



# Preliminary LCR Results: Capability Year 2024-2025

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Lucas Carr

NYISO

**ICAPWG/MIWG**

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# Agenda

- Background
- LCR Study Inputs
- Preliminary LCR Results
- Next Steps

# Background

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- **The Locational Minimum Installed Capacity Requirements (LCR) study was performed in order to produce preliminary LCR results for the 2024-2025 Capability Year**
- **The study utilized the installed reserve margin (IRM) database, Tan45 produced IRM value, final transmission security limit (TSL) floors, and final net cost of new entry (CONE) curves**
- **For the final LCR study, the NYISO will utilize the final IRM approved by the NYSRC Executive Committee (EC)**
  - Final IRM for the 2024-2025 Capability Year is expected to be determined at the December 8, 2023 EC meeting

# LCR Study Inputs

# IRM Final Base Case (FBC)

- The IRM FBC has been developed and the Tan45 results were reviewed at the 11/1/2023 NYSRC Installed Capacity Subcommittee (ICS) meeting

2024 – 2025 IRM FBC Tan45 Results			
IRM	J LCR*	K LCR*	G – J*
23.1%	72.7%	103.2%	84.6%

\* LCR results determined by the Tan45 process

- The preliminary LCR results are based on the FBC database and the Tan45 IRM results above

# Final TSL Floors

- The Final TSL Floors were presented at the October 26<sup>th</sup> ICAPWG meeting

Available at: <https://www.nyiso.com/documents/20142/40834869/Final%20TSL%20Floors%20-%20Capability%20Year%202024-2025.pdf>

Transmission Security Limit Floor Calculation	Formula	G-J	NYC	LI	Notes
Load Forecast (MW)	[A] = Given	15,274	11,171	5,080	[1]
Bulk Power Transmission Limit (MW)	[B] = Studied	4,350	2,875	275	[2]
Net Flow Adjustment to Transmission Limit (MW)*	[N] = Study Assumption	275			[3]
Offshore Wind (MW)	[O] = Given			37.5	[4]
UCAP Requirement (MW)	[C] = [A]-[B]+[N]+[O]	11,199	8,296	4,843	
UCAP Requirement Floor	[D] = [C]/[A]	73.3%	74.3%	95.3%	
5-Year Derating Factor	[E] = Given	5.4%	4.5%	8.9%	[5]
Special Case Resources (MW)	[F] = Given	526.7	442.4	35.3	[6]
ICAP Requirement (MW)	[G] = ([C]/(1-[E]))+[F]	12,364	9,129	5,348	
ICAP Requirement Floor (%)	[H] = [G]/[A]	81.0%	81.7%	105.3%	

\*See Bulk Power Transmission Capability Report for study assumptions and adjustment details

[1] 2024 Fall Load Forecast

[2] Based on 2024 Locality Bulk Power Transmission Capability Report

[3] LI Bulk Power Transmission Limit Adjustment

[4] Difference in Resource Adequacy and Transmission Security UCAP Valuation

[5] 5-year Market EFORD based on the generation mix in the 2024-2025 IRM FBC

[6] Modeled SCRs for 2024-2025

# Final Net CONE Curves

- The Net CONE curves were updated based on the 2024-2025 ICAP Demand Curves (presented earlier today)
- The Net CONE (\$/kW-yr) value is updated based on the 2024-2025 Annual ICAP Reference Values
- The hypothetical peaking plant sizes and net CONE curve slopes (LCR (%)) remain unchanged from the 2023-2024 study

Location (Peaking Plant Size)	LCR (%)	2024 - 2025 Net CONE Curves (\$/kw-yr)	2023 - 2024 Net CONE Curves (\$/kw-yr)
NYCA (326.7 MW)	112.9	69.34	71.12
	115.9	70.97	72.75
	118.9	72.35	74.13
	121.9	73.66	75.44
	124.9	74.21	75.99
G - J (347.0 MW)	84.0	75.09	80.41
	87.0	77.25	82.57
	90.0	78.82	84.14
	93.0	80.26	85.58
	96.0	80.95	86.27
Zone J (348.8 MW)	80.6	144.12	147.67
	83.6	149.00	152.55
	86.6	150.98	154.53
	89.6	152.54	156.09
	92.6	153.65	157.20
Zone K (348.8 MW)	97.4	45.93	50.95
	100.4	55.40	60.42
	103.4	61.24	66.26
	106.4	64.19	69.21
	109.4	66.74	71.76



# Preliminary LCR Results

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- The preliminary LCR results were produced utilizing the FBC database, Tan45 IRM, final TSL floors and final net CONE curves

Results Comparison	IRM	J LCR	K LCR	G - J	LOLE (Event-days/yr)
2024 - 2025 Preliminary LCRs	23.1%	81.7%*	105.3%*	81.0%*	0.070
2024 - 2025 FBC (Tan45)	23.1%	72.7%	103.2%	84.6%	0.100
2023 - 2024 Final LCRs	20.0%	81.7%*	105.2%	85.4%*	0.098

\* TSL floor is binding

- With the 23.1% Tan45 IRM, all three TSL floors are binding and the LOLE is better than 0.100 days/year
  - The results will be finalized respecting the approved final 2024-2025 IRM

# Next Steps

# Next Steps

- **Conduct the final LCR study after the IRM is finalized by the NYSRC EC**
- **Present the final LCR results to the NYISO Operating Committee for approval in mid-January 2024**
  - The results will also be presented to the ICAPWG for review earlier in January 2024
- **The LCR Report and Locality Bulk Power Transmission Capability Report will be posted on the NYISO website following approval**

# Our Mission & Vision



## Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



## Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

# Questions?