Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)
November 24, 2025, ICS Meeting #311
Prepared for: December 5, 2025, EC Meeting #320
Prepared by: William Gunther (Con Edison)

4.1.1 ICS Action Items List

For ICS AI 220-1, the EC requested ICS to annually track the number of public appeals used in NY. W. Gunther confirmed with the TOs that no such appeals were made in 2025.

For ICS AI 299-2, there was a request to complete a sensitivity case to monitor the impact of regional correlated outages from renewable resources. This sensitivity is covered under Offshore Wind in Neighboring Systems later in this report.

For EC AI 312-1, ICS will provide a complete report to the EC in January. As a preview, firm fuel election information is also covered later in this report.

4.1.2 IRM Masked Database TO Review

W. Gunther from ConEd and T. Primrose from PSEG-LI confirmed that they were able to replicate the 0.1 LOLE result on the FBC using the masked database provided by NYISO. No other database corrections were noted.

4.1.3 Offshore Wind in Neighboring Regions

B. Prinsloo presented a sensitivity analysis to examine the impact of correlated output between South Fork Wind (138 MW) in NYCA and Vineyard Wind (855 MW) and Revolution Wind (715 MW) in ISONE. Modeling the ISONE OSW units using shape-based data is new for this year; last year, Vineyard Wind was modeled as a thermal resource and Revolution Wind was excluded. Revolution Wind consistently exhibits >83% correlation with South Fork Wind based on 2020-2024 weather and Vineyard Wind consistently averages >85% correlation. The potential for correlated outages increases the risk of regional capacity shortfalls during peak demand periods or extreme weather events. Offshore wind profiles currently indicate that the capacity factor for OSW in NY is ~10% lower than in NE.

NYISO modeled the correlation by using the profiles from South Fork Wind for Vineyard Wind and Revolution Wind. For the sensitivity, NYISO conducted a parametric case based on the Special Sensitivity case and would expect the results to be similar starting from the current FBC. Results indicate a non-material impact for correlated OSW availability in the 2026-2027 IRM study as shown below. OSW in NE and NYCA are currently small compared to the total system capacity in each area, minimizing the impact of correlated wind outage events on reliability and the IRM in the near term.

	2026-2027 IRM FBC Special Sensitivity	Offshore Wind Sensitivity	Delta
NYCA (IRM)	25.600%	25.625%	0.025%
Zone J (LCR)	79.845%	79.864%	0.019%
Zone K (LCR)	107.502%	107.525%	0.023%
G-J Locality (LCR)	89.221%	89.241%	0.020%
	2026-2027 IRM FBC Special Sensitivity LOLE	Offshore Wind Sensitivity LOLE	Delta
NYCA	0.100	0.100	0.000
PJM	0.116	0.117	0.001
ISO-NE	0.163	0.165	0.002
IESO	0.119	0.120	0.001
HQ	0.136	0.136	0.000

Average EA from Zone to NYCA			
Zone	2026-2027 IRM FBC Special Sensitivity (MW)	Offshore Wind Sensitivity (MW)	Delta (MW)
PJM	569.5	568.7	(0.8)
ISO-NE	486.5	486.2	(0.3)
IESO	307.1	307.3	0.2
HQ	199.6	200.6	1.0

4.1.4 Firm Fuel Characteristic Elections

This material was not on the original ICS agenda and was posted on Saturday prior to ICS on Monday. P. Jain presented generator firm fuel elections for the 2026-2027 capability year. ICAP suppliers using natural gas and/or fuel oil could fully or partially elect firm fuel and be assigned to the firm fuel CARC. The deadline this year was 11/1 but future elections will be due on 8/1. Firm fuel elections are applicable to Zones F-K and are summarized in the table below. Zone F would be subject to firm fuel constraints like LHV but would have a different set of CAFs.

Capacity Zones	A: Sum of Firm Fuel Elections (MW) (2026-2027 Capability Year)	B: Sum of Natural Gas and/or Fuel Oil Resources (MW) (Winter 2025-2026 DMNC/DMGC)	Percentage of Natural Gas and/or Fuel Oil MWs that are covered by Firm Fuel Elections (A/B)
ROS* (only Zone F)	2.8 GW	3.5 GW	80%
G-J Locality (excluding Zone J)	3.2 GW	4.8 GW	67%
NYC Locality (Zone J)	7.6 GW	9.3 GW	82%
Long Island Locality (Zone K)	4.6 GW	5.2 GW	89%
Total	18.3 GW	22.8 GW	80%

M. Mager expressed surprise at how high the percentages are for generators electing firm and did not even know that much firm capacity was available. He asked if the results were in line with NYISO's expectations. P. Jain indicated NYISO had not yet analyzed how these elections compare with the model assumptions, but this is on the agenda for January.

