



LOCATIONAL MINIMUM INSTALLED CAPACITY REQUIREMENTS STUDY

For the 2026-2027 Capability Year

I. Recommendation

This report documents a study conducted by the New York Independent System Operator, Inc. (NYISO) to determine Locational Minimum Installed Capacity Requirements (LCRs) for the Localities of New York City (Load Zone J), Long Island (Load Zone K), and the G-J Locality (Load Zones G, H, I, and J) for the 2026-2027 Capability Year beginning May 1, 2026.¹

On December 5, 2025, the New York State Reliability Council, L.L.C. (NYSRC) approved a New York Control Area (NYCA) Installed Reserve Margin (IRM) value of 24.5% for the 2026-2027 Capability Year. The NYISO then determined the LCRs for the 2026-2027 Capability Year using the applicable study inputs including the 2026-2027 IRM study database, the NYSRC approved IRM, the NYISO-determined transmission security limit (TSL) floor values, and net cost of new entry (CONE) curves.

Consistent with the “triggering resource” rules that became effective on December 24, 2025,² when a Triggering Resource exists for the upcoming Capability Year, the NYISO develops two sets of LCRs: one set assuming the Triggering Resource is participating in the capacity market (“resource-in”) and a second set assuming the Triggering Resource is not participating in the capacity market (“resource-out”). For the 2026–2027 Capability Year, the Unforced Capacity Deliverability Rights (UDRs) awarded to the Champlain Hudson Power Express (CHPE) project qualify as a Triggering Resource. Accordingly, the NYISO determined two sets of LCRs representing the different potential operating assumptions for CPHE (i.e., “CHPE-In” and “CHPE-Out”).

Based on the applicable study inputs, the LCR results for the two cases are summarized in the table below.

Triggering Resource Operating Status Assumption	IRM	J LCR	K LCR	G-J LCR
CHPE-In	24.5%	86.4%	110.3%	82.5%
CHPE-Out	24.5%	82.6%	110.3%	82.5%

¹ Capitalized terms not otherwise defined herein shall have the meaning specified in the NYISO Market Administration and Control Area Services Tariff (Services Tariff) and the NYISO Open Access Transmission Tariff (OATT).

² NYISO Services Tariff, Section 5.11.7.

II. Identification of a Triggering Resource

For the 2026–2027 Capability Year, the UDRs awarded to the CHPE project qualify as a Triggering Resource because: (1) the project is anticipated to potentially commence ICAP market participation during the 2026–2027 Capability Year, (2) the project was awarded Capacity Resource Interconnection Service (CRIS) on or before December 5, 2025 (i.e., the date the NYSRC adopted the IRM value for the 2026–2027 Capability Year), and (3) the project’s in-service status changes the limiting contingencies used in the TSL floor value derivation for Load Zone J. When CHPE is in service, it is treated as one of the contingencies for the Load Zone J transmission security analysis, thereby changing the limiting contingency and raising the NYC TSL floor value relative to the case where CHPE is not assumed to be in service.

III. Starting Point Database

As its starting point, the 2026–2027 LCR study utilized the NYSRC’s 2026–2027 IRM study database. The IRM study information is available on the NYSRC website.³ The final IRM study technical base case for the 2026–2027 Capability Year maintained the loss-of-load expectation (LOLE) criterion at no more than 0.100 event-days/year, with a statewide reserve margin of 25.6% and corresponding preliminary locational requirements of 79.8%, 107.5%, and 89.2% for New York City, Long Island, and the G-J Locality, respectively. In addition to the above technical study results, the NYISO also provided an assessment of the impact of the NYISO-determined TSL floor values used in the NYISO LCR study process.⁴ Under the final technical study case assumptions, the applicable TSL floor values are 86.4% for Load Zone J, 110.3% for Load Zone K, and 82.5% for the G-J Locality.

