

#### Proposed NYSRC Reliability Rule for Inverter-Based Resources

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### Background

- At the February 8, 2023 TPAS/ESPWG meeting (here) the NYISO presented an overview of various industry activities related to Inverter-Based Resources (IBRs) and IEEE 2800
  - This presentation highlighted that significant efforts are underway at FERC, NERC and the NYSRC to promote reliability with increased IBR resources and that the NYISO would continue to engage with the NYSRC in the development or modification of reliability rules and requirements to promote reliable operation and interconnection of IBRs
  - The IEEE 2800 standard includes performance requirements for the reliable integration of IBRs to the transmission system including: voltage and frequency ride through, active power control, reactive power control, dynamic active power support under abnormal voltage and frequency conditions and other aspects
- At the time of the February 8, 2023 TPAS/ESPWG meeting the NYISO stated that requirements within the IEEE 2800 standard are currently voluntary
  - The NYISO encouraged all IBR generator owners and developers to promote reliability by designing and operating facilities in accordance with the requirements in the IEEE 2800 standard



# **NYSRC Proposed Reliability Rule 151**

- At the February and March NYSRC Reliability Rules Subcommittee (RRS) meetings (meeting materials found <u>here</u>), the RRS discussed the Proposed Reliability Rule (PRR) 151 (a link to the PRR is provided <u>here</u>)
  - PRR-151 is titled, "to establish minimum interconnection standards for large inverter based resources (IBR) generating facilities based on IEEE Standard 2800-2022"
- This PRR would potentially impact wind, solar, and energy storage facilities interconnected in New York
- Throughout the development of PRR 151 the NYISO expressed several concerns and intends to submit written comments to the NYSRC
- PRR-151 was approved for posting by the NYSRC Executive Committee (EC) on March 10, 2023
  - Comments are due to the NYSRC on or before April 27, 2023
  - Send comments to Herb Schrayshuen (herb@poweradvisorsllc.com)



# Additional Details on PRR 151

- The implementation plan proposed by the NYSRC calls for the new rules to be effective within six months following NYSRC EC approval, subject to comments received during the 45-day posting process
  - The NYSRC proposed the six-month implementation period for the NYISO, transmission owners, and large IBR generating facility owners to develop compliance procedures. The implementation plan does not specify when generator owners would be required to comply with the rule and associated procedures.
  - The PRR recognizes that if a longer implementation period is deemed appropriate per comments received, the NYSRC objective is to have implementation of the PRR 151 complete prior to the next Class Year which would begin after Class Year 2023 is completed
- The proposed rules in the PRR requires, among other rules, the development of processes and procedures for all sections of IEEE 2800 except Section 8 (Power Quality)



# NYISO Thoughts on PRR 151

- The primary concerns previously expressed by the NYISO during the PRR development process include:
  - While reliability is of paramount importance, the NYISO is concerned that the rule, as drafted, will significantly increase the amount of time required for resources to complete studies through the interconnection process
  - There are many criteria that are not expressly specified in the IEEE standard or the PRR
    - EPRI has identified that "adoption requires the TO to make approximately 120 decisions, e.g., specifications of settings other than default values"
  - The criteria may require revisions to various manuals, technical bulletins, tariff, as well as the interconnection agreement which will require time to review through the NYISO processes
  - Much of the criteria within IEEE 2800 are to be determined by either the "transmission system owner" or "transmission system operator". This may also require revisions to the Transmission Owner local planning criteria
  - While the PRR indicates it will apply to "interconnection studies," the implementation timeline and applicability sections do not differentiate between existing and proposed IBRs
  - In absence of IEEE 2800.2, the requirements of generator owners in order to demonstrate compliance with IEEE 2800 (*i.e.,* self-certify) is unclear
    - IEEE 2800.2 defines recommended practices for test and verification procedures that should be used to confirm plant-level conformance of inverter-based resources (IBRs) interconnecting with bulk power systems in compliance with IEEE Std 2800 (A description of 2800.2 is provided <u>here</u>)

### **Next Steps**

- The NYISO encourages review of PRR-151 by all stakeholders, especially impacted entities including:
  - Generator Owners and Developers of wind, solar, and storage facilities
  - Transmission Owners
- Provide comments to the NYSRC on or before April 27, 2023
  - Send comments to Herb Schrayshuen (herb@poweradvisorsllc.com)



# **Questions?**



#### **Our Mission & Vision**

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#### **Mission**

Ensure power system reliability and competitive markets for New York in a clean energy future



#### Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

