

Update on Energy Adequacy Tool, Energy Shortfall Threshold, and Perspectives on Retail Demand Response

2024 NECPUC Symposium

Retail Demand Response & Load Flexibility Panel



Stephen George

DIRECTOR, OPERATIONAL PERFORMANCE, TRAINING & INTEGRATION



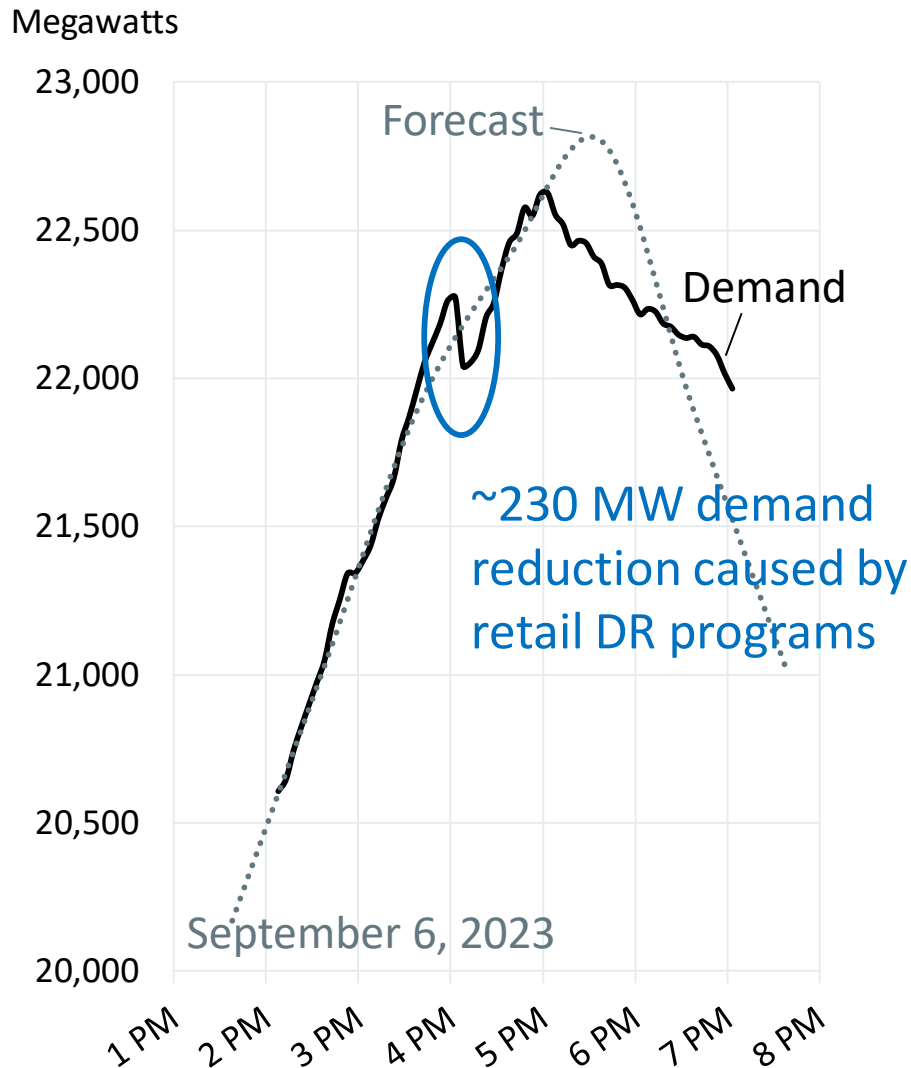
ISO-NE's study of energy shortfall risks produces innovative tool for assessing the region's energy adequacy

- **Probabilistic Energy Adequacy Tool (PEAT):** framework for risk analysis under extreme weather events will be essential for evaluating the region's risk of energy shortfall — the electricity supply falling below consumer demand — giving the region's stakeholders advance warning and the opportunity to take steps to avert it
- **Regional Energy Shortfall Threshold (REST):** ISO's initial 2027 and 2032 energy adequacy study results from the PEAT will help inform the development of a reliability-based threshold that reflects the region's level of risk tolerance with respect to energy shortfalls during extreme weather
 - Considerations for development of the REST:
 - Periodicity of Studies (*When?*)
 - Extreme Event Selection Process (*How?*)
 - REST Metrics and Thresholds (*What?*)

New England's energy shortfall risk is dynamic, and will evolve as the region continues its clean energy transition



ISO-NE's Perspective on Retail Demand Response



- The REST threshold will represent an energy shortfall risk tolerance, beyond which solutions may be required
 - Solutions could include market designs, dynamic retail pricing, or additional responsiveness by end-use consumers
- ISO's recently published CELT report projects that regional electricity consumption will increase by ~17% over the next decade
- Retail DR programs can have a significant impact on ISO's system and market operations
 - The effects of retail programs operating outside of ISO's markets can be challenging to forecast