

# Notice of Potential Market Problem: Updated CAFs and Other Downstream Processes

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# Background

- The NYISO discovered an error was made in the determination of the 5-year derating factor used for calculating the transmission security limit (TSL) floor value for Load Zone J for 2024-2025 Capability Year. Using the correct derating factor, the TSL floor value for Load Zone J for the 2024-2025 Capability Year should be 80.4% instead of the initially calculated 81.7% value
  - The NYISO also confirmed that no corrections are required for the G-J Locality and Load Zone K for the 2024-2025 Capability Year
- After discovery of the issue, the NYISO reported the matter to FERC and the Market Monitoring Unit (MMU) prior to issuing a “Notice of a Potential Market Problem” to the market on April 10, 2024, and commenced discussions with stakeholders at the Operating Committee on April 11, 2024 and the ICAP Working Group on April 15, 2024
- The NYISO conducted a supplemental analysis to determine that the Locational Minimum Installed Capacity Requirement (LCR) for Load Zone J should have been 80.4% and that the TSL floor values for Load Zone K (105.3%) and the G-J Locality (81.0%) remained binding for their respective LCRs
- The NYISO recommended revising the Load Zone J LCR for the 2024-2025 Capability Year to 80.4% and implementing the revised LCR beginning with the May 2024 ICAP Spot Market Auction. The revised LCR for Load Zone J was subsequently approved by the Operating Committee on April 19, 2024
  - On April 18, 2024, the NYISO submitted waiver request to FERC addressing the implementation of the revised LCR for Load Zone J beginning with the May 2024 ICAP Spot Market Auction
  - The revised Load Zone J LCR (80.4%) was implemented beginning with the May 2024 spot auction
- In addition, the NYISO also recommended continuing discussions with stakeholders to assess the feasibility, implications, timelines and required actions to pursue any prospective updates to Capacity Accreditation Factors (CAFs) and/or other downstream market parameters

# Updated CAFs

# Updated CAF Calculations

- **The NYISO conducted an updated CAF calculation using the correct LCR for Load Zone J to identify the impact on previously finalized CAF values for the 2024-2025 Capability Year. The following changes are reflected in the supplemental LCR analysis as the starting point base case for the CAF calculation:**
  - The Loss of Load Expectation (LOLE) is increased from updated from 0.089 event days per year to 0.090 event days per year
  - Reduced capacity within Load Zone J due to lower LCR
  - Increased capacity within Load Zones GHI due to maintaining the same LCR for G-J Locality
- **With the changes reflected in the updated base case, the general risk profile of the system conditions remained relatively unchanged from the original analysis**
  - The NYISO identified a slightly higher distribution of LOLE events towards later hours (see Appendix for additional details)
  - The slight change in distribution did not impact the previously identified Peak Load Window definition for the 2024-2025 Capability Year ([February 2 ICAP Working Group Presentation](#))
- **The NYISO calculated the updated CAFs with the updated base case, using the same process employed for the previously finalized CAFs**

# Overview Updated CAFs

- **The updated CAFs in aggregate affect less than 8% of UCAP NYCA-wide and would result in a net increase of 17 MW UCAP across the entire NYCA system**
  - The change in the UCAP represents less than 0.1% change in total UCAP across the NYCA system
- **A general downward trend of updated CAFs is observed largely due to the higher LOLE of the updated base case, with the exception of a few CARCs primarily in the rest of state region (Load Zones A-F)**
  - The increase in the marginal reliability value due to the higher starting point LOLE is more prominent with the “perfect unit” which is used as the denominator of the CAF calculation
  - The slightly higher distribution of LOLE events to later hours results in increases to certain CAFs primarily in the rest of state region
- **It should be noted that CAF changes are generally driven by smaller changes in the LOLE from the GE-MARS simulation**
  - In the case of the updated CAFs, the changes in the LOLE are in the 4<sup>th</sup> and 5<sup>th</sup> decimal point

# Updated CAFs

CARC	Zone	Previous FINAL CAFs	Updated CAFs with Corrected NYC LCR	Delta
2-hour EDL	ROS	55.42%	<b>55.20%</b>	-0.22%
2-hour EDL	GHI	56.16%	<b>55.33%</b>	-0.83%
2-hour EDL	J	55.93%	<b>55.27%</b>	-0.66%
2-hour EDL	K	52.76%	<b>52.91%</b>	0.15%
4-hour EDL	ROS	64.47%	<b>66.80%</b>	2.33%
4-hour EDL	GHI	67.95%	<b>66.80%</b>	-1.15%
4-hour EDL	J	68.84%	<b>67.49%</b>	-1.35%
4-hour EDL	K	78.94%	<b>79.19%</b>	0.25%
6-hour EDL	ROS	91.77%	<b>91.36%</b>	-0.41%
6-hour EDL	GHI	91.92%	<b>90.96%</b>	-0.96%
6-hour EDL	J	90.41%	<b>89.34%</b>	-1.07%
6-hour EDL	K	91.53%	<b>92.15%</b>	0.62%
8-hour EDL	ROS	100.00%	<b>99.32%</b>	-0.68%
8-hour EDL	GHI	100.00%	<b>99.33%</b>	-0.67%
8-hour EDL	J	100.00%	<b>98.70%</b>	-1.30%
8-hour EDL	K	99.72%	<b>99.79%</b>	0.07%

