

Draft Minutes

New York State Reliability Council - Installed Capacity Subcommittee (ICS)

Meeting #304– June 4th, 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 checked="" type="checkbox"/>
Ruby Chan (CHG&E)	<input type="checkbox"/>	<input 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 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 Wentlent (MEUA).....	<input type="checkbox"/>	<input type="checkbox"/>
Hilme Athar (PSEG LI).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Thomas Primrose (PSEG LI).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mike DeSocio	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Advisers/Non-member Participants:

Gary Jordan (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 checked="" type="checkbox"/>
Laura Popa (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Max Schuler (NYISO)	<input type="checkbox"/>	<input 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 type="checkbox"/>
Ryan Carlson (NYISO)	<input type="checkbox"/>	<input 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 type="checkbox"/>
Brendan Long (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Victoria Swider (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Carter Hempstead (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 type="checkbox"/>
Leen Almadani (CHG&E)	<input type="checkbox"/>	<input type="checkbox"/>
Majdi Baccouche (NYSEG/RG&E).....	<input type="checkbox"/>	<input type="checkbox"/>
Patrick Danner (NYPA)	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>
Andrea Calo (CES)	<input type="checkbox"/>	<input 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 type="checkbox"/>
Tim Lundin (LS Power)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Julia Popova (NRG).....	<input type="checkbox"/>	<input type="checkbox"/>
Ricardo Galarza (PSM)	<input type="checkbox"/>	<input 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 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 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 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 checked="" type="checkbox"/>
Yannick Vennes	<input type="checkbox"/>	<input type="checkbox"/>
Jack Garrett (NYISO).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Afreen Vahora	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Khatune Zannat (NPCC).....	<input type="checkbox"/>	<input type="checkbox"/>
Stephen Conant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Keegan Guinn (NYISO).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nilkesh Gowalani	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pramila Nirbhavane	<input type="checkbox"/>	<input type="checkbox"/>
Ethan Avallone	<input type="checkbox"/>	<input type="checkbox"/>
Matthew Schwall	<input type="checkbox"/>	<input type="checkbox"/>
Diego Meucci	<input type="checkbox"/>	<input type="checkbox"/>
Stephanie Palmer	<input type="checkbox"/>	<input checked="" type="checkbox"/>
James Pigeon.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Akin Aroge (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
John Haff	<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 #303 were approved with no comments.

4. Review of Action Item List – W. Gunther

The sole change was the update of the BTM solar and ELM whitepaper status from drafted to complete.

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

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

- EC approved BTM solar and ELM whitepaper.
- CHPE discussion at EC: Lengthy discussion occurred at EC, with a large focus on potential mismatch between IRM model and market realization. NYISO indicated parallel analysis of CHPE inclusion/CHPE non-inclusion would address these concerns.
- Draft Policy 5 update received no comments from EC (or ICS).

6. Load Forecast Uncertainty (LFU) Model Updates – A. Aroge

A. Aroge presented a background and summary of the Winter Base Load Forecast Uncertainty Update covering the following:

- Based on an analysis of Summer 2024 and Winter 2024-25 weather data, the NYISO recommended updating the Winter LFU model.
- Since zonal peak day temperatures were below normal during the 2024 NYCA summer peak day, there is no update to the summer LFU models and multipliers.
 - 2026-2027 IRM study will use summer LFU multipliers currently in effect.
 - NYISO plans to update the summer LFU models and multipliers during the spring of 2026 for the 2027-2028 IRM Study.
- Recommended 2026 Winter LFU values increased slightly for all load bins (.24% increase for bin 1, 1.28% increase for bin 7).

Parametric results for LFU update will be presented at the next ICS. LFU update will result in IRM impact once fuel constraints are modeled.

7. Gold Book Load Forecast Impact – B. Prinsloo

B. Prinsloo presented background behind the math of the parametric update for the 2025 Gold Book load forecast covering the following:

- Parametric IRM impact was -.619%, while J, J and G-J LCRs increased .983%, .983% and .517% respectively.
- With load update NYCA load increased by 510.9 MW, decreasing the capacity margin by 1.99% before applying any capacity adjustments.
 - Subsequently, the A-K parametric adjustment is applied with 424.3MW capacity added to NYCA to bring the LOLE back to 0.1.
- Tan45 methodology may produce different IRM impact.

