

# NYISO Resource Adequacy & Capacity Market – External Areas

---

Dylan Zhang

Manager, Resource Adequacy, NYISO

ESIG Fall Technical Conference 2025 - Resource Adequacy Assessments for Large Geographic Regions

October 28, 2025

# External Control Area Modeling

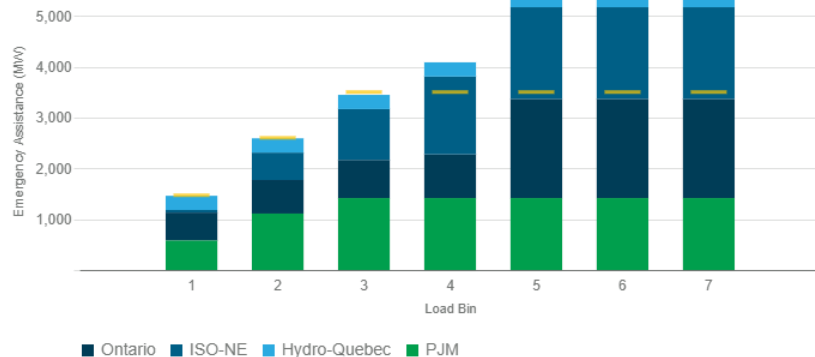
## Emergency Imports and External Area Modeling Limitations

External area models are provided by Northeast Power Coordinating Council (NPCC) and fully represented within the New York State Reliability Council (NYSRC) “Installed Reserve Margin” (IRM) study.

For purposes of the annual IRM study, external area models are subject to adjustment to avoid over reliance in determining New York's minimum Installed Capacity (ICAP) requirement to meet resource adequacy.

1. Intertie transfer capability is reduced based upon analysis of latent reserves within external areas during historical peak operating conditions and distinct load/weather uncertainty bin.
2. All the external areas are adjusted, by removing perfect capacity, to reach no-better-than 0.1 loss of load event-days per year to prevent over reliance by New York on neighboring systems
3. Peak load days are adjusted to ensure the top 3 peak load days for the NYISO and external areas are coincident
4. The external areas are not to exceed the "minimum reserve margin" identified in the NERC “Long Term Reliability Assessment”

Maximum Emergency Assistance to NYISO by Load Bin (MW)

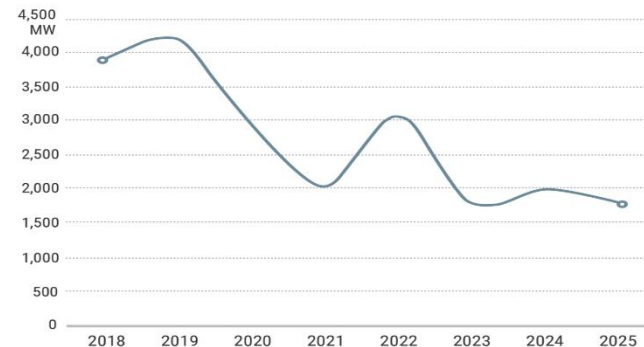
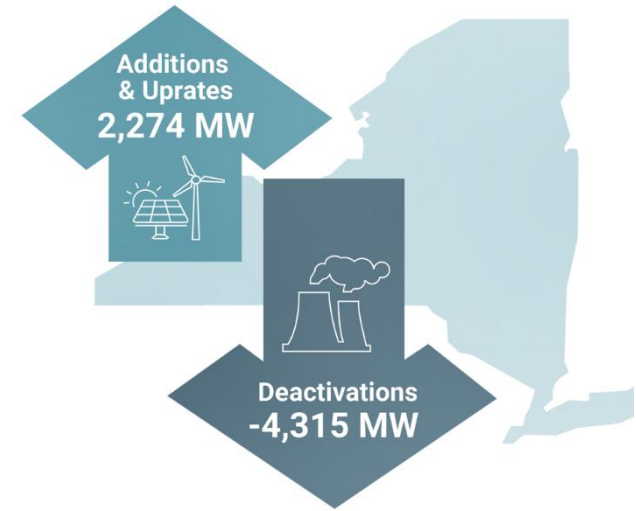


# Firm Capacity Imports

- Certain controllable, high-voltage direct current (HVDC) transmission projects that sink into NYISO are eligible to sell Installed Capacity in NYISO ICAP auctions by combining their firm transmission rights with contracted capacity located in the external source area. These capacity imports are represented in the NYISO ICAP market through awards of Unforced Capacity Deliverability Rights (UDRs).
- These UDRs include annual elections for holders to inform the NYISO and NYSRC of their intent to: 1) utilize their transmission rights (or a portion thereof) and procure capacity for sale in NYISO ICAP auctions and/or 2) to allow the transmission capability (or a portion thereof) to be utilized for emergency assistance.
- Contracted capacity from external areas is represented as available in the NYISO and NYSRC resource adequacy studies.

# Capacity Market Interactions

- Transmission capability utilized for emergency assistance has the effect of reducing the IRM and placing downward pressure on New York's minimum ICAP requirement.
  - Assumed reliance on emergency assistance can impact market price signals as to the value of capacity.
- Reliability margins are tightening in New York due to imbalances between resource deactivations and new resource additions in combination with load growth.
- Given the impact of emergency assistance assumptions on the IRM, appropriate and reasonable assumptions are critical to representing New York's resource adequacy needs and providing appropriate market signals as to the value of capacity.



# Questions?

# Our Mission and 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

