

Draft Minutes

**New York State Reliability Council - Installed Capacity Subcommittee (ICS)
Meeting #316– April 28th, 2026
Microsoft Teams**

Attendees

Present Phone

Members / Alternates:

Thomas Primrose (PSEG LI – ICS Chair)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
William Gunther (Con Edison)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Brian Shanahan (National Grid).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rich Bolbrock (Unaffiliated)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Clay Burns (National Grid)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ruby Chan (CHG&E).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Caroline Decker (CHG&E)	<input type="checkbox"/>	<input type="checkbox"/>
Seamus Gorman (CHG&E)	<input type="checkbox"/>	<input 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"/>
Patrick Danner (NYPA)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mike Mager (MI)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chris Wentlent (MEUA)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hilme Athar (PSEG LI)	<input type="checkbox"/>	<input type="checkbox"/>
Mike DeSocio (Luminary).....	<input type="checkbox"/>	<input type="checkbox"/>

Advisers/Non-member Participants:

Gary Jordan (ICS Consultant).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
John Adams (ICS Consultant).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Henry Fox (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dylan Zhang (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Laura Popa (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Max Schuler (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Yvonne Huang (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Bianca Prinsloo (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lucas Carr (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Sanket Milind Ulagadde (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Ryan Carlson (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Heidi Nielsen (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Brendan Long (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Carter Hempstead (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Garrett Bissell (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Kathleen O'Hare (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Josif Figueroa (NYISO).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pramila Nirbhavane (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Ethan Avallone (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Keegan Guinn (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Pallavi Jain(NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oyin Agunbiade (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Andrew Gregory (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Arjun Malhotra (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Claudia Bustamente (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Leila Nayar (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Sushant Varghese (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Diego Meucci (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Benjamin O'Rourke (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Jack Garrett (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Afreen Vahora (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Syeda Lubna (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Akin Aroge (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Manish Sainani (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Zach T. Smith (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Helena Frudit (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Chris Hamilton (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Aaron Markham (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Rajesh Subramanian (NYISO).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alexis Drake (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>

Ansa Altaf (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Yi-An Chen (NYISO)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ross Altmann (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Raj Dontireddy (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Dominic Riendeau-Krause (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ava Sealander (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jillian Cola(NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mikaela Lucas (GE)	<input type="checkbox"/>	<input type="checkbox"/>
Matt Elkins (GE)	<input type="checkbox"/>	<input type="checkbox"/>
Adam Evans (DPS).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Richard Quimby (DPS)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Randy Monica Jr. (DPS).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Holly Quattrociocchi (DOS).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wes Yeomans (RRS/RCMS)	<input type="checkbox"/>	<input type="checkbox"/>
Kristine Agati (Avangrid).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Leen Almadani (CHG&E).....	<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"/>
Mike Cadwalader (Atlantic Economics).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Grant Flagler (Con Ed Energy)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Karl Hofer (Con Edison)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lucy Khazanovich (PSEGLI)	<input type="checkbox"/>	<input type="checkbox"/>
David Mirabella (PSEGLI)	<input type="checkbox"/>	<input type="checkbox"/>
Manny Panaligan (PSEGLI).....	<input type="checkbox"/>	<input type="checkbox"/>
Mark Magliola (PSEGLI)	<input type="checkbox"/>	<input type="checkbox"/>
Mariann Wilczek (PSEGLI).....	<input type="checkbox"/>	<input type="checkbox"/>
Peter Andolena (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 checked="" type="checkbox"/>
Ricardo Galarza (PSM)	<input type="checkbox"/>	<input type="checkbox"/>
Richard Bratton (IPP NY).....	<input type="checkbox"/>	<input type="checkbox"/>
Khatune Zannat (NPCC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Herb Schrayshuen (NYSRC).....	<input type="checkbox"/>	<input type="checkbox"/>