Load change in Zone D year over year caused by large load interconnection.

8. CHPE Modeling Assumptions – L. Carr

L. Carr presented modeling considerations for CHPE in the 2026-2027 IRM Study covering the following:

- ICS is expected to finalize assumptions regarding the inclusion of CHPE and peaker status for the 2026-2027 IRM PBC (PBC) at the 7/10/2025 ICS meeting.
- NYISO recommends applying a cable outage rate for the CHPE line that is based on the class average of existing cables that are modeled within the IRM study.
 - 10-year average cable outage rate is 5.80% based upon the 2015-2024 data.
 - Data is a proxy until operational data for the line is reported and rolled into the dataset.
- NYISO recommends use of a 1,250 MW “curtailable contract” from Hydro Quebec (HQ) to Load Zone J to represent CHPE UDRs for summer months (May-October).
 - CHPE UDRs is likely to be supported by the control area system resources of HQ.
 - Contract will flow only to the extent it does not introduce a loss of load risk in the source area.
 - Recommend maintaining 0 MW winter rating for the CHPE line and 0 MW capacity supply to Load Zone J using the CHPE UDRs in the winter season (November – April).
- NPCC Reliability Assessment for Winter 2024-2025 identified possible shortage conditions in HQ during future peak winter periods.
 - NYISO recommends updating the transfer capability across all Hydro Quebec interfaces (Chateauguay, Cedars, and CHPE) to 0 MW during winter months (November-April).

G. Jordan expressed support for curtailable contract modeling approach.

M. DeSocio expressed concerns that curtailable contract methodology may not reflect UDR capacity obligations. He commented that HQ should go deficient before curtailing the capacity contract (with the exception of transmission limitations).

T. Primrose expressed concern about interactions between policy 5 adjustments for external control areas and the curtailable contract construct. NYISO responded that base database received from NPCC has HQ as a winter peaking area so criteria adjustments will be confined largely to winter risk.

W. Gunther expressed similar concern, and expanded that HQ may have some resource availability during non-peak winter periods. NYISO responded that this may be a future improvement, but it would not be a major change since there is no LOLE risk outside of peak periods.

M. Mager expressed some agreement with limiting imports from HQ in winter, but questioned limitations on HQ when the model indicates excess resources are available.

M. DeSocio inquired about recent NYISO operational experience with HQ during cold weather. NYISO indicated that the NY and HQ winter peaks are highly correlated, NY has provided support via Chateaugay in recent years, and HQ also forecasts significant winter growth. W. Gunther clarified that that recent flow patterns may be a result of drought conditions in HQ. Y. Huang indicated that EA is not a typical flow (I.E. energy flow during real time operation) and asked how much we want to depend on neighbors.

9. Extreme Weather Resource Adequacy Modeling – J. Garrett

J. Garrett presented an update on investigative work regarding Extreme Weather Impacts on Resource Adequacy and Renewable Modeling covering the following:

- Background on current renewable modeling including requirement to model a common production year within replications (I.E. not using a 2005 production profile shape for Load Zone K solar, a 2006 production profile shape for OSW, and a 2007 production profile shape for LBW in Load Zone D).
- Assessment of capacity factors based on DNV simulated power profiles for current NYCA renewables.
- Assessment of low output counts based on DNV and production power profiles for current NYCA renewables.
 - Low output hours defined as hours when capacity factor across all intermittent renewable resources is less than 10%.
- Modeling of 10 years of data in MARS:
 - Additional 5 years of data for solar, LBW, and OSW were created using the DNV simulated data on top of the current modeling (DNV data for 2014 through 2018, production data for 2019 through 2023).
 - Model change to 10 years of profiles identified a 0.17% increase to IRM from the 2024-2025 FBC (from 24.4% to 24.57%).
- LOLE and IRM impacts are mainly driven by the production of intermittent renewable resources during the highest 10 peak load hours.
- Model change to 10 years of renewables caused no runtime or standard error degradation.

