

Transmission Security Limit (TSL) Floor Values Calculation: 2025-2026 Capability Year

Keegan Guinn

ICAP Market Operations

ICAP Working Group

October 22, 2024

Agenda

- Summary of the Proposed 2025 2026 TSL Floor Methodology
- Updated TSL Floor Calculation Inputs
- Updated 2025-2026 TSL Floors
- Next Steps



TSL Floor Methodology and Inputs



Summary of Proposed 2025–2026 TSL Floor Methodology

- At the 9/10 ICAPWG¹, NYISO presented the proposed TSL floor methodology, which included the following enhancements to account for the coincident peak load and an update to the 5-year derating factor for intermittent resources.
 - Use the coincident peak load for UCAP requirement calculation
 - Use the ICAP Manual Attachment N methodology for intermittent derating factor calculation
 - Continue to use the average 5-year EFORd from the GADS data excluding 9300 events for thermal generators
- As discussed at the 10/7 ICAPWG², these enhancements are in alignment with the Transmission Security framework
 - 1. <u>September 10, 2024, ICAPWG presentation</u>
 - 2. October 7, 2024, ICAPWG presentation



Updated TSL Floor Calculation Inputs – Load Forecasts

 Since the 9/10 ICAP Working Group presentation, the load forecast for the 2025 – 2026 IRM Study was updated at the 10/4 LFTF and subsequently approved by the New York State Reliability Council (NYSRC) as part of the 2025 – 2026 IRM Final Base Case (FBC) Assumptions Matrix ¹

9/10 Presentation	G-J	NYC	LI
Non-Coincident Load Forecast	15,274	11,171	5 <i>,</i> 080
Coincident Load Forecast	15,060	10,925	5,000
Fall Forecast Update	G-J	NYC	LI
Non-Coincident Load Forecast	15,205	11,044	5 <i>,</i> 092
Coincident Load Forecast	14,962	10,802	5,016

1. IRM FBC Assumptions Matrix: <u>https://www.nysrc.org/wp-content/uploads/2024/10/IRM-2025-2026-FBC-Assumptions-Matrix-v1.0-10042024-ICS.pdf</u>



Updated TSL Floor Calculation Inputs – Bulk Power Transmission Limit

- NYISO completed the 2025 Locality Bulk Power Transmission Capability Report (full report posted along with today's 10/22 ICAPWG meeting materials)
 - Bulk Power Transmission Limits were updated from the 2024 Report locality limits to the 2025 Report locality limits
 - The increase in G-J is driven primarily by the Dover PAR being modeled as in service

Locality	2025 Report Respected Outages	2024 Report Respected Outages	2025 Report Limit (MW)	2024 Report Limit (MW)	Delta
G – J	N-1 Outage applied (Knickerbocker- Pleasant Valley (Y57) 345 kV)	N-1 Outage applied (Athens – Van Wagner (91) 345 kV)	4,500	4,350	+150
Zone J	N-2 Outages applied (Dunwoodie - Mott Haven (72) 345 kV & Ravenswood 3 (980MW))	N-2 Outages applied (Dunwoodie - Mott Haven (72) 345 kV & Ravenswood 3 (980MW))	2,875* (3,855 – 980) Post-Contingency Limit – Largest Single Resource	2,875* (3,855 – 980) Post-Contingency Limit – Largest Single Resource	0
Zone K	N-1 Outage applied (Neptune HVDC (660MW))	N-1 Outage applied (Neptune HVDC (660MW))	275* (940 - 660) Post-Contingency Limit - Largest Single Resource	275* (940 - 660) Post-Contingency Limit - Largest Single Resource	0

* Size of largest single resource is subtracted from the post-contingency limit to represent the need for making up for the loss of resource as part of the applicable contingency. This approach does not apply in other locality limits due to the configuration of the respected contingencies.

* The limits reported in this table are rounded down to the nearest 25 MW



Updated 2025-2026 TSL Floor Values



Updated 2025-2026 TSL Floors

Transmission Security Limit	Formula	G-J	NYC	LI	Notes
on-Coincident Load Forecast (MW) [A] = IRM Study Assumption		15,205	11,044	5,092	[1]
Coincident Load Forecast	[P] = IRM Study Assumption	14,962	10,802	5,016	[1]
Bulk Power Transmission Limit (MW)	[B] = Studied	4,500	2,875	275	[2]
Net Flow Adjustment (MW)	[N] = Study Assumption	275			[3]
Offshore Wind (MW)	[O] = Calculated	0	0	38.4	[4]
UCAP Requirement (MW)	[C] = [P]-[B]+[N]+[O]	10,737	7,927	4,779	
UCAP Requirement Floor	[D] = [C]/[A]	70.6%	71.8%	93.9%	
5-Year Derating Factor*	[E] = Calculated	5.90%	3.26%	8.37%	[5]
Special Case Resources (MW)	[F] = IRM Study Assumption	569.3	478.7	30.6	[6]
ICAP Requirement (MW)	[G] = ([C]/(1-[E]))+[F]	11,980	8,673	5,247	
TSL Floor (%)	[H] = [G]/[A]	78.8%	78.5%	103.0%	

- 1. 2025 Fall Load Forecast
- 2. 2025 Locality Bulk Power Transmission Capability Report
- 3. LI Bulk Power Transmission Limit Adjustment
- 4. Difference in Resource Adequacy and Transmission Security UCAP Valuation
- 5. *Preliminary 5-Year Derating Factor as presented at the 9/10 ICAPWG
- 6. The SCR MW value reflects the assumptions proposed for the 2025 2026 IRM Final Base Case



Next Steps



Next Steps

- Finalize the 5-year Derating Factor calculation to reflect changes in the IRM FBC
- Present Finalized TSL Floors at the October 29 ICAPWG
- Proceed with LCR study for the 2025 2026 Capability Year



Our Mission & Vision

 \checkmark

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?