CARC	Zone	Previous FINAL CAFs	Updated CAFs with Corrected NYC LCR	Delta
Landfill Gas	ROS	59.67%	<b>61.27%</b>	1.60%
Solar	ROS	15.64%	<b>13.63%</b>	-2.01%
Solar	GHI	15.62%	<b>13.36%</b>	-2.26%
Solar	J	15.18%	<b>13.65%</b>	-1.53%
Solar	K	11.62%	<b>11.98%</b>	0.36%
Offshore Wind	K	31.56%	<b>32.06%</b>	0.50%
Land-based Wind	ROS	12.89%	<b>12.28%</b>	-0.61%
Limited Control Run of River	ROS	32.78%	<b>35.76%</b>	2.98%
Limited Control Run of River	GHI	41.23%	<b>39.14%</b>	-2.09%
Large Hydro	ROS	100.00%	<b>100.00%</b>	-
Large Partial Pump Hydro	ROS	100.00%	<b>100.00%</b>	-
Generator	ROS	100.00%	<b>100.00%</b>	-
Generator	GHI	100.00%	<b>100.00%</b>	-
Generator	J	100.00%	<b>100.00%</b>	-
Generator	K	100.00%	<b>100.00%</b>	-

# Downstream Market Parameters

# Consideration of Downstream Market Parameters

- **The NYISO is continuing to assess the considerations related to all affected downstream parameters**
  - These downstream parameters include, but are not limited to, CAFs, the availability of capacity Import Rights and the translation of ICAP Demand Curves to Unforced Capacity (UCAP) terms using the updated CAFs
- **At this time, the NYISO has not identified a readily available and feasible path forward for updating the downstream parameters intra-Capability Period**
  - The NYISO's preliminary assessment identified software limitations that impede the ability to implement parameter changes during the Capability Period



# Next Steps

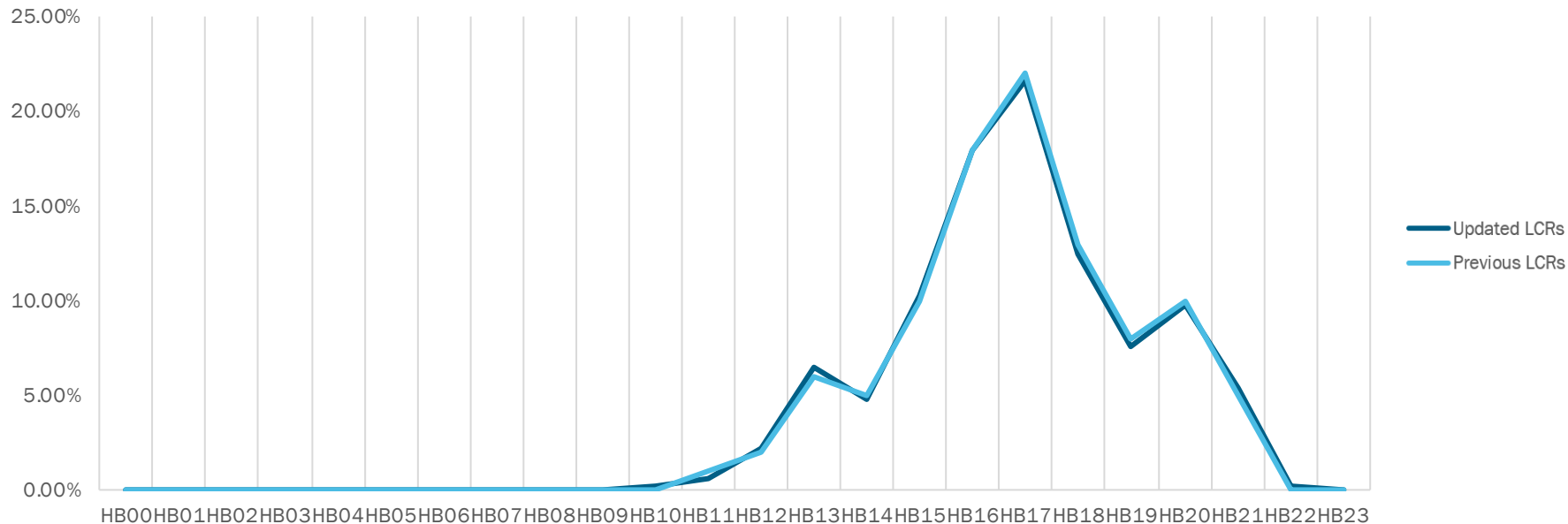
# Next Steps

- **The NYISO will return to a future ICAP Working Group meeting in May/June to provide additional information and discuss potential next steps**
  - The NYISO is seeking stakeholder feedback on the assessments and considerations related to all affected the downstream parameters

# Appendix

*- LOLE Distribution Comparison*

# Hourly LOLE Distribution Comparison



# 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?