A. De Vito Trinsey asked if there was an audit function confirming that the resources are in fact firm. P. Jain indicated there is not a confirmation process per se but there are performance penalties as detailed in NYISO's ICAP manual and tariff sections. If a generator makes a firm fuel election, they are expected to be able to operate for at least 56 h at a time during the winter performance period of Dec-Feb. Generators will be assessed a penalty if they do not perform and are also expected to develop an operating plan.

R. Bolbrock asked if the firm fuel designation includes firm transportation. P. Jain indicated yes because NYISO's election process considers both available gas and oil. She indicated that generators were only required to enter the MW firm, and fuel type was an optional field. R. Bolbrock was also surprised at the high firm election percentages given firm transportation is included. M. Mager indicated that a lot of his large consumers report that they cannot get firm gas transportation contracts. P. Jain indicated that NYISO does not investigate if generators have firm contractual arrangements but require that generators have a plan to work toward having sufficient fuel to meet the obligation when making the election. H. Neilson from NYISO Legal added that there is a requirement to have the operating plan and all fuel and transportation arrangements in place by 12/1 and there are penalties associated with that as well as potential referral to FERC. There can be a review as the MMA does to confirm that the obligations have been met.

G. Jordan asked how the numbers compare to the MARS model. P. Jain indicated these elections are in line with Tier 5 [below average load] of the fuel study of ~17,000 MW of natural gas and oil but not in line with Tier 1-4 assumptions [top 69% of load; 11,688-15,600 MW modeled available gas + oil]. Y. Huang stated that we need to be cautious when comparing a probabilistic model with tiers representing different weather conditions and the binary election based on generator's plan to meet performance. G. Jordan indicated fuel constraints is part of what is driving the IRM result.

4.1.5 ELR Whitepaper – EC Approval Item

ICS approved the ELR whitepaper on 11/11 and shared a copy at the 11/14 EC meeting for feedback. No EC feedback was received, and ICS now requests EC approval, which will fulfill 2025 NYSRC goal A1.4.

4.1.6 Confirmation of New ICS Chair and Vice-Chair – EC Approval Item

As discussed previously, T. Primrose (PSEG-LI) volunteered to serve as ICS Chair and P. Danner volunteered to serve as ICS Vice Chair starting in 2026. Summaries of their qualifications are attached.

4.1.7 Special Sensitivity Tan 45 Presentation

The Special Sensitivity makes the following changes to the FBC.

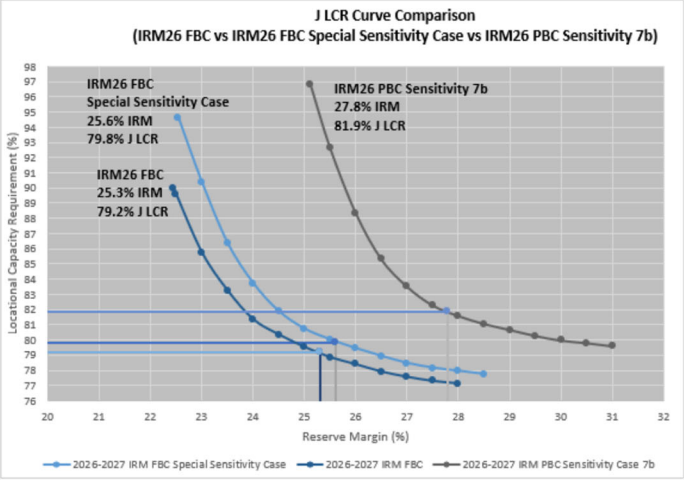
- Zone J additions (512.9 MW): Gowanus 2-1 to 2-8, 3-1 to 3-8, with exception of Gowanus 3-6; Narrows 1-1 to 1-8, 2-1 to 2-8, with exception of Narrows 2-1 and 2-7
- Zone K additions (204.4 MW): Far Rockaway GT1 and GT2, Glenwood GT3, Shoreham IC1
- Zone A removals (126.5 MW): Cassadaga Wind
- Winter fuel constraints updated to reflect the above generator changes.

