Meeting Minutes

New York State Reliability Council – Extreme Weather Working Group (EWWG)
Meeting # 8 – July 28, 2023
Zoom

1. DNV Hourly Data – Status Update

- DNV has provided their final version of the data, and the NYISO is performing an internal review of the data
- Data covers the period of 2000 – 2022, and provides shapes for all 62 counties in New York
    - 79 land – based wind sites (25 existing and 54 theoretical)
    - 77 solar sites (4 existing and 73 theoretical)
    - NYISO noted that only viably hostable technology was considered (for example, there could have been a determination that a particular county could not host land – based wind)
    - NYISO noted that there are more land – based wind and solar sites than there are counties because some counties are large enough to host multiple land – based wind sites and / or multiple solar sites
- NYISO indicated that this data will be utilized for the upcoming System & Resource Outlook study
- Gary Jordan raised a question regarding whether or not the datasets provided by DNV should be utilized in the IRM MARS model in order to replace renewables in areas outside of the NYISO that are currently modeled as "equivalent" thermal units. Ben O'Rourke noted that what is provided in the NPCC MARS database is what is utilized. Stakeholders agreed that there should be conversations at the NPCC level regarding the renewable modeling that is provided by participating RTOs / ISOs.
- There was a stakeholder question regarding DNV's sourcing for the offshore wind dataset. Ben Cohen noted that DNV utilizes a simulated model based on weather research
- There was a stakeholder question on whether or not the offshore wind and land – based wind datasets include consideration of turbine cut – out due to high wind speeds. NYISO confirmed that the offshore wind and land – based wind datasets due indeed account for turbine cut – out due to high wind speeds.
- Data should be available to NYISO stakeholders by the end of 2023

2. Draft Meeting Minutes for Meeting # 7 – 6/30/2023

- Minutes were approved with little to no changes
- Roger Clayton presented his action item regarding wind lull analysis for each year of the NYISO 2000 – 2021 Offshore Wind dataset

- There was a stakeholder question on whether or not there is a plan to analyze the dataset for the frequency of turbine cut – out events due to high wind speeds. There was a consensus among stakeholders that cut – out events due to high wind speeds are much shorter in length than lull events (hours – long vs. day(s) – long), and are therefore not an overly concerning resource adequacy issue. However, cut – out events due to high wind speeds are an important operational concern.

3. NYSRC Wind Impacts White Paper – EC Approval / Final Issuance

- Executive Committee gave final approval for the White Paper on 7/14/2023
- White Paper can be found here on the NYSRC website

4. Potential Reliability Rule – 152: System Conditions for Transmission System Planning Performance Requirements Covering Wind and / or Solar Generating Resource Lulls

- Roger Clayton informed stakeholders that since the last EWWG meeting, discussions occurred with the NYISO pertaining to the potential reliability rule, and it would appear that the NYISO already does some of the analysis that stakeholders had in mind
- Keith Burrell of the NYISO noted the following points for stakeholders:
  - The 2022 RNA Transmission Security Studies Modeling Assumptions Matrix has the following information:
    - Land – based wind dispatched at 5 %, 10 %, and 10 %, for Summer, Winter, and Light load cases respectively (statistical analysis supporting these dispatch levels can be found in the 5/23/2022 TPAS / ESPWG meeting materials)
    - Offshore wind dispatched at 10 %, 15 %, and 15 %, for Summer, Winter, and Light load cases respectively (statistical analysis supporting these dispatch levels can be found in the 5/23/2022 TPAS / ESPWG meeting materials)
    - BTM solar reductions in load forecast are included in the Gold Book (Table I – 9d) along with nameplate capacity (Table I – 9a). Utility – scale solar resources are dispatched at the same factor as the BTM solar resources for a given transmission security case (Summer dispatch percentages for 2022 – 2032 can be found in the 5/23/2022 TPAS / ESPWG meeting materials).
    - Large hydro and pumped storage are dispatchable up to the stated seasonal capabilities published in the Gold Book. Run – of – river hydro are fixed at their five – year average based on GADS data (roughly 50 % of the capability stated in the Gold Book).
  - Transmission Security models system conditions for a snapshot in time
  - N – 1 and N – 1 – 1 contingency analysis is already being performed on system conditions that reflect heavily reduced renewable outputs

- Renewable drought events are not currently covered as contingencies themselves, for example, multiple offshore wind farms simultaneously experiencing turbine cut – out due to high winds

5. Resource Adequacy / Transmission Security Modeling

- The Department of Energy 2022 Offshore Wind Market Report indicates that there will be a need for detailed modeling of offshore wind in the PJM and ISO – NE areas in the MARS model in upcoming IRM studies
- Gary Jordan noted that for the 2024 – 2025 IRM Study (the current study), there is a plan to replace the Vineyard Wind "equivalent" thermal unit with the appropriate offshore wind shape ; this will be discussed further at the 8/2/2023 ICS meeting

6. Winter Reliability and Extreme Weather Modeling

- Laura Popa brought attention to the NYISO Resource Adequacy Modeling Strategic Plan, which includes the following:
  - Winter Reliability and Modeling
    - 2022: Winter Modeling Initial Assessment
    - 2023: Start Winter Modeling Fuel Limitation Modeling
    - 2024: Start Tie and Seasonal Specific Emergency Assistance
    - 2025: Start Seasonal Specific Load and Topology
    - 2026: Start Winter Reliability & Outage Correlation

7. Other Business

- No other business

8. Action Items

- John Dellatto to update Offshore Wind Pipeline excel file after publication of the Department of Energy 2023 Offshore Wind Market Report