Amanda De Vito Trinsey (NYSRC)	<input type="checkbox"/>	<input type="checkbox"/>
Vincent Gabrielle (RTO Insider)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Marie French (Politico)	<input type="checkbox"/>	<input type="checkbox"/>
Aaron Breidenbaugh (C Power)	<input type="checkbox"/>	<input type="checkbox"/>
Eve Marengi (Luminary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ray Stalter (Luminary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Michael Lenoff (Earth Justice)	<input type="checkbox"/>	<input type="checkbox"/>
William Sanchez (NYSERDA)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rick Gonzales	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Elynor Reyes	<input type="checkbox"/>	<input type="checkbox"/>
Michael Swider	<input type="checkbox"/>	<input type="checkbox"/>
Benjamin Cohen	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mackenzie Poulton	<input type="checkbox"/>	<input type="checkbox"/>
Haizhen Wang	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Jared Anderson	<input type="checkbox"/>	<input type="checkbox"/>
Mark Gaines	<input type="checkbox"/>	<input type="checkbox"/>
Kenneth Galarneau	<input type="checkbox"/>	<input checked="" type="checkbox"/>
John Norris	<input type="checkbox"/>	<input type="checkbox"/>
Leon Almadani	<input type="checkbox"/>	<input type="checkbox"/>
Yannick Vennes	<input type="checkbox"/>	<input type="checkbox"/>
Stephen Conant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nilkesh Gowalani	<input type="checkbox"/>	<input type="checkbox"/>
Matthew Schwall	<input type="checkbox"/>	<input type="checkbox"/>
Stephanie Palmer	<input type="checkbox"/>	<input type="checkbox"/>
James Pigeon	<input type="checkbox"/>	<input checked="" type="checkbox"/>
John Haff	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Matthew Napoli	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alan Ackerman	<input type="checkbox"/>	<input type="checkbox"/>
Marisa Doherty	<input type="checkbox"/>	<input type="checkbox"/>
Scott Niemann	<input type="checkbox"/>	<input type="checkbox"/>
Vaibhav Parekh	<input type="checkbox"/>	<input type="checkbox"/>
Travis Atkinson	<input type="checkbox"/>	<input type="checkbox"/>
Daniel Jerke	<input type="checkbox"/>	<input type="checkbox"/>

Timothy Duffy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ryan Martin	<input type="checkbox"/>	<input type="checkbox"/>
Andrew Davis	<input type="checkbox"/>	<input type="checkbox"/>
Leonard Ashley (NYSERDA).....	<input type="checkbox"/>	<input type="checkbox"/>
Scott Berthiaume	<input type="checkbox"/>	<input type="checkbox"/>
Steve Whitley.....	<input type="checkbox"/>	<input type="checkbox"/>
Derek Hagaman	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Caelan Schaefer	<input type="checkbox"/>	<input type="checkbox"/>
Adam Bednarczyk	<input type="checkbox"/>	<input type="checkbox"/>
Adam Fam.....	<input type="checkbox"/>	<input type="checkbox"/>
Charlotte Gebhard	<input type="checkbox"/>	<input type="checkbox"/>
Christopher Jylkka	<input type="checkbox"/>	<input type="checkbox"/>
Glenn Haake (Invenergy)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alex Novicki	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

T. Primrose noted a couple changes to agenda:

- Winter Fuel Availability Constraints Modeling Review moved to the end
- Approval will be sought on items 7, 9, and 10

No additional agenda items noted.

3. Approval of Previous Meeting Minutes – P. Danner

Meeting minutes for previous meeting #315 were approved with no edits.

4. Review of Action Item List – T. Primrose

T. Primrose reported no significant changes, noting that the Winter Fuel Availability Constraints Modeling Review agenda item should address EC 322-2a.

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

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

- A. Markham delivered a report on Winter 2025-2026 Cold Weather Operations
- No new takeaways or action items

6. TSL-LCR Working Group Update – R. Gonzales

R. Gonzales provided an update on the TSL-LCR working group. The working group has met five times, and has a couple of recommendations for consideration:

1. LCR – PJM Emergency Assistance Limits: WG recommends to NYSRC ICS to further reduce EA limits from PJM over controllable ties into NYC and Long Island Zones to promote further alignment with PJM EA limits to 2023 whitepaper values and align TSL-LCR outcomes
2. LCR - Locational Operating Reserves: WG recommends the NYSRC ICS revise MARS modeled locational operating reserves to align with proposed NYISO Values (i.e., 625MW of total 10-minute reserves in Zone J)

Both these recommendations will be discussed with approval sought in the next agenda item. Other working group discussion items to be addressed ad hoc, whether at ICS or through the NYISO stakeholder process.

