

EWVG Characterizing the Gap Suggestion for Executive Committee Draft

Analyses done by the NYSRC Extreme Weather Working Group have shown that extended periods of low wind and solar resource availability will be challenging for the future New York electric system. We suggest that a comment to the PSC Case No. 15-E-0302: docket requesting more extensive analysis of this resource gap would be appropriate.

The PSC Case No. 15-E-0302: Proceeding included a [Technical Conference](#) in December 2023 titled Zero Emissions by 2040 that included a session called Gap Characterization. The session showed that a new category of generating resources called Dispatchable Emissions-Free Resources (DEFER) is necessary to keep the lights on during periods of extended low wind and solar resource availability. To appropriately assess resource adequacy during these periods, the wind and solar resource gap must be characterized not only for New York but also for adjoining regional systems presuming that they also transition to a system with a similar reliance on wind and solar.

As part of the recently completed NYISO [2023-2042 System & Resource Outlook](#), DNV modeled “long-term hourly simulated weather and generation profiles for representative offshore wind (OSW), land-based wind (LBW), and utility- scale solar (UPV) generators”. The analysis covered the period 2000 to 2021 and was limited to the New York Control Area.

The EWVG recommends that the NYSRC EC submit a comment to the PSC requesting that this kind of analysis be extended to adjoining control areas and over a longer analysis period. The frequency, duration, and intensity of wind and solar availability gaps must be known to properly plan to provide the generation, storage, and DEFER resources necessary to maintain reliable service.