The NYISO follows the “Locational Minimum Installed Capacity Requirements Determination Process” to develop the LCRs for Load Zone J, Load Zone K, and the G-J Locality. For the 2026–2027 cycle, NYISO has presented a revised version of this procedure to stakeholders with proposed methodology updates.⁵ Pursuant to these procedures, the IRM study database is adjusted to the NYSRC approved IRM (24.5%), and the target LOLE is established at the lesser of 0.100 event-

³ NYSRC New York Control Area Installed Capacity Requirement Reports:

<https://www.nysrc.org/documents/reports/nysrc-new-york-control-area-installed-capacity-requirement-reports>

⁴ NYISO Impact Assessment of TSL Floor Values for the 2026–2027 IRM Study:

<https://www.nysrc.org/wp-content/uploads/2025/12/4.2-Impact-Assessment-of-Transmission-Security-Limits-11242025-ICS-Attachment-4.2.pdf>

⁵ Updated Draft of the Locational Minimum Installed Capacity Requirements Determination Process:

[https://www.nyiso.com/documents/20142/55778551/LCR%20Determination%20Process%20-%20Triggering%20Resource%20Revisions%20Draft%20v7%20\(Redline\).Updated.pdf](https://www.nyiso.com/documents/20142/55778551/LCR%20Determination%20Process%20-%20Triggering%20Resource%20Revisions%20Draft%20v7%20(Redline).Updated.pdf). The NYISO plans to post a final version of the updated process document to its website following Operating Committee approval of the final LCR study results for the 2026–2027 Capability Year.

days/year and the LOLE that results from the adjusted database corresponding to the approved IRM. The adjusted database corresponding to the NYSRC approved 24.5% IRM while setting the preliminary locational requirements equal to the applicable TSL floor values for all three Localities resulted in the target LOLE for this year's LCR study of 0.091 event-days/year.⁶

IV. Changes from the 2025-2026 Capability Year

The 2026-2027 IRM study included several impactful modeling changes compared to the 2025-2026 IRM study. The 2026-2027 IRM study implemented winter fuel availability constraints which reflect reduced available capacity during the peak winter period for certain fossil fuel generators located in Load Zones F-K. The 2026-2027 IRM study also included the modeling of CHPE as summer only resource. As a result of such updates, the 2026-2027 IRM study starts to capture winter reliability risks. Several major assumptions changes are also included in the 2026-2027 IRM study, such as: (1) changing the limitation for voluntary curtailments from three calls per year to three calls per month, and (2) modeling of Distributed Energy Resources (DERs) based on the anticipated transition of certain resources from the Special Case Resource (SCR) program and Demand Side Ancillary Services Program (DSASP).⁷

In addition to the changes in the IRM study final base case for the 2026–2027 Capability Year, to provide for improved alignment with the assessment and assumptions used in the planning studies, two methodology changes were implemented for calculating the TSL floor values used in the LCR study. The updated calculation utilizes non-coincident peak load forecasts to establish Locality Unforced Capacity (UCAP) requirements, and transmission related outages (i.e., 9300 code events) are not excluded from the Locality-specific five-year derating factors values used for UCAP to ICAP conversions.⁸ Both changes are consistent with the assumptions used to determine the transmission security based reliability needs identified in the NYISO's Short-Term Assessment of Reliability (STAR) for Q3 2025.

⁶ 2026-2027 IRM Study Database Alignment Report:

<https://www.nysrc.org/wp-content/uploads/2026/01/2026-2027-IRM-Study-Database-Alignment-Report.pdf>

⁷ 2026-2027 IRM Study Final Base Case Model Assumptions Matrix:

<https://www.nysrc.org/wp-content/uploads/2025/11/2026-2027-IRM-FBC-Assumptions-Matrix-ICS-11052025.pdf>

⁸ 2026-2027 Transmission Security Limit Floor Values Calculation:

https://www.nyiso.com/documents/20142/55276151/04_Update%20to%202026-2027%20TSL%20Floor%20Methodology%20-%2011202025%20ICAPWG%20Draft.pdf

V. LCR Determination Process

The LCR calculation methodology utilizes an economic optimization algorithm to minimize the total cost of capacity for the NYCA, taking into account net CONE curves as shown in the table below. Such net CONE curves account for the applicable net Energy and Ancillary Services revenue offset values for each capacity region and incorporate information from the annual update to determine the ICAP Demand Curves applicable for the 2026-2027 Capability Year.

