PRR 155: Reliability Rule (Rev. 11-4-26)~~6-29-26~~)

Request to Develop or Modify Reliability Rules and Requirements (NYSRC Policy No. 1)
Submit request to herb@poweradvisorsllc.com via the NYSRC site www.nysrc.org.

Item	Information
1. PRR No. & Title of Reliability Rule or Requirement change	**PRR 155: Establish minimum interconnection standards for Large Inverter Based Resource (IBR) Generating Facilities based on IEEE Standard 2800-2022**
2. Rule Change Requester Information	
Name	RRS
Organization	NYSRC
3. New rule or revision to existing rule?	Revised rule. B.5: Establishing New York Control Area (NYCA) Interconnection Standards for Large IBR Generating Facilities
4. Need for rule change, including advantages and disadvantages	PRR 155 is a revision to RR B.5 (As-designed IBR interconnections) to include modeling, test and verification requirements for as-built IBR plants based on: • IEEE 2800-2022 "Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems" and • IEEE 2800.2 - 2026 "Recommended Practice for Test and Verification Procedures for Inverter-based Resources Interconnecting with Bulk Power Systems" The advantage to immediate adoption of PRR 155 is that it establishes minimum as-built IBR interconnection criteria and the processes needed to verify that these criteria are achieved. These changes are critical to NYCA reliability as NYCA transitions to higher penetration of inverter-based resources per CLCPA mandates. There are no disadvantages.
5. Related NYSRC rules	Reliability Rule B.4 - Transmission System Interconnection Special Studies Reliability Rule I - Modeling and Data, I.4 - Transmission Data
6. Section A – Reliability Rule Elements	
1. Reliability Rule	**NYISO's Interconnection Studies for Large IBR Generating Facilities (>20 MW) shall be based on IBR Plants compliant with the IEEE 2800-2022 Standard as amended for NYCA application, and their associated IBR models and data.**
2. Associated IEEE, NERC and NPCC Standards, Criteria, and Guidance Documents	NPCC: Directory 1 NERC: All Standards and guidance documents under review for IBR application including: • PRC-029-1 - Frequency and Voltage Ride-through Requirements for Inverter-based Resources (Effective 10/1/26). PRC-029-2 revision under ballot 5/18/26. • MOD-26-2 - Verification and Validation of Dynamic Models and Data (Effective 4/1/26). • MOD-32-2 - Data for Power System Modeling and Analysis (Effective 4/1/28) • FAC-002-5 - Project 2022-04 EMT Modeling. • Reliability Guideline: Commissioning Best Practices for BPS-Connected Inverter Based Resources (June 2026).

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	• Whitepaper IBR Equipment EMT Model Validation (June 2026) IEEE: Standards & Recommended Practice documents: • IEEE 2800-2022 "IEEE Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems". • IEEE 2800.2 - 2026 "Recommended Practice for Test and Verification Procedures for Inverter-based Resources Interconnecting with Bulk Power Systems".
3. Applicability	Interconnection Studies of Large IBR Generating Facilities

7. Section B - Requirements	R1. The NYISO shall prepare and maintain procedures for the NYISO's *Interconnection Studies* process requiring that *Large IBR Generating Facility Developers*: R1.1. Attest that their IBR plant will be designed to be in compliance with the mandatory requirements of IEEE 2800-2022, as amended by "NYSRC Procedure for Application of IEEE 2800-2022 Standard for Large IBR Generating Facilities for the New York Control Area". R1.2. Attest that their IBR plant models, data and test results accurately simulate the performance of their compliant IBR plant per R1.1: R1.2.1. Attestation of compliance of models and data for the IBR plant as submitted to the NYISO's Cluster Study Process. R1.2.2. Attestation of compliance of the final IBR plant design prior to commissioning, including: • Validation of IBR Unit & Power Plant Controller (PPC) models, • Plant model verification, and • Plant design evaluation based on simulation studies. R1.2.3. Attestation of compliance of as-built and tested IBR plant, including: • Installation evaluation, • Commissioning tests, and • Post-commissioning model validation. R2. Each Large IBR Facility Developer subject to the NYISO's *Interconnection Studies* process shall: R2.1. Attest that their IBR plant will be designed to be in compliance with the mandatory requirements of IEEE 2800-2022, as amended by "NYSRC Procedure for Application of IEEE 2800-2022 Standard for Large IBR Generating Facilities for the New York Control Area". R2.2. Attest that their IBR plant models, data and test results accurately simulate the performance of their compliant IBR plant per R2.1: R2.2.1. Attestation of compliance of models and data for the IBR plant as submitted to the NYISO's Cluster Study Process. R2.2.2. Attestation of compliance of the final IBR plant design prior to commissioning, including: • Validation of IBR Unit & Power Plant Controller (PPC) models, • Plant model verification, and