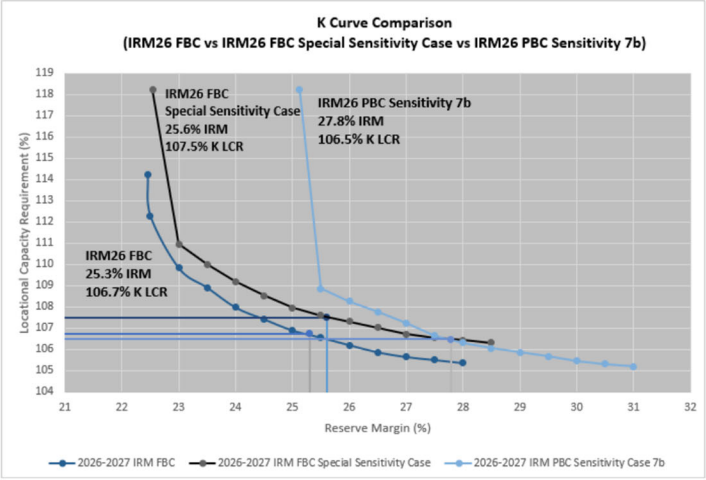
NYISO presented Tan 45 results for the Special Sensitivity as shown below.

Case	IRM	Load Zone J LCR	Load Zone K LCR	G-J Locality LCR	Summer LOLE (%)	Winter LOLE (%)	EOP Calls (Days/Yr)
2026-2027 IRM FBC	25.3%	79.2%	106.7%	88.8%	86.0%	14.0%	6.3
2026-2027 IRM FBC Special Sensitivity Case	**25.6%**	**79.8%**	**107.5%**	**89.2%**	**85.2%**	**14.8%**	**6.2**
Delta	0.3%	0.6%	0.8%	0.4%	-0.8%	0.8%	-0.1

The increase to the winter LOLE observed for the Special Sensitivity Case is consistent with the increase in winter LOLE risk observed for Sensitivity Case 7B (CHPE + Barges) compared to the PBC.

The J and K Tan 45 curves for the Special Sensitivity Case appear below. The Load Zone J curve for the Special Sensitivity Case shifts to the right vs. the FBC due to the lower-than-average EFORd values of the Gowanus and Narrows barges. Compared to the FBC, the Load Zone K curve for the Special Sensitivity Case shifts to the right due to the addition of the specified generators in Load Zone K. The Load Zone K curve for the Special Sensitivity Case exhibits a similar steep drop off from the "point 0" to "point 1" as was observed for the 2026 -2027 IRM PBC Sensitivity 7B. For reference, the figure also includes sensitivity 7B with the large offset due to other modeling changes since the PBC (e.g., SCR to DER enrollment, revised voluntary industrial curtailment call limit, and standard IRM updates).





Additional statistics for the Special Sensitivity Case appear below.

Season	LOLE (Event-Days/Yr)	LOLH (Event-Hours/Yr)	EUE (MWh/Yr)	EOP Calls (Days/Yr)
Annual	0.1003	0.3650	168.50	6.2
Summer	0.0854 (85.2%)	0.3217 (88.1%)	147.09 (87.3%)	4.4
Winter	0.0148 (14.8%)	0.0433 (11.9%)	21.42 (12.7%)	1.8

NYISO supported adoption of the Special Sensitivity Case as the FBC. Based on the recommendation, M. Mager asked if NYISO expects CHPE to be in service by May 1 under today's circumstances and for the barges to also continue operating for the duration of the summer without retiring. If CHPE will not be in or if the barges retire when CHPE comes in, then the Special Sensitivity may not be the best base case.

Y. Huang indicated uncertainty around the exact timing of the CHPE in-service date and that the barges would likely still be in service in July based on the timing of their deactivation notice. NYISO determined the barges deactivation notice was completed on 7/14/25 with an intended retirement date of 7/14/26. Y. Huang indicated that the NYISO does not know how the current solicitation will play out and cannot comment. Y. Huang also indicated that the NYISO would develop separate sets of LCRs and CAFs for before and after CHPE comes into service.

Y. Huang indicated that the Special Sensitivity Case would work better for subsequent market parameters as it allows the barges to remain for the CHPE out-of-service case. M. Mager indicated that he is not overly concerned about the market reasons Y. Huang mentioned and that he is interested in what is most likely to occur as that is what NYSRC should represent in the base case.

G. Bissell indicated that NYISO has posted a solicitation highlighting the potential need for resources >600 MW for 2026 and that NYISO will not have a full answer in time for this IRM study. The Special Sensitivity Case examines the magnitude of the solicitation and potential capacity that might be included in the model and is responsive to those needs.

M. Mager indicated that while he understands the timing of the solicitation, the EC needs to decide whether to make the Special Sensitivity Case the base case on Dec 5 and one of the factors the EC will consider is what is the most likely scenario. He asked if NYISO's recommendation is based on an expectation that the Special Sensitivity is the most likely outcome or if some other reason is driving the recommendation.