- LCR - Emergency Operating Procedure Review is under discussion and if any recommendation is identified it will go through ICS
- TSL – Seasonal vs. Annual Forced Outage Rates monitoring will be led by NYISO discussion
- TSL/LCR – GADS 9300 Outage Codes
- TSL – SCR Treatment is under NYISO Stakeholder Review (Future Market Design up for NYISO project prioritization)
- The working group continues to monitor other NYISO discussions, as well as the external Market Monitor’s State of the Market report and any of its recommendations

7. Impact Analysis on Updated EA Limit and OR Allocation – S. Varghese

S. Varghese reported on the results from the NYISO’s impact assessment of the preceding agenda item’s recommendations using Tan45 cases, including individual cases for each recommendation and a combined case reflecting both recommended changes. The combined impact of updating the modeling assumptions for EA limits of downstate PJM lines and 10-minute operating reserves produced a 1% increase in the Load Zone J LCR and a 0.17% increase in the Load Zone K LCR, with no material impact on the IRM observed.

There were no objections to either the Emergency Assistance Limit reduction or the increase in 10-min operating reserves in Load Zone J to 625 MW as recommended by the TSL-LCR Working Group, thus they are approved.

8. 2027-2028 IRM Operating Reserves during Load Shedding – H. Fox

H. Fox reported on analysis indicating higher 10-minute net load variability for the 2027-2028 study period relative to the values underlying the currently-approved assumption for the quantity held in reserve. Consequently the NYISO proposed an update to the Emergency Operating Procedures (EOPs) to increase the assumed 10-minute Operating Reserve withholding in EOP Step 8 to 450 MW (+50 MW).

M. Cadwalader suggested choosing different verb than “withholding” because in other contexts it implies an attempt to exercise market power; H. Fox replied that they would try to find a different description for the additional reserves being reserved.

There were no objections to the NYISO proposal to update the assumed 10-minute Operating Reserve during load shedding to 450 MW for the 2027-2028 IRM study, thus it is approved.

9. Parametric Improvements - Final Recommendation – D. Riendeau-Krause

D. Riendeau-Krause described how at the 3/31/2026 ICS meeting the NYISO provided its initial recommendations to: (1) adopt the “upstate/downstate parametric split” (Parametric Split) methodology for assessing load forecast updates, and (2) maintain the current methodology for assessing transmission updates.

In addition to formalizing those recommendations, D. Riendeau-Krause described the recommendations for generation, i.e., maintaining the current methodology for assessing generation additions & removals, as well as DMNC and Transition Rate updates. As reviewed at the 3/31/2026 ICS meeting, testing of “perfect capacity” additions in Load Zones D and J did not consistently identify the potential for reducing divergence between parametric and Tan45 results using the Parametric Split methodology for generation.

G. Jordan opined that load & generation are different sides of the same coin and inquired about the differing results and recommendations; the NYISO replied that load updates also impact the IRM’s denominator, whereas generation does not.

There were no objections to the recommendations from the NYISO, thus they are approved.

10. Seasonal Topology Update – A. Sealander

A. Sealander described the current topology update process and recommendations for incorporating seasonal topology updates, i.e.,

1. identify internal NYCA transmission interfaces that have observed increases in flow during the winter months above the applicable summer transmission limit
2. For the interfaces identified in Step 1, confirm whether such interfaces are observed to be binding during the winter months in the previous year’s PBC when constrained by the summer limits annually
3. For the interfaces that are binding during winter months, consider a winter transfer limit update based on the most up-to-date NYISO studies available during PBC development for the current IRM study cycle
4. Propose the appropriate seasonal limits as part of the topology update process during PBC development
5. Finalize seasonal transfer limits during FBC development including any recommended updates from NYISO studies available after development of the PBC

A. Sealander then reviewed the recommended IRM study topology update timelines for the upcoming Preliminary Base Case (PBC) and Final Base Case (FBC)

There were no objections to the seasonal topology procedure recommendations from the NYISO, thus they are approved.

