

Request to Develop or Modify Reliability Rules and Requirements (NYSRC Policy No. 1-11)
Submit request to Herb Schrayshuen (herb@poweradvisorsllc.com) via the NYSRC site www.nysrc.org

Item	Information
1. PRR No. & Title of Reliability Rule or Requirement change	PRR 156: Modifications to Enhance Resource Adequacy.
2. Rule Change Requester Information	
Name	Yvonne Huang
Organization	NYISO
3. New rule or revision to existing rule?	Revision to existing rule: A.2: Establishing Load Serving Entity Installed Capacity Requirements.
4. Need for rule change, including advantages and disadvantages	There are four reasons to revise the Reliability Rules A.2: 1. A.2 is currently structured with annual installed capacity requirements for LSEs which are based on summer peak. With growing winter reliability risks, seasonal adjustment to the capacity requirements may be needed to better reflect reliability risks between the two seasons. In addition, NYISO is developing proposed ICAP Market enhancements to establish seasonal capacity requirements. Accommodating seasonal considerations impacts the general description of A.2, as well as A.2 R1, A.2 R2 and A.2 R2.1 2. The requirements under A.2 R3 should be updated for improved alignment with the NYISO's current rules and procedures. In addition, on-going monitoring of Resource Adequacy is already required under other Reliability Rules. Revisions are recommended to better acknowledge existing market processes and outcomes. 3. Clarification of A.2 R1.3 is needed to better describe the intended alignment between the Installed Reserve Margin (IRM) and the NYISO's Locational Minimum Installed Capacity Requirements (LCRs) as is reflected in current practices and procedures. 4. NYISO has also proposed new rules to update LCRs and downstream capacity market parameters in response to the entry of certain new capacity supply resources with significant impacts on transmission security for Localities. Clarification of A.2 R1.3 is also needed to capture such new requirements. In summary, revisions to Reliability Rules A.2 are warranted to ensure the rules continue to reinforce and improve the reliability of the evolving NYCA system.
5. Related NYSRC rules	A.2: Establishing Load Serving Entity Installed Capacity Requirements.
6. Section A – Reliability Rule Elements	
1. Reliability Rule	Establishment of Load Serving Entity installed capacity requirements, including locational capacity requirements, for each Capability Year.
2. Associated NERC & NPCC Standards and Criteria	None
3. Applicability	NYISO and LSEs

7. Section B – Requirements	A.2 (Introductory Description) Load Serving Entity installed capacity requirements, including Locational Capacity Requirements, for the applicable NYISO defined obligation procurement period each Capability Year shall be established. A.2 R1. The NYISO shall annually establish the appropriate Load Serving Entity (LSE) installed capacity (ICAP) requirements for the NYISO defined obligation procurement period, including Locational Capacity Requirements (LCRs) in accordance with NYSRC rules and NYISO tariffs. A.2 R1.3 The NYISO LCR analysis shall use the GE MARS software, and the study base case inputs such as load and capacity data, and models consistent with that utilized by the NYSRC for its determination of the IRM, as described in Section 3.2 and 3.5 of the NYSRC Policy 5, “Procedure of Establishing NYCA Installed Capacity Requirements:” as starting point inputs for the LCR analysis conducted pursuant to Section 5.11.4 of the NYISO Market Administration and Control Area Services Tariff. A.2 R2. LSEs shall procure sufficient <i>resource capacity</i> for the entire NYISO defined obligation procurement period so as to meet the applicable ICAP requirements and LCRs as established by the NYISO in accordance with R1 requirements and NYISO tariffs so as to meet the statewide IRM requirement determined from Reliability Rule A.1. A2.R2.1 Each LSEs shall certify and maintain its ICAP obligation for the next each NYISO defined obligation procurement period Capability Period, including any LCRs, in accordance with LSE ICAP requirements established by the NYISO tariffs and procedures. A.2 R3. The NYISO shall notify those LSEs that are determined to be review annually, and report to the NYSRC if any LSEs were found deficient in meeting their ICAP requirements for any of the applicable NYISO defined obligation procurement period during the past Capability Year, including LCRs, for the next Capability Year. This notification shall specify appropriate deficiency charges. The NYSRC shall be immediately notified of such capacity deficiencies, including any measures that may be have been conducted and/or planned to minimize <i>reliability</i> impacts.
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8. Section C – Compliance Elements	
1. Measures	M1 The NYISO conducted an annual analysis to establish LSE and Locational Capacity Requirements for the next <i>Capability Year</i> in accordance with R1.1, R1.2, and R1.3 requirements. The procedures used to calculate LCRs were documented in accordance with R1.4 and a report prepared in accordance with R1.5. M2 Each LSE demonstrated that it procured sufficient <i>capacity</i> from Installed Capacity Suppliers to meets its ICAP requirement, in accordance with R2.

