

#### Notice of Potential Market Problem: Load Zone J TSL Floor Value for the 2024-2025 Capability Year

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#### **Operating Committee**

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### Background

- In the course of conducting separate analysis to evaluate forced outage rate calculations, the NYISO discovered that 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
  - The original 4.5% derating factor was based on historical generator outage data from the inappropriate time period (2017-2021 instead of 2018-2022)
  - When using the appropriate historical generator outage data for 2018-2022, the derating factor for Load Zone J should be 2.89%
- 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
- 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
  - The NYISO also informed the NYSRC of the matter
  - The NYISO commenced discussions with stakeholders at the Operating Committee on April 11, 2024 and the ICAP Working Group on April 15, 2024
- The NYISO's ongoing assessment of the issue has confirmed that this error was limited to Load Zone J, and no corrections are required for the G-J Locality and Load Zone K for the 2024-2025 Capability Year
  - Based on detailed unit-level comparison, the NYISO also confirmed offsetting effects between generators in Load Zones G-I and Load Zone J result in the 2018-2022 derating factor for Load Zone J decreasing compared to the 2017-2021 dataset while the G-J Locality remained static



## **Background (cont.)**

- For purposes of the TSL floor value calculations, the Locality derating factor values are generally rounded to a single decimal place
  - The same general rounding convention was used for the 2023-2024 and 2024-2025 calculations
- For the 2024-2025 Capability Year, the derating factor used in the calculation of the TSL floor value for Load Zone K was rounded to two decimal places
  - The change implemented for Load Zone K was intended to provide further clarity regarding the derating factor and capacity adjustments applied due to the inclusion of offshore wind
    - For additional information regarding the treatment of offshore wind please refer to the <u>9/5/2023</u> presentation to the ICAPWG
  - Although the TSL floor value calculations for the G-J Locality and Load Zone J used values rounded to a single decimal point, the LCR Report identified derating factor values with two decimal points for consistency in presentation
- The NYISO rounded the corrected derating factor value for Load Zone J to two decimal places (2.89%) to provide additional clarity and used this value in calculating the corrected TSL floor value for Load Zone J
  - The updated TSL floor value for Load Zone J of 80.4% is unaffected by the rounding precision (i.e., one vs two decimal places)



### **Background** (cont.)

• The table below provides the derating factors for all Localities rounded to the appropriate decimal place used in the calculation of their respective TSL floor values

	Locality Derating Factors Used in TSL Floor Value Calculations				
Locality	2023-2024	2024-2025 (Initial with NYC Error)	2024-2025 (Corrected)		
G-J	5.4%	5.4%	5.4%		
Load Zone J	4.5%	4.5%	2.89%		
Load Zone K	6.3%	8.85%	8.85%		



### **Updated Study Results**

- The NYISO conducted an updated study for the 2024-2025 Capability Year, using the corrected TSL floor value for Load Zone J, along with the TSL floors for the other Localities and the NYSRC approved IRM (22.0%). The results:
  - confirmed that the TSL floor values remain binding for all Localities with the Load Zone J Locational Minimum Installed Capacity Requirement (LCR) established at the corrected TSL floor value (<u>i.e.</u>, 80.4%),
  - identified minimal change to the NYCA loss of load expectation (LOLE) compared to the original study, and
  - confirmed that the system reflecting the updated inputs continues to meet reliability criterion

LOLE	Round to 0.089 (0.0886)	Round to 0.090 (0.08982)	+0.00122
Zone J LCR	81.7%	80.4%	-1.3%
G-J Locality LCR	81%	81%	
Zone K LCR	105.3%	105.3%	
IRM	22%	22%	
Parameters	Current	With Zone J Correction	Delta

- The small LOLE increase identified by the updated study is due to the improved transfer into Load Zone J in the underlying model, reducing the reliability impact of MW within Load Zone J
  - The impact of improved transfer into Load Zone J was studied and discussed at the NYSRC Installed Capacity Subcommittee during the installed reserve margin (IRM) study process completed in 2023 (link to ICS material)