11. 2026 ICS Preliminary SCR & DER Model Values – J. Cola

J. Cola began by reviewing the data set for SCR response rates by hour of event based on historical SCR performance.

M. Mager asked if values would be updated and J. Cola replied that yes she would return with updates. Stakeholders noted more SCR calls especially this past winter; J. Cola said she would see if she could include winter.

Given many SCR calls recently, M. Mager inquired as to when the calculation could start excluding old data. J. Cola replied that prior to the many mandatory activations in the past summer, they needed to go back to 2012 to have historical data for the duration limit of 7 hours; she will take back if date range can be shortened but wouldn't want to change duration limit of 7 hours now that all the zones have data. Agreement in principle, will see if can shorten the data set date range for the final.

12. Generator Transition Rate Matrices: Software Transition – K. O'Hare

K. O'Hare reviewed results from the benchmarking of the PowerGADS system to its GADS OS predecessor. This was done by comparing the NERC calculation (on the x-axis) to the software (on the y-axis) for 3 sets of 5 years. The results indicate that, on average, the PowerGADS system is closer to the NERC EFORD than the GADS OS.

13. Standard Error Analysis – G. Jordan

G. Jordan reminded the ICS that Policy 5.3.8 calls for the standard error of the Installed Reserve Margin (IRM) being 0.025 of the mean loss of load expectation (LOLE), consistent with a 95% confidence level, but last year (because timely completion could not be guaranteed for the 8,000+ replications that would have been required to achieve it) the requirement was relaxed to 90%, with the end result being 94%.

G. Jordan described the problem as some replications producing results that are much greater than the average. W. Gunther commented on the importance of understanding low probability, high impact situations. G. Jordan noted that he is not seeking to discard outliers.

G. Jordan presented data comparing the average LOLE and standard error with increasing replications, noting that LOLE is not changing much as the simulations do more replications to lower the standard error. G. Jordan made the point that computing power is neither infinite nor free, and accepting fewer replications permits more sensitivities. A table compared the IRM, J LCR, and K LCR

with increasing replications, and there was some discussion as to whether a change in IRM from 25.631 at 3,000 replications to 25.493 at 4,000 was material.

G. Jordan provided detail that the obstacles to convergence are the “outlier” replications that are much greater than the mean. In these two scenarios the three largest replications were due to transmission outages on the Y49/50 interface into Zone K where the vast majority of the system risk occurred.

R. Gonzales commented that large contingencies are important and should be discussed with the EC.

T. Primrose will take the task of developing final draft language and coordinate for its review.

W. Gunther provided a link in the chat to [Practices and Standards | EPRI Micro Sites](#)

14. Winter Fuel Availability Constraints Modeling Review — P. Jain

P. Jain reported on a NYISO assessment of the theoretical maximum winter fuel availability identified by the ICF Study compared to operating experience for gas-fired generators in New York, which showed the actual gas consumed by power generation was approximately 50% of the maximum theoretical gas-fired generation availability estimated by the ICF Study. The ICF Study noted several factors it did not consider, which combined with this NYISO assessment means the NYISO plans to put greater reliance on historical data when evaluating winter grid reliability.

P. Jain also reviewed cold weather operations for winter 2025-2026, observing that

- the cold stretch from 1/29/2026 to 2/9/2026 represented operating conditions at slightly above 50/50 load levels, but with longer duration of a cold stretch than experienced in recent past winters
- during this cold stretch, some fuel availability constraints were experienced, but ~2,500 MW of gas-only unit production from Load Zones F-K occurred
- the operating data from this cold stretch, particularly the gas-fired power production and available oil inventory data, will be included in the data used to assess potential updates to the winter fuel availability constraint modeling assumptions for the 2027-2028 IRM study

15. Additional Agenda Items

No other additional agenda items were identified.

Next Meeting

Meeting #317 –Wednesday, June 3rd, 2026, 10:00 am–MS Teams