W. Gunther asked if sequential low output counts was considered in analysis. NYISO responded that results were previously presented to EWWG and that it was not a significant issue currently given the small amount of storage currently on the system.

J. Haff asked about the impact of growing BTM solar shifting the peak hour later at night. NYISO replied that the model used for analysis pre-dated BTM solar explicit modeling, but that they will take the comment back for consideration.

G. Jordan asked if NYISO would recommend the IRM study continue using the last 5 year's data or switch to 10 years. NYISO indicated they are currently collecting feedback and not ready to make a recommendation. G. Jordan indicated that limited IRM impact indicates no urgent need to change the number of renewable profile years used in MARS.

Y. Huang urged ICS that in considering extreme weather representation, accurately representing weather patterns is distinctly different from chasing the specific worst case for LOLE.

10. Topology Update – J. Garrett

J. Garrett presented an update on the topology update for the 2026-2027 IRM PBC covering the following:

- NYISO proposes to decrease the Dysinger East Forward Limit to 1,925MW based on the 2025 NYISO Summer operating study (previously 2,100MW).
- NYISO proposes to increase the West Central Reverse Limit to 2,225MW based on the 2025 NYISO Summer operating study (previously 2,200MW).
- NYISO proposes to increase the Moses South Forward Limit Limit to 3,500MW based on the expected in service date of the Smart Path Connect Project (previously 2,650MW).
- NYISO proposes to increase the Central East Forward Limits by 75MW to align with the expectation of the Marcy STATCOM being in-service.
- NYISO proposes to decrease the Sprain Brook Dunwoodie South Forward Limit to 4,225MW based on the 2025 NYISO Summer operating study (previously 4,400MW).

11. New Generator Inclusion Screening – H.Fox

H.Fox presented the New Generation Inclusion Screening for the 2026-2027 IRM PBC covering the following:

- Background on data sources and screening criteria.
- Review of past IRM cycle inclusions.
 - 6 of 13 new projects from past 3 IRM cycles did not meet June 1st COD criteria.
- Recommendation to include two new generation projects totaling 18MW in 2026-2027 IRM PBC.
 - Energy storage and duration limited resources will be modeled based upon information received on their customer registration and confidential duration elections.
- Discussion on CHPE inclusion is ongoing.

G. Jordan started a stakeholder discussion regarding CHPE inclusion and downstream impacts. Various permutations of sensitivities surrounding CHPE and the NYC peaker barges were discussed. D. Zhang expressed concern with running more than one Tan45 sensitivity. Stakeholders recommended that base case/sensitivity pairs are CHPE in+ barges out and CHPE out+ barges in.

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

H.Fox presented an update for the IRM 2026-2027 PBC Parametric Results covering the following:

- Material Updates: Cable transition rates, Gold Book load forecast, Gold Book DMNC update, Thermal EFORD update (2020-2024), and Sprain Brook Dunwoodie South topology update.
- Parametric result stands at 25.01% IRM, and 77.55%, 110.11%, and 88.33% for NYC, LI, and LHV respectively.
- Remaining major material updates include external area adjustments, CHPE, fuel constraints, and new MARS version.

NYISO noted that new MARS version is required to address runtime concerns with fuel constraints implementation.

13. IRM 2026-2027 PBC Assumptions Matrix- H. Fox

H. Fox presented an update for the IRM 2026-2027 PBC assumptions matrix covering the updates aforementioned in agenda item #12.

14. Policy 5 Updates (Final Draft for EC) – J. Adams

J. Adams presented a final draft of Policy 5 updates. No comments were received from the version circulated to ICS and EC last month and ICS had no additional questions at the meeting. ICS.

ICS to request EC approval of Policy 5 updates at 6/13 EC meeting.

15. Additional Agenda Items

No additional agenda items identified.

Next Meeting

Meeting #305 –Thursday, July 10th, 2025, 10 am – NYISO KCC & MS Teams