New York State Reliability Council – Extreme Weather Working Group (EWWG)
Meeting # 21 – January 31, 2025
Zoom

1. **Draft Meeting Minutes for Meeting #20 (12/13/2024) – Thomas Primrose**
   - Approved

2. **Virtual Offshore Wind Energy Laboratory & Simulator (VOWELS) – Roger Clayton**
   - Reviewed that Bruce Bailey reached out to NYSRC EWWG to request their participation in the VOWELS Advisory Committee. The VOWELS Program will be publishing a live dashboard providing Wind Availability Data and forecasting, and they will also be publishing research papers regarding Wind Resource development. Roger Clayton will be representing NYSRC at the VOWELS Advisory Committee and can bring back relevant information for EWWG, or bring questions from our group to the Advisory Committee.

3. **Metocean Information in Support of US OSW – Roger Clayton / John Dellatto**
   - John provided an overview of the VOWELS research publication which discusses the importance of ocean data across all phases of OSW project development: concept, development, construction, and operation.
   - The paper covers various measurement technologies:
     i. Buoy-based LiDAR
     ii. Microwave radiometry
     iii. Radar and atmospheric flux measurements
   - The group looks forward to further outputs from VOWELS research efforts.

4. **NERC EOP-012-2 Revisions (Link to Recording) – John Dellatto**
   - Revisions to NERC EOP-012-2 were discussed, focusing on generator owners rather than transmission operators.
   - Possible motivation for the revisions includes the response to cold weather-related failures in Texas.
   - Webinar notes presented by John Dellatto indicated challenges in reaching consensus on the ballot, which may require special standards authority intervention.
   - Key Requirement Changes
     i. Requirement 2 (R2):
        1. Clarifies demarcation dates for generator operation before/after October 1, 2027.
        2. References design criteria established before the directive (June 29, 2023).
     ii. Requirement 6 (R6):
        1. Covers corrective action plan requirements for cold weather reliability events.
        2. Enforces development and implementation of corrective action plans.
        3. Two-year review period for applicability within generator fleets.
        4. 100-day language was removed for alignment with the first directive.
     iii. Requirement 7 (R7):
        1. Continues corrective action plan discussions.
        2. Establishes a two-year timeline for general compliance and a four-year timeline for freeze protection implementation.
     iv. Requirement 8 (R8):
        1. Minor wording clean-up.
        2. Differentiates two reporting timelines for generator cold weather constraints:

3. Two weeks after commercial operation.
4. 45 days after determining applicability.

v. Requirement 9 (R9):
1. Extends review period from 2 years to 3 years.
2. Requires generator owners to validate cold weather constraints every 36 months.

- Cold Weather Constraints & Freeze Protection
  i. Discussion on defining generator cold weather constraints (GCWC).
  ii. No specific technical requirements were added—focus remains on industry-standard practices, methods, and technologies.
  iii. Specific references to: Wind turbines (structural limitations, frozen precipitation issues). Solar panels (icing and clearing challenges). Combustion turbines (inlet air concerns).
- John Stevenson will review further and provide updates. Cold weather concerns have been addressed by the NYISO but will continue monitoring.
- The group will track ballot progress and potential special action interventions.
- Updates expected throughout the first quarter of the year and beyond.

5. Whitepaper Proposal to Installed Capacity Subcommittee – Thomas Primrose

- Thomas Primrose requested the start of discussion for what requests and details should go into the whitepaper proposal scope of work to ICS.
- Gary Jordan suggested use of IRM base case, and running a sensitivity using different sets of 5 year weather history. Then averaging the LOLE for each 5 year period.
- Mark Younger agreed the idea sounded reasonable, however also wanted to emphasize that NYISO should also conduct background statistics on Lulls within DNV shapes, similar to analysis conducted by EWWG.
- Mark Younger also suggested that high renewable penetration assumed for the base case would likely provide most useful results and that this should be easier to develop by utilizing the existing high renewables buildout case from last year's IRM cycle.
- Team generally agreed a case with around 4000-6000 MW of intermittent resources would be useful for study of lull effects.
- Next Steps and Action Items
  i. Tom Primrose to draft a scope based on feedback.
  ii. Involve IRM manager, Dylan Zhang.