	M3 The <i>NYISO</i> conducted an annual report on ICAP Spot Market Auction outcomes for the past <i>Capability Year</i>, including deficiencies and associated actions, in accordance with R3. immediately notified the NYSRC that an LSE failed to demonstrate that it meets its ICAP requirement for the next Capability Year, in addition to other requirements specified in R3.
2. Levels of Non-Compliance	For Measure 1 Level 1: Not applicable. Level 2: The <i>NYISO</i> report required by R1.5 was incomplete in that it did not meet all requirements specified in the Requirement; or procedures for calculating LCRs were not documented as specified in R1.4. Level 3: Analyses of <i>LSE</i> and <i>locational ICAP requirements</i> violated one or more requirements specified in R1.1 through R1.3. Level 4: The report required by R1.5 describing the analyses of <i>LSE</i> and <i>locational ICAP requirements</i> for the next <i>Capability Year</i> was not provided. <u>For Measure 2</u> Level 1: Not applicable. Level 2: Not applicable. Level 3: Not applicable. Level 4: One or more LSEs failed to comply with <i>NYISO</i> requirements to demonstrate that it procured sufficient <i>capacity</i> to meet its ICAP obligation, as required by R2. For Measure 3 Level 1: Not applicable. Level 2: Not applicable. Level 3: Not applicable. Level 4: The <i>NYISO</i> did not provide the annual report to the NYSRC notify the NYSRC when an LSE failed to demonstrate that it meets its ICAP requirement for the next Capability Period, as required by R3.
3. Compliance Monitoring Process (See Policy 4):	TBD
3.1 Compliance Monitoring Responsibility	• M1: RCMS • M2: <i>NYISO/RCMS</i> • M3: RCMS
3.2 Reporting Frequency	• M1: Annually • M2: Annually • M3: Annually When required
3.3 Compliance Reporting Requirements	• M1: In accordance with Annual Compliance Monitoring Program requirements • M2: <i>NYISO</i> Certification of <i>LSE</i> Compliance • M3: <i>NYISO</i> Certification of ICAP Spot Market Auction Outcomes As required
9. Comments	
10. Date Rule Adopted	
11. PRR Revision Dates	
12. Implementation Plan	TBD



Background Information for PRR 156

Yvonne Huang and Wes Yeomans

NYISO and RRS Chair

EC Meeting #319

November 14, 2025

PRR 156 Summary

- **Draft PRR 156 was discussed at the 11/7 RRS meeting and is presented at the EC for approval to post for comment**
- **PRR 156 is proposing changes to the Reliability Rules A.2 to reinforce and improve reliability of the evolving New York Control Area (NYCA) system.**
 - Changes are proposed to accommodate consideration of seasonal reliability risks, especially reliability risks in the winter season.
 - Changes are proposed to provide better alignment between resource adequacy assessments with the NYISO's current market rules and procedures.
 - Clarifications is proposed to better describe the alignment required by the NYSRC Policy 5 between the Installed Reserve Margin (IRM) and the NYISO's Locational Minimum Installed Capacity Requirements (LCR) studies
 - The proposed clarification on IRM/LCR alignment also captures the NYISO's proposed market rule changes in response to new market entry with significant impacts on transmission security for Localities.
- **Proposed language for the Reliability Rules A.2 has been reviewed by RRS. In addition, RRS has also reviewed the proposed change