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	• Design evaluation. R2.2.3. Attestation of compliance of as-built and tested IBR plant, including: • Installation evaluation, • Commissioning tests, and • Post-commissioning model validation.
8. Section C – Compliance Elements	
1. Measures	M1. The NYISO self-certified and provided evidence that it had procedures in place for implementing the Large IBR Generating Facility Developer's interconnection requirements in accordance with R1. M2. The NYISO certified that each Large IBR Generating Facility Developer attested to compliance with its applicable requirements in ~~accordance with~~ R2~~.~~ and identified any Large IBR Generating Facility Developer that ~~did not~~ failed to provide a required attestation.
2. Levels of Non-Compliance	2.1 Measure 1: Level 1: Not applicable. Level 2: The NYISO failed to have procedures covering requirement R1.1. Level 3: The NYISO failed to have procedures for one or more requirements in R1.2. Level 4: Not applicable. 2.2 Measure 2: Level 1: Not applicable. Level 2: The NYISO failed to certify that Large IBR Generating Facility Developer(s) attested to meeting the requirements of R2. ~~certified that the required attestations whereas not submitted to the NYISO in accordance with requirement R2.1~~ Level 3: The NYISO failed to identify those Large IBR Generating Facility Developer(s) that did not provide the required attestations in accordance with the requirements of R2. ~~certified that the required attestation was not submitted to the NYISO in accordance with one or more requirements in R.2.2.~~ Level 4: Not applicable.

3. Compliance Monitoring Process (See Policy 4)	No change.
3.1 Compliance Monitoring Responsibility	No change.
3.2 Reporting Frequency	No change
3.3 Compliance Reporting Requirements	No change

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9. Implementation Plan	This revised rule to be applicable to all Large IBR Generating Facilities subject to NYISO's OATT Attachment HH - Standard Interconnection Procedures. The rule will be implemented on the latter of (a) January 1, 2027 or (b) the effective date of revisions to necessary NYISO procedures in accordance with NYISO's governance process following the approval by NYISO stakeholders.

10. Comments	1. The following definitions contained in the NYSRC Reliability Rules & Compliance Manual Glossary will be updated: • "*Interconnection Studies*" - The studies and procedures outlined in the NYISO's OATT Attachment HH and Transmission Expansion and Interconnection Manual. • *"Large Inverter Based Resource (IBR) Generating Facility"* – The IEEE Standard 2800-2022 definition of a grouping of one or more IBR unit(s) and possibly supplemental IBR device(s) operated by a common Facility level controller along with a collector system to achieve the performance requirements of this standard at a single reference point of applicability (RPA) and having an aggregate capacity of greater than 20 MWs. 2. In addition to the procedures outlined in Attachment HH of the OATT and the NYISO's Transmission Expansion and Interconnection Manual, the Standard Interconnection Agreement (SIA), Attachment HH, Section 40.25.15, Appendix 15, defines the terms and conditions among the NYISO, the Interconnection Customer, and the Connecting Transmission Owner. The SIA currently provides for the submission by the Interconnection Customer of specific information regarding the electrical characteristics of its facility in accordance with Applicable Reliability Standards, as defined in Attachment HH, and as detailed in the SIA (e.g., modeling and testing information through the engineering, construction and procurement, commissioning, and post-commissioning phases). 3. Revise RR I.4 to include EMT models/data. IBR models and data for IBR plant compliant with IEEE Standard 2800-2022 may be modified as the IBR plant progresses through the interconnection process. The procedures for obtaining the as-designed models and data, and their updating during the various stages of interconnection are addressed by NYSRC's existing Reliability Rule I - Modeling and Data, I.4 - Transmission Data 4. Revise NYSRC's Policy 1, Section 5 "Exceptions to the Reliability Rules" to recognize the restrictions on IBR exemptions in NERC's PRC-029-2 "Frequency and Voltage Ride-through Requirements for Inverter-Based Resources". 5. Exclusions from the requirements in IEEE 2800-2022 for this PRR are: • Clause 8: Power Quality

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	• Clause 11: Measurement Data for Performance Monitoring and Validation
11. Date Rule Adopted	
12. PRR Revision Dates	1/8/26, 4/16/26, 5/18/26, 6/13/26, 6/25/26, 6/29/26

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