar and ELM improvements would shift LOLE risks to earlier in the day when large amounts of BTM solar are available
- The NYISO recommends adoption of the explicit modeling of BTM solar and the proposed ELM in the 2026-2027 IRM Preliminary Base Case

M. Younger voiced support of incorporating changes into base case model.

ICS approved the NYISO proposal for inclusion in the 2026-2027 IRM Preliminary Base Case. NYISO to follow up on presentation with a formal whitepaper for EC approval.

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

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

- Background on Phase 1 whitepaper 6-tiered fuel availability assumptions
- Background on “available oil” calculation with examples
- NYISO recommended updating the assumed level of “available oil” to 12,100 MW for the initial implementation of the fuel availability constraints modeling in the IRM study
 - Across 84 weekly fuel surveys (2018-2025), the average amount of capacity covered by stored oil was approximately 12,100 MW with a range from 11,600 MW – 12,530 MW
 - Increase from the 11,000 MW initial “available oil” assumption in the Phase 1 Whitepaper is primarily due to the use of a 56-hour energy production duration assumption
- NYISO recommended updating the assumed level of “available gas” incorporating updated production data for Zones F-K from recent winters
 - Gas availability did not increase for the highest load tier, but increased slightly for the lower-tiers
- 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

Significant stakeholder discussion occurred throughout presentation:

W. Gunther asked about air permit restrictions and whether they are factored into the available oil calculation. L. Carr confirmed that air permit restrictions are currently not included in the calculation.

M. Younger agreed that the NYISO should check generator permit limitations on oil fired hours. Also advocated for NYISO to use firm fuel elections in the model, and that the NYISO estimates should use the same requirements as the firm fuel market definition.

Y.Huang stated that the objective is not to replicate the market but to capture in aggregate how much fuel can be depended on from a probabilistic perspective. Reiterated that NYISO believes the approach as presented is reasonable approach for IRM study.

C. Wentlent noted that some generators in the NYISO fleet are part of combined emissions bubbles or have individual operating limits. He provided example of units running into air permit limitations during polar vortex. Y. Huang expressed reluctant willingness to look at unit to unit

exceptions, but that NYISO operations support NYISO approach as reflecting unit availability in aggregate.

M. Mager expressed concern about the level of deference given to statements from NYISO operations without hearing from them directly. He also requested clarity on the update cadence and process for available oil and available gas calculation. NYISO expressed that the annual process is an open question, but that focus should be on assumptions for the 2026-2027 IRM cycle. NYISO also expressed the need for flexibility to be able to incorporate new and/or better data as time goes on.

M. Cadwalader inquired about tier 1 gas availability, given lack of data at those load levels. NYISO clarified that they did not modify assumptions for most constraint point (tier 1) from phase 1 whitepaper due to lack of data for that point in gas availability regression.

M Younger requested an updated gas availability regression dropping data points below 22,000MW, where gas production is primarily demand driven. NYISO to bring regression excluding these points to the next ICS.

9. Additional Agenda Items

No additional agenda items identified.

W. Gunther and M. Younger commented that the ICAPWG will be covering LCR optimizer recommendations and presentation on Firm/Non-Firm fuel elections in in the IRM study on 3/6/2025.

Next Meeting

Meeting #302 –Wednesday, April 2nd, 2025, 10 am – MS Teams