Location (Peaking Plant Size)	LCR (%)	2026 - 2027 Final Net CONE Curves (\$/kw-yr)
NYCA (200 MW)	110.0	56.67
	113.0	57.05
	116.0	56.86
	119.0	57.27
	125.0	58.30
	128.0	58.89
G - J (200 MW)	69.0	41.74
	72.0	46.07
	75.0	50.25
	78.0	53.20
	84.0	56.79
	87.0	58.54
Zone J (200 MW)	68.4	125.86
	71.4	130.98
	74.4	135.93
	77.4	140.06
	83.4	145.09
	86.4	146.87
Zone K (200 MW)	93.3	36.88
	96.3	42.55
	99.3	47.85
	102.3	52.19
	108.3	57.80
	111.3	59.80

Using LCR study methodology, the NYSRC's LOLE resource adequacy standard will be met while utilizing the NYSRC-approved IRM and maintaining capacity requirements greater than or equal to the applicable TSL floor values, as shown in the table below.

Transmission Security Limit	G-J	NYC		LI	Notes
		CHPE In	CHPE Out		
Non-Coincident Load Forecast (MW)	15,305	11,089	11,089	5,128	[1]
Bulk Power Transmission Limit (MW)	4,525	2,475	2,875	275	[2]
Net Flow Adjustment (MW)*	275	0	0	0	[3]
Offshore Wind (MW)	0	0	0	37.2	[4]
UCAP Requirement (MW)	11,055	8,614	8,214	4,890	
UCAP Requirement Floor	72.20%	77.70%	74.10%	95.40%	
5-Year DF, Current	8.58%	5.67%	5.67%	13.21%	[5]
Special Case Resources (MW)	526.9	453	453	23.1	[6]
ICAP Requirement (MW)	12,619.40	9,584.80	9,160.70	5,657.60	
ICAP Requirement Floor (%)	82.50%	86.40%	82.60%	110.30%	

[1] 2026 Fall Load Forecast⁹

[2] 2026-2027 Locality Bulk Power Transmission Capability Report¹⁰

[3] Long Island Bulk Power Transmission Limit Adjustment

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

[5] 5-Year Derating Factor reflecting generation mix in the 2026-2027 IRM Final Base Case

[6] The SCR MW value reflects the assumptions used for the 2026-2027 IRM Final Base Case¹¹

When CHPE is in service, it becomes the “largest single resource” under the transfer limit analysis for Load Zone J, which raises the TSL floor value for Load Zone J compared with the CHPE-Out case. For the 2026–2027 LCR study, the binding TSL floor values for Load Zone J are 86.4% (CHPE-In) and 82.6% (CHPE-Out).

VI. Summary of Study

The calculations and analysis in this study use the NYISO process for setting the LCRs, with the NYSRC-approved statewide IRM of 24.5% for the 2026-2027 Capability Year. For 2026-2027, the LCR study also applies the Triggering Resource rules due to the identification of CHPE as a Triggering

⁹ NYSRC 2026-2027 Fall Forecast Update:

<https://www.nysrc.org/wp-content/uploads/2025/09/2026-IRM-Forecast-ICS-V2.pdf>

¹⁰ 2026-2027 Locality Bulk Power Transmission Report:

<https://www.nyiso.com/documents/20142/53789919/2026%20Locality%20Bulk%20Power%20Transmission%20Capability%20Report.pdf>

¹¹ 2026-2027 IRM Study Final Base Case Model Assumptions Matrix (see Attachment F):

<https://www.nysrc.org/wp-content/uploads/2025/11/2026-2027-IRM-FBC-Assumptions-Matrix-ICS-11052025.pdf>

Resource for the 2026-2027 Capability Year.

Based on the NYSRC-approved IRM of 24.5% and the final 2026–2027 IRM study alignment case, the applicable LOLE criterion is met with the TSL floor values binding in all Localities. For the CHPE-In case, the LCRs are 86.4% for New York City, 110.3% for Long Island, and 82.5% for the G-J Locality. For the CHPE-Out case, the LCRs are 82.6% for New York City, 110.3% for Long Island, and 82.5% for the G-J Locality. The applicable set of LCRs for each Obligation Procurement Period of the 2026-2027 Capability Year shall be determined in accordance with Section 5.11.7.1 of the Services Tariff.