

#### Special Case Resource (SCR) Response Rates Analysis for 2026-2027 Installed Reserve Margin (IRM) Study Final Base Case (FBC)

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\*\*Updated to include correction on Slide 4

## Background

- The NYISO calculates zonal SCR response rates by hour of event based on historical SCR performance.
  The dataset 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
    - Further information regarding the event data used for determining the SCR response rates for the 2026-2027 IRM study are
      posted with today's meeting material
  - 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)
- Prior to 2025, the historical performance dataset included no events longer than 5 hours for Load
   Zones A-E, and no events longer than 6 hours for Load Zones G-J
  - The maximum length of events in the historical dataset is 7 hours. A response rate of 0% is currently utilized for hours beyond the available historical data for a given zone
    - For example, for the 2026-2027 IRM study, a reponse rate of 0% is assumed for hours 6 and 7 of a 7-hour event for SCRs in Load Zones A-E because the historical dataset for these resources only includes performance for up to 5 hours



# **Background** (cont.)

- In June 2025, there were three 7-hour NYCA-wide (all zones) events that will be used to calculate the SCR response rates for all event hours for the 2027-2028 IRM study
  - Response rate data will be collected in the upcoming months for the summer 2025 SCR events.
  - Inclusion of summer 2025 event performance data will provide information to determine 7-hour response rates in all Load Zones for the 2027-2028 IRM study
- At the 9/3/2025 ICS meeting, additional analysis was requested to assess the materiality of the current assumption of 0% response rates in certain hours for zones that do not have historical performance data for 7-hour events
  - Certain stakeholders recommended development of assumed response rates for hours without historical performance for purpose of conducting an impact assessment
  - Certain other stakeholders noted that without historical data there is no basis to assume any response rates for hours beyond those for which historical performance data is currently available
- For purposes of the impact assessment, assumed response rates (as reflected on the following slide)
  were substituted for hours in zones currently assigned a 0% response rate due to the absence of
  available historical performance data

### **Impact Analysis**

 A parametric sensitivity case was conducted using the following response rate assumptions provided by ICS for hours in zones without available historical performance data

| Super Zone | 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%       | 65.00%       | 55.00%       |
| 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%       | 60.00%       |
| J          | 57.53%       | 62.61%       | 66.97%       | 70.70%       | 72.29%       | 66.09%       | 55.00%       |
| K          | 51.20%       | 57.99%       | 63.12%       | 65.49%       | 64.82%       | 63.35%       | 52.63%       |

The following table summarizes the potential impacts identified by this assessment

| Case                             | IRM                 | J LCR  | K LCR   | G-J LCR |
|----------------------------------|---------------------|--------|---------|---------|
| Base*                            | <mark>25.680</mark> | 80.714 | 105.713 | 90.284  |
| Sensitivity with ICS Assumptions | 25.567              | 80.628 | 105.608 | 90.196  |
| Delta                            | (0.11)              | (0.09) | (0.11)  | (0.09)  |



<sup>\*</sup>The base case of this impact assessment does not include consideration of the MARS version 5.8 update discussed at the 10/1/2025 ICS meeting

#### Recommendation

- The NYISO recommends continued use of response rates based solely on available historical data for the 2026-2027 IRM FBC
  - For zones that currently lack historical performance data for 7-hour events, a 0% response rate would apply for any hours beyond available historical data
  - SCR response rates have historically been based on actual performance data
    - Currently, there is no agreed upon methodology/basis for determining potential response rates in the absence of actual historical performance data
  - The 2027-2028 IRM study will incorporate event performance date from summer 2025 and provide actual performance data to derive 7-hour response rates for all zones



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# Questions?



# SCR Response Rates for 2026-2027 IRM Study

| SCR Performance for 2026-2027 IRM Study |                         |   |                 |                 |                 |                 |                 |                 |                            |
|---|-------------------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------------|
| Super Zones                             | SCR Enrollments<br>(MW) | Response Rate (%) by Hour of SCR Activation |                 |                 |                 |                 |                 |                 | Superzonal ACL to          |
|   |                         | Event Hour<br>1                             | Event Hour<br>2 | Event Hour<br>3 | Event Hour<br>4 | Event Hour<br>5 | Event Hour<br>6 | Event Hour<br>7 | CBL Translation Factor (%) |
| A - E                                   | 260.5                   | 82.33%                                      | 85.85%          | 85.54%          | 79.20%          | 75.61%          | -               | -               | 91.85%                     |
| F                                       | 87.8                    | 72.95%                                      | 79.54%          | 82.43%          | 83.29%          | 83.40%          | 70.40%          | 66.99%          | 89.18%                     |
| G - I                                   | 73.9                    | 61.08%                                      | 69.85%          | 72.12%          | 73.52%          | 74.47%          | 71.50%          | ı               | 83.46%                     |
| J                                       | 453.0                   | 57.53%                                      | 62.61%          | 66.97%          | 70.70%          | 72.29%          | 66.09%          | -               | 72.92%                     |
| K                                       | 23.1                    | 51.20%                                      | 57.99%          | 63.12%          | 65.49%          | 64.82%          | 63.35%          | 52.63%          | 75.13%                     |
| All Zones                               | 898.1                   | 66.77%                                      | 72.08%          | 74.61%          | 74.35%          | 73.83%          | 66.38%          | 58.14%          |                            |

