

New York State Reliability Council – Extreme Weather Working Group (EWWG)
Meeting # 23 Minutes – May 30, 2025
Zoom

1. Draft Meeting Minutes for Meeting #22 (3/28/2025) – Hilme Athar

- Approved

2. NERC Cold Weather Data Request Reporting– Hilme Athar

- Hilme Athar provided an FYI update on NERC's Cold Weather Generator Data Request. FERC issued an order February 2024 directing NERC to develop a plan to collect data on the winterization of generating units and submit an annual analysis of the data.
- NERC is collecting the following data from generation units across North America:
 - i. Extreme minimum temperature at each location
 - ii. Minimum and maximum ambient operating temperatures
 - iii. Winter net capacity
 - iv. Unit operability at extreme temperatures
 - v. History of cold weather reliability events
 - vi. Corrective Action Plans (CAPs), including development and implementation date.
- NERC will evaluate ongoing risk and CAP effectiveness. Final report is expected by October 1, 2025.
- Jay Goodman requested the docket number for the FERC directive; Hilme identified it is in support of EOP-012-1.
- Separate from this directive, Hilme also noted NERC is hosting a public dataset of extreme benchmark temperature events in ISO and RTO regions under TPL-008 which may be useful for future studies.

3. Renewable Lulls: Issue Discovery Report Update– Thomas Primrose

- Thomas Primrose provided an update on data statistics prepared for Renewable Lulls Issue Discovery Report.
- Annual capacity factors were calculated for each of the DNV simulated Renewable profiles for each year 2000-2022.
 - i. Maximum, Average, Minimum, and Spread of the 22 year set is identified.
 - ii. One item of note to help understand the amount of variability, was looking at Zone K Offshore Wind August capacity factor ranged from 37% to 17% in the 20 year data set.
- Thomas also put together a history of UCAP translation factors for the DNV profiles.
- For the analysis UCAP translation factor is considered to be the LOLE-weighted capacity factor during the June-August timeframe.
- This was developed using the most recently presented LOLE distributions from ICS.
- Thomas also fulfilled Mark Younger's request from EWWG meeting #22, of analyzing the statistics comparing 5-year periods and 10-year periods.
- 10-year period tightens the spread of the UCAP translation factors. This is of note for possible impact on IRM setting process.

4. NYISO Resource Adequacy Intermittent Renewable Modeling – Jack Garrett

- Jack Garrett of NYISO's Resource Adequacy group presented NYISO's most recent analyses to incorporate extreme weather impacts on renewable resources into MARS modeling.
- Statistical analysis examined historical and DNV-simulated data to identify extreme weather years using low output count. Low renewable output hours defined as <10% capacity factor. Z-scores used to assess how individual weather years deviate from the average number of low output hours of all years.

- Key findings:
 - i. 2021 identified as most extreme (high number of low output hours)
 - ii. 2018 also showed elevated low output counts
 - iii. Trends from simulated and production data aligned reasonably well
- Jack emphasized the weather year shape must remain consistent across all intermittent resources when a profile is chosen, in order capture correlated effects across resources.
- Modeling impact tests:
 - i. Compared 5-year base case (2019–2023) to 10-year case (2014–2023) using DNV data
 - ii. IRM increased from 24.4% to 24.57% in the 10-year test
 - iii. LOLE impacts tied heavily to renewable performance during top 10 peak load hours
 - iv. 2016 and 2022 decreased LOLE; 2014 and 2017 increased LOLE.
- LOLE impact of a weather year's shape can vary year to year in MARS as peak load window shifts.
- Hilme asked whether NYISO would consider selecting representative years (good/bad) vs. using probabilistic full-period sampling. Jack said NYISO is still evaluating options and will seek feedback from ICS before making recommendation.
- Roger Clayton raised concerns about solar capacity factor assumptions in RNA vs. MARS; Jack noted behind-the-meter solar wasn't included in this analysis and advised following up with Keith Burrell.
- Roger Caiazza asked if NYISO is analyzing worst-case historical years (e.g., 1961) for dispatchable emissions-free resource planning. Jack confirmed such analysis is underway.
- Thomas raised potential zonal-level implications, suggesting low output count may be more critical for localities with heavy offshore wind deployment (e.g., Zones J/K). Jack and Dylan acknowledged the importance of considering zonal characteristics, especially as the resource mix changes.

5. Other Business

- No new items were raised.
- Thomas Primrose noted that VOWELS dashboard is back online.