

Seasonal Derating Factor Considerations – Final Recommendation

Sushant Varghese

Manager, Resource Adequacy

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Background

- **With increasing winter reliability risk, it is necessary to incorporate additional winter-specific data and assumptions into the resource adequacy framework to ensure that modeled resource performance and system conditions appropriately reflect seasonal differences.**
 - Historically, reliability risk in the New York Control Area (NYCA) has been concentrated in the summer period, and resource adequacy modeling primarily reflected summer-based assumptions.
 - In recent years, winter-specific assumptions have been progressively incorporated into the Installed Reserve Margin (IRM) study model as part of the ongoing modeling improvement initiatives.
 - Beginning with the 2026–2027 IRM study, Loss of Load Expectation (LOLE) risk was identified during the Winter Capability Period.
- **At the 6/3/2026 ICS meeting, the NYISO initially recommended calculating separate summer and winter zonal derating factors using separate inputs of seasonal availability factors, seasonal thermal EFORDs and seasonal capacities.^[1]**
 - Annualizing the seasonal zonal derating factors based on the portion of LOLE risk for each seasons from the prior Capability Year's final NYISO Locational Minimum Installed Capacity Requirements (LCR) study base case was recommended.
 - The NYISO also recommended maintaining the current generator modeling in the GE MARS model as well as maintaining annual capacity removal or addition in the IRM study process for capacity requirement determination.
- **At the 6/22/2026 ICAPWG meeting, the NYISO identified a concern with the proposed calculations of the 5-year annual EFORD and the average 5-year seasonal EFORD.^[2]**
 - With the 5-year annual EFORD, all outage and service data are aggregated as one continuous time period to calculate the annual EFORD.
 - With the 5-year seasonal EFORD, each year/season is calculated separately and then the average calculation is based on five (5) distinct EFORDs.
 - The calculated average seasonal EFORDs are not consistent with the 5-year annual EFORDs based on a continuous time period, which is the modeling inputs in the resource adequacy model. Thus, the NYISO recommended maintaining the 5-year annual EFORD calculation for thermal units in the zonal derating factor calculation

[1] [6/3 ICS Presentation](#)

[2] [6/22 ICAPWG Presentation](#)

Final Recommendation

- While additional consideration is needed for the 5-year seasonal EFORD as a calculation tool is being developed, the NYISO continues to recommend including winter performance data for intermittent resources and recognizing seasonal capability differences in the zonal derating factor calculation.
- Therefore, starting with the 2027-2028 IRM study Preliminary Base Case (PBC), the NYISO's recommendation is to
 - Maintain the current generator modeling in the GE MARS model
 - Maintain annual capacity removal or addition in the IRM study process for capacity requirement determination
 - To inform the annual capacity removal or addition, develop annualized zonal derating factors using seasonal (summer and winter) zonal derating factors weighted by the seasonal LOLE risks portion from the prior Capability Year's final NYISO LCR study base case.^[3] Seasonal zonal derating factors shall use the following inputs:
 - Summer and winter capabilities (CRIS-adjusted DMNC) for all generators based on the most recent NYISO Load & Capacity Data report (Gold Book) for all resources (e.g., 2026 Gold Book for the 2027-2028 IRM study)
 - Summer and Winter availability factors for the Intermittent Power Resources and Limited Control Run-of-River Resources for the prior five-year period (e.g., 2021-2025 for the 2027-2028 IRM study), based on hourly production profiles as defined in Attachment N of the ICAP Manual^[4]
 - 5-year EFORD calculation for thermal resources applied to the entire Capability Year, based on the GADS data submission for the prior 5-year period (e.g., 2021-2025 for the 2027-2028 IRM study)
 - Report the seasonal and annualized zonal derating factors in the Assumptions Matrix to improve transparency of IRM study inputs

[3] See Peak Load Window for the 2026-2027 Capability Year (Updated 5/20/2026).

[4] ICAP Manual Attachments

Zonal Derating Factors for the 2027-2028 IRM Study PBC

- Based on the recommendation, the NYISO has developed the seasonal zonal derating factors for the 2027-2028 IRM study PBC including the following data:
 - Seasonal generator capability based on the 2026 Gold Book
 - Annual EFORd calculation for thermal resources based on the GADS data submission for the period of 2021-2025
 - Hourly production profiles for the Intermittent Power Resources and Limited Control Run-of-River Resources for the period of 2021-2025
 - Seasonal hourly LOLE weighting based on the final 2026-2027 LCR study base case (using the CHPE-in case)^[5]
 - Generation inclusion and deactivation (2027-2028 IRM PBC assumptions)
 - The seasonal LOLE risk from the final 2026-2027 LCR study base case
 - Additional assumption updates that may affect the seasonal zonal derating factors:
 - Finalized production profiles for 2025 for Intermittent Power Resources and Limited Control Run-of-River Resources for 2027-2028 IRM Final Base Case (FBC)
 - Final Generation inclusion and deactivation assumptions for 2027-2028 IRM FBC

Load Zone	Summer Derating Factor	Winter Derating Factor	Annual Derating Factor
A-F	21.55%	19.95%	21.12%
G-J	10.87%	10.65%	10.81%
J	8.04%	7.89%	8.00%
K	14.25%	14.17%	14.23%
NYCA	17.06%	16.05%	16.79%

[5] See [Peak Load Window for the 2026-2027 Capability Year \(Updated 5/20/2026\)](#)

Next Steps

- Seek ICS approval of the final recommendation for the 2027-2028 IRM study
- If approved by the ICS, implement the recommendation starting with the 2027-2028 IRM study PBC
- Proceed with the development of a 5-year seasonal EFORd calculation tool and return to the ICS for further discussion on derating factor consideration

Questions?

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