

## Meeting Minutes

### **New York State Reliability Council – Extreme Weather Working Group (EWWG) Meeting # 10 – October 27, 2023 Zoom**

#### **1. Draft Meeting Minutes for Meeting # 9 – 9/29/2023**

- Minutes were approved with little to no changes

#### **2. DNV Hourly Data – Status Update**

- Laura Popa indicated that DNV will make a presentation at the November 21, 2023 ESPWG Meeting
- Laura Popa also indicated that she will look into the timeline regarding the data being made available to stakeholders

#### **3. Potential Reliability Rule – 153: System Conditions for Transmission System Planning Performance Requirements Covering Wind and / or Solar Generating Resource Lulls**

- Roger Clayton provided the following updates:
  - Put together a draft for Potential Reliability Rule – 153 with Keith Burrell and the NYISO; planning to present the draft at the next Reliability Rules Subcommittee meeting, and then at the next Extreme Weather Working Group meeting
  - Clarified that the rule will cover the sudden loss of offshore wind generation at high output (i.e. a high wind speed cut – out condition or a sudden lull condition)
  - Envision that the rule will highlight the need to plan for many GWs of offshore wind generation falling off in a short period of time

#### **4. Virtual Offshore Wind Energy Laboratory and Simulator (VOWELS)**

- Objective: Improve our understanding of the dynamics of offshore wind generation and grid integration, giving special attention to weather – driven, high impact, low probability events in the NY / New England / Mid – Atlantic region
- “Laboratory” Topics: extreme wind and storms, large ramps, wind droughts, sea breezes and low level jets, predictability of high impact events, concurrent conditions for load and solar, effects of climate change
- “Simulation” Component: modeling output of planned projects in real – time via online dashboard; power output and weather data; current, past 24 hours, next 24 hours; updated hourly; data for individual projects and selectable project aggregates
- Next Steps: form advisory / user committee; develop detailed research and collaboration plan; launch dashboard and increase functionality, explore co – funding opportunities

- Stakeholder questions regarding transmission losses, as well as blockage and wake losses – Bruce Bailey indicated transmission losses of approximately 2% – 4%, as well as blockage and wake losses of approximately 10%
- Stakeholders expressed interest in the NYSRC participating on the advisory / user committee

## 5. Climate Change Vulnerability Studies

- Background:
  - Driven by legislation amending NYS Public Service Law Article IV, Section 66
  - All utilities considered climate data developed by Columbia University under contract with NYERDA
  - Utilities also considered additional data sources relevant to climate hazards in their service territories
- Central Hudson:
  - Various asset and operational vulnerabilities identified for the following conditions: extreme heat, extreme cold and ice (operational only), flooding, extreme precipitation, extreme wind
- Consolidated Edison:
  - Various asset and operational vulnerabilities identified for the following conditions: temperature and TV, flooding, extreme wind and ice
- National Grid:
  - Various asset and operational vulnerabilities identified for the following conditions: extreme heat, inland flooding, high winds, ice, heavy precipitation (operational only)
- NYSEG and RG&E:
  - Various asset and operational vulnerabilities identified for the following conditions: extreme heat, precipitation (operational only), flooding, wind and ice
- Orange and Rockland:
  - Various asset and operational vulnerabilities identified for the following conditions: temperature and TV (operational only), extreme flooding, extreme wind and ice

## **6. December 2022 Winter Storm Elliot Grid Operations: NERC Key Findings and Recommendations**

- Key Findings:
  - Freezing and Mechanical / Electrical Issues: Of the generating unit outages, de – rates, and failures to start that were attributed to having “Freezing Issues,” nearly 80% occurred at ambient temperatures that were above their documented minimum operating temperatures
  - Natural Gas Fuel Issues: 63 natural gas – fired generating unit outages / de – rates, totaling 10,038 MW, were due to firm gas transportation curtailments during the event
  - Electricity Demands Exceeded Grid Operators’ Forecasts: the majority of the BAs’ short – range forecasts of peak electricity demands underestimated load; for example, one BA’s underestimation was as much as 11.6%, and two BAs’ underestimations were as much as 5%
  
- Recommendations:
  - 11 items falling into the following categories: generator cold weather reliability, natural gas infrastructure cold weather reliability, gas – electric coordination cold weather reliability, and electric grid operations cold weather reliability

## **7. Other Business**

- Joanna Weissman noted that on October 25, 2023, the NYISO submitted a one – time informational report in compliance with FERC Order No. 897; the NYSRC EWWG was referenced several times throughout the report
- Roger Caiazza informed the group that the NYS PSC will convene a two – day technical conference on December 11, 2023 and December 12, 2023, regarding the Zero Emissions Target, and suggested that the NYSRC EWWG findings thus far be presented at the conference

## **8. Action Items**

- No action items