New York ISO
Independent System Operator

Demand Response: Preliminary Model Values for 2026-2027 IRM Study

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April 29, 2025

Agenda

- Background
- Preliminary SCR values for 2026-2027 IRM Study
- Next steps
- Appendix I - Description of ICS Adjustment Factors

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Background

Overview of the SCR zonal response rate methodology accepted in 2025-2026 IRM Study

Background – Data Set Overview

- **The NYISO calculates zonal SCR response rates by hour of event based on historical SCR performance. The data set includes:**
  - All event hours, by zone, for each mandatory event from the most recently completed five years in which a mandatory event was initiated by the NYISO
  - The hourly response rates for each hour simulate the aggregated performance and staggered responses of individual SCRs during mandatory events and reflect the percentage of obligated SCR MW that responded during that hour across all mandatory events in the relevant zone(s)
- **The NYISO additionally calculates Translation Factors (see Appendix for details). The data set includes:**
  - All event hours, by zone, for each mandatory event from the most recently completed five years in which a mandatory event was initiated by the NYISO
  - All performance test hours that occur between the first Capability Period in the above timeframe and the most recent Summer Capability Period

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SCR Response Rates – Duration Limit

- **The SCR modeling approach utilizes energy limited resource (ELR) functionality to model SCRs as duration limited resources with hourly response rates**
  - The duration limits reflect the expected maximum mandatory SCR event length based on historically observed calls in the NYISO market. Calls have historically ranged from 1-7 hours
  - The duration limit of the zonal SCR resources will vary by load zone based on the maximum historical call length that has occurred in the zone since 2012

	SCR Activation Duration Limit by Zone (hours)			
	A-E	F	G-J	K
Duration Limit	5	7	6	7

- **Because SCR performance is captured in the hourly response rates in the SCR modeling approach established during the 1/30/2024 ICS Meeting, the maximum modeled SCR capacities are calculated based solely on July 2024 zonal SCR enrollment and the zonal ACL to CBL factors**

July Max Modeled Capacity (MWs) = SCR ICAP MW * ACL to CBL Translation Factor

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Preliminary SCR Model Values

*Based on July 2024 enrollments

Inputs for 2026-2027 IRM Preliminary Base Case (PBC)

- **Additional data inputs since 2025-2026 IRM Final Base Case (FBC)**
  - Winter 2023-2024 and Summer 2024 SCR Performance Test hours – total of 2 hours
  - Summer 2024 SCR Event hours – total of 15 hours
- **The additional data inputs consist of**
  - All event hours, by zone, from mandatory events from Summer 2012 through Summer 2024
    - Range from 35 event hours for Zone A to 97 event hours for Zone K
    - Used in calculating the zonal response rates and ACL to CBL translation factors
  - All performance test hours from Summer 2012 through Summer 2024
    - 25 Performance Test hours
    - Used in calculating the ACL to CBL translation factors
- **The inclusion of the additional data inputs leads to updates to the SCR activation hourly response rate and maximum modeled capacity for the 2026-2027 IRM PBC**

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Updated Response Rate by Hour of SCR Activation

Zones	Event Hour 1	Event Hour 2	Event Hour 3	Event Hour 4	Event Hour 5	Event Hour 6	Event Hour 7
A-E	82.33%	85.85%	85.54%	79.20%	75.61%	-	-
F	72.95%	79.54%	82.43%	83.29%	83.40%	70.40%	66.99%
G-I	61.08%	69.85%	72.12%	73.52%	74.47%	71.50%	-
J	57.53%	62.61%	66.97%	70.70%	72.29%	66.09%	-
K	51.20%	57.99%	63.12%	65.49%	64.82%	63.35%	52.63%

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Updated Max Modeled Capacity (MWs)

Zones	SCR ICAP MW based on July 2024	ACL to CBL Factor	July Max Modeled Capacity (MWs)
A-E	783.4	91.9%	719.5
F	103.5	89.2%	92.3
G-I	90.6	83.5%	75.6
J	478.7	72.9%	349.1
K	30.6	75.1%	23.0

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Comparison of SCR Response Rate

For 2026-2027 IRM PBC - Preliminary Response Rates (Up to 2024 Events)

Zones	Event Hour 1	Event Hour 2	Event Hour 3	Event Hour 4	Event Hour 5	Event Hour 6	Event Hour 7
A-E	82.33%	85.85%	85.54%	79.20%	75.61%	-	-
F	72.95%	79.54%	82.43%	83.29%	83.40%	70.40%	66.99%
G-I	61.08%	69.85%	72.12%	73.52%	74.47%	71.50%	-
J	57.53%	62.61%	66.97%	70.70%	72.29%	66.09%	-
K	51.20%	57.99%	63.12%	65.49%	64.82%	63.35%	52.63%