M. Lenoff asked whether in the Q3 STAR solicitation it is possible to have CHPE without the barges in 2026. After a prolonged pause, NYISO asked whether he was thinking realistically about the existing barges and CHPE and how the question relates to the solicitation. M. Lenoff clarified that as the EC deliberates on what the IRM should be, they may want to know if NYISO will select the barges for some period less than the full 2026 rather than extending their operation further. Is it possible that CHPE comes in, demonstrates satisfactory performance, and NYISO selects that scenario as the solution allowing the barges to shut down? NYISO indicated that they cannot comment on a hypothetical when there is an open solicitation. M. DeSocio reframed the question as, "is it true CHPE by itself does not solve the reliability need identified in the Q3 STAR?" R. Altman indicated there is still a need in the outer years of the STAR study with CHPE, 68 MW in 2029 and growing slightly in 2030.

M. Lenoff asked about the difference between the FBC and Special Sensitivity cases after removing CHPE before it comes into service per NYISO's triggering resource methodology. After a long pause, H. Fox indicated no comment on the market implications of those scenarios and D. Zhang referenced alternative market parameters but said it is complicated. In those cases, the IRM could be lower but carries the risk that when you reintroduce CHPE in the model, the LOLE is worse than 0.1. Thus, the NYISO thinks it is important to present a case with CHPE in, which is true for both the FBC and the Special Sensitivity.

W. Gunther indicated that per the ICS Milestone Schedule, the Special Sensitivity is an ICS approval item, and the motion is to make a technical recommendation to the EC to replace the current FBC with the Special Sensitivity Case. He noted that ICS typically operates on a consensus basis and that members may not have had time to fully review the meeting materials given some postings were less than the required 4-day window. He asked if anyone would prefer more time to align internally and to defer the vote to the EC. M. Mager and T. Primrose expressed concern about the timing and that they might have additional questions. T. Primrose was in favor of deferring this question to the EC. M. DeSocio suggested the Special Sensitivity Case is the most likely outcome for next summer given solicitation timing. G. Jordan and C. Wentlent suggested that ICS should hold a poll, so the EC knows what ICS thinks. In the ensuing poll, W. Gunther, M. Mager, C. Wentlent, T. Primrose, R. Bolbrock, B. Shanahan, and A. Elkasrawy all abstained with the sole affirmative view being R. Bratton for IPPNY. Central Hudson and NYPA representatives did not respond.

4.1.8 2026-2027 IRM Study Technical Report – EC Acceptance Item

G. Jordan presented the IRM Technical Report, with updates primarily focused on incorporating the Special Sensitivity Case.

- Information was added about the number of iterations required to reach the statistical error tolerance.
- NYISO added a table on ICAP removals in the FBC and plans to add another one for the Special Sensitivity Case in the revised version for the EC.
- Section 7 was added on the Special Sensitivity Case, and the sensitivity table was updated with the Special Sensitivity Case as Sensitivity 8.

All the information will be included in case the Special Sensitivity Case is chosen as the base case. If the EC decides to replace the FBC with the Special Sensitivity Case, this will be noted in the report, and the sensitivity table will remain unchanged rather than realigning all the results to the revised base case and demoting the current FBC to a sensitivity.

M. Lenoff asked if the document should be designated draft. W. Gunther indicated it is a draft and subject to EC revision. G. Jordan asked about updating the posted ICS copy and H. Schrayshuen indicated it should remain the copy shown at the meeting for version control. H. Schrayshuen and A. De Vito Trinsey indicated that the final IRM report and appendices will be filed as part of the final IRM package with the FERC for approval and the PSC for information. As such, the report and appendices need to be completed with any EC requested changes in the week after the 12/5 EC meeting to allow time for the filings.

ICS approved the IRM report with the acknowledgement that it would also include an additional table summarizing the shifted MW for the Special Sensitivity Case, the final IRM approved by the EC, and if necessary, an explanation for why the final IRM is lower than the study result.

4.1.9 2026-2027 IRM Study Technical Report Appendices – EC Acceptance Item

J. Adams presented the IRM Report Appendices. There are several changes compared to last year including:

- Updated standard error calculations
- Updated definition for Installed Reserve Margin and Net Peak Load per request from M. DeSocio last meeting. The latter is needed due to treating BTM solar as a supply side resource.
- New EUE tables and several changes in Appendix B
- Significantly expanded description of operating procedures and LOLE analysis
- Risk breakdown by locality including EUE heat maps

J. Adams noted an appendix reference in the main report that needs to be updated.

ICS approved the IRM report appendices as modified with the acknowledgement that additional content on the Special Sensitivity Case may be added per EC discussion.