### **Capacity Accreditation Factor Considerations**

- Capacity Accreditation Factors (CAFs) are calculated as subsequent step after finalizing the LCRs
- The NYISO anticipates that some degree of change to the previously posted final CAF values for the 2024-2025 Capability Year would likely be identified if CAFs were reevaluated, using the results of the updated analysis due to the change in the LCR for Load Zone J and the resulting minimal change in NYCA LOLE
- However, the NYISO anticipates that the potential impact on the previously determined final CAFs for the 2024-2025 Capability Year would be limited due to the minimal change to the NYCA LOLE, which is the key parameter in CAF calculations
- The final CAFs are used in updating the translation factors and translating the ICAP Demand Curves to UCAP terms
  - The previously posted final CAFs for the 2024-2025 Capability Year were used to determine the translation factors and the UCAP Demand Curves applicable for the Summer 2024 Capability Period
- Seeking to update CAFs, translation factors and the UCAP demand curves would require significant effort and is not feasible to complete before the upcoming May 2024 ICAP Spot Market Auction
  - The current certification deadline for the May 2024 ICAP Spot Market Auction is April 22, 2024
  - A complete refresh will require effort from both NYISO to update all downstream market parameters and Load Serving Entities to update estimated loads, in a compressed timeframe, leading to potentially additional market uncertainties
  - NYISO will continue to assess and discuss with stakeholders the feasibility, implications, timelines and required actions to pursue any prospective update of CAFs and/or other downstream market parameters



### **Capacity Accreditation Factor Considerations (cont.)**

- At the 4/15/2024 ICAP Working Group meeting, stakeholders requested that the NYISO provide certain preliminary information to assess the potential magnitude of impacts to CAFs reflecting the updated study with revised Load Zone J LCR of 80.4% and the system LOLE at 0.08983
- Stakeholders further recommended that the preliminary information could be initially limited to the CAFs for the 4-Hour Energy Duration Limited Capacity Accreditation Resource Class (CARC)
- The table below provides the preliminary results of the requested information:

4-Hour Energy Duration Limited CAFs	Rest of State	GHI	NYC Locality	LI Locality
Previously Finalized CAFs	64.47%	67.95%	68.84%	78.94%
Updated CAFs Calculation (preliminary)	66.80%	66.80%	67.49%	79.19%
Delta	+ 2.33%	- 1.15%	- 1.35%	+ 0.25%

 The results above are preliminary and a complete verification process has not been fully conducted with respect to this information. This data is provided for informational purposes only to assist stakeholders in assessing the relative potential magnitude of impacts on certain CAFs that could result if updated values were fully developed



### **Proposed Remedial Action**

- The NYISO recommends revising the Load Zone J LCR for the 2024-2025 Capability Year to 80.4% based on the updated study results and implementing the revised LCR beginning with the May 2024 ICAP Spot Market Auction
  - This includes revising the associated UCAP requirements for Load Zone J to reflect the revised LCR
- The NYISO will continue to collaborate with stakeholders to assess the feasibility, implications, timelines and required actions to pursue any prospective updates of CAFs and/or other downstream market parameters
  - The NYISO will produce updated CAFs for stakeholders awareness and consideration
- The NYISO will implement improved process and review controls to mitigate the potential for this error to recur



#### **Next Steps**

#### Related to ICAP Markets

- Seek approval of revised 2024-2025 LCR for Load Zone J
  - Repost updated LCR Report for 2024-2025 Capability Year
- Requirements to implement revised Load Zone J LCR beginning with the May 2024 ICAP Spot Market Auction:
  - Update/revise Load Zone J obligations and the UCAP demand curve in the ICAP Automated Market System (AMS)
  - Coordinate with affected Transmission Owners and Load Serving Entities to implement revised requirements prior to the currently scheduled close of certification for the May 2024 ICAP Spot Market Auction on April 22, 2024
- Proceed with May 2024 ICAP Spot Market Auction as currently scheduled
- Collaborate with stakeholders to assess the feasibility, implications, timelines and required actions to pursue any prospective updates to CAFs and/or other downstream market parameters

#### Regulatory and Other Considerations

- Waiver request submitted to FERC to address the proposed remedial action plan to implement the revised LCR for Load Zone J beginning with the May 2024 ICAP Spot Market Auction
- Continue to assess the potential market impacts of the incorrect initial 2024-2025 Capability Year TSL floor value for Load Zone J, including collaboration and coordination with MMU on such assessment
- Investigate the root cause of the erroneous calculation and identify/develop potential process improvements to mitigate the potential recurrence of a similar calculation error in the future



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#### Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation



# **Questions?**