For 2025-2026 IRM FBC - Final Response Rates (Up to 2023 Events)

Zones	Event Hour 1	Event Hour 2	Event Hour 3	Event Hour 4	Event Hour 5	Event Hour 6	Event Hour 7
A-E	77.85%	83.57%	82.28%	70.24%	69.18%	-	-
F	75.94%	82.20%	85.24%	86.18%	85.54%	70.40%	66.99%
G-I	58.45%	67.53%	70.20%	71.94%	73.63%	71.48%	-
J	55.04%	60.60%	65.47%	67.78%	68.80%	66.09%	-
K	49.71%	56.72%	62.12%	64.63%	64.66%	63.36%	52.65%

Difference in Response Rates (2026 vs 2025 IRM)

Zones	Event Hour 1	Event Hour 2	Event Hour 3	Event Hour 4	Event Hour 5	Event Hour 6	Event Hour 7
A-E	4.48%	2.28%	3.26%	8.96%	6.43%	-	-
F	-2.99%	-2.66%	-2.81%	-2.89%	-2.14%	0.00%	0.00%
G-I	2.63%	2.32%	1.92%	1.58%	0.84%	0.02%	-
J	2.49%	2.01%	1.50%	2.92%	3.49%	0.00%	-
K	1.49%	1.27%	1.00%	0.86%	0.16%	-0.01%	-0.02%

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Comparison of Max Modeled Capacity (MWs)

For 2026-2027 IRM PBC - Preliminary Max Modeled Capacity (MW) (Up to 2024 Events)

Zones	SCR ICAP MW based on July 2024	ACL to CBL Factor	July Max Modeled Capacity (MWs)
A-E	783.4	91.9%	719.5
F	103.5	89.2%	92.3
G-I	90.6	83.5%	75.6
J	478.7	72.9%	349.1
K	30.6	75.1%	23.0

For 2025-2026 IRM FBC - Final Max Modeled Capacity (MW) (Up to 2023 Events)

Zones	SCR ICAP MW based on July 2024	ACL to CBL Factor	July Max Modeled Capacity (MWs)
A-E	783.4	93.5%	732.0
F	103.5	90.6%	93.7
G-I	90.6	84.1%	76.1
J	478.7	74.3%	355.7
K	30.6	76.1%	23.3

Difference in Max Modeled Capacity (MW) (2026 vs 2025 IRM)

Zones	SCR ICAP MW based on July 2024	ACL to CBL Factor	July Max Modeled Capacity (MWs)
A-E	-	-1.7%	-12.5
F	-	-1.4%	-1.4
G-I	-	-0.6%	-0.5
J	-	-1.4%	-6.6
K	-	-1.0%	-0.3

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Next Steps

- Update the SCR model inputs for the 2026-2027 IRM FBC with actual July 2025 enrollments once they become available

Appendix I – Description of ICS Adjustment Factors

SCR Baselines

- **Average Coincident Load (ACL):**
  - Capacity Baseline for resources participating in the SCR program
  - Required for all resources participating in the SCR Program
  - Used for Capacity Market participation
- **Customer Baseline Load (CBL):**
  - Energy Baseline for resources participating the SCR programs
  - Optional submission following a NYISO Test or Event
  - Used for Energy Payments

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ACL to CBL Translation Factor 2026 vs 2025

Program	Zone	2026	2025	Difference
SCR	A-E	91.9%	93.5%	-1.7%
SCR	F	89.2%	90.6%	-1.4%
SCR	G-I	83.5%	84.1%	-0.6%
SCR	J	72.9%	74.3%	-1.4%
SCR	K	75.1%	76.1%	-1.0%

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SCR Adjustment Factors used in IRM Studies

- **Translation Factor (ACL to CBL)**
  - The Translation Factor is used to adjust performance based on ACL baseline to a CBL equivalent
  - Transition from fixed to calculated Translation Factor established during 9/5/2018 ICS Meeting
  - Calculated value from:
    - All event hours, by zone, for each mandatory event from the most recent five years in which a mandatory event was initiated by the NYISO (but not older than summer 2012)
    - All performance test hours accumulated during the above timeframe even when there were no mandatory events
    - 2026 IRM ACL to CBL data set includes all event hours from mandatory events and performance tests from Summer 2012 through Summer 2024
  - Only uses responses from resources reporting their CBL

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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