## Request to Develop or Modify Reliability Rules and Requirements (NYSRC Policy No. 1-11) Submit request to <a href="mailto:herb@poweradvisorsllc.com">herb@poweradvisorsllc.com</a> via the NYSRC site <a href="mailto:www.nysrc.org">www.nysrc.org</a>

Item	Information
PRR No. & Title of Reliability Rule or Requirement change	PRR 150: Establish minimum interconnection standards for Large Facilities Inverter Based Resources (IBR) based on IEEE 2800-2022
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2. Rule Change Requester Information	
Name	RRS
Organization	NYSRC
3. New rule or revision to existing rule?	New rule. B.5: Establishing NYCA Interconnection Standards for Large Generator Inverter Based Resources
4. Need for rule change, including advantages and disadvantages	The NYISO Interconnection Queue as of 1/5/23 has greater than 50 GWs of Large Facilities (>20 MW) Inverter Based Resources. The NYISO's 2023 Class Year Start Date is February 13, 2023 at the earliest and the 2023 Class Year will include those IBRs that have met the NYISO's inclusion rules.
	NYSRC does not presently have IBR interconnection standards in its Reliability Rules. PRR 150 is proposed for approval on an expedited basis in order to be applicable to IBRs in the 2023 Class Year based upon recent disturbances in Texas and California where IBRs failed to perform reliably, the cumulative magnitude of IBRs in NYCA per New York State's CLCPA mandates and NERC's recommendation to immediately adopt IEEE 2800-2022 IEEE 2800-2022, "IEEE Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems" sets minimum IBR interconnection standards. PRR 150 is based upon a critical subset of IEEE 2800-2022 requirements as amended for NYCA. PRR 150 will be further revised to encompass all pertinent IEEE 2800-2022 requirements.  The advantages to immediate adoption of PRR 150 are that it establishes IBR
	interconnection standards critical to NYCA reliability as NYCA transitions to renewable resources per CLCPA mandates. There are no disadvantages.
5. Related NYSRC rules	Reliability Rule B.4
6. Section A – Reliability Rule Elements	
1. Reliability Rule	NYISO Interconnection Studies for Large Facility Inverter Based Resources shall include minimum interconnection requirements based on IEEE 2800-2022.
<ol> <li>Associated NERC         Standards &amp; NPCC         Standards and Criteria     </li> </ol>	NPCC: Directory 1 NERC: All Standards under review for IBR application IEEE: IEEE 2800-2022
3. Applicability	NYISO Large Facility IBR Interconnection Studies

7. Section B Requirements	IEEE 2800-2022 requirements are included by reference for NYCA application to Large Facility IBRs (greater than 20 MW) with amendments as shown below.
	<ul> <li>R1. The NYISO shall prepare and maintain procedures for Large Facility IBR interconnection studies based on IEEE 2800-2022: Section 1 "Overview"; Section 2 "Normative references"; Section 3 "Definitions, acronyms and abbreviations"; Section 4 "General interconnection technical specifications and performance requirements" as amended for NYCA application in Attachment A.</li> <li>R2. All Large Facility IBR interconnection studies shall be based on IEEE 2800-2022: Section 5 "Reactive power-voltage control requirements within the continuous operation region"; Section 6 "Active power-frequency response requirements"; Section 7 "Response to TS abnormal conditions"; Section 9 "Protection", as amended for NYCA application in Attachment A.</li> <li>R3. The NYISO shall prepare and maintain procedures for all Large Facility IBR interconnection studies based on IEEE 2800-2022: Section 10 "Modeling data"; Section 11 "Measurement data for performance monitoring and validation"; Section 12 "Test and verification requirements" as amended for NYCA application in Attachment A.</li> <li>R4. The NYISO shall annually submit a technical report documenting the assumptions, models and methodology of Large Facility IBR interconnection studies in accordance with R1 through R3.</li> </ul>
8. Section C – Compliance Elements	
1. Measures	M1.  The NYISO shall maintain procedures for implementing the IBR interconnection requirements in R1 to through R3.
2. Levels of Non-Compliance	Level 1: Not applicable  Level 2: Not applicable  Level 3: Not applicable.
	Level 4: A Large Facility IBR report was not submitted in accordance with R4.
3. Compliance Monitoring Process (See Policy 4):	No change.
31 Compliance Monitoring Responsibility	No change.
3.2 Reporting Frequency	No change
3.3 Compliance Reporting Requirements	No change
9. Implementation Plan	This rule change will be implemented immediately following EC approval of PRR 150.
10. Comments	IEEE 2800-2022: Section 8 "Power quality" is excluded from this PRR as a requirement.

11. Date Rule Adopted	
12. PRR Revision Dates	Initial draft 1/8/2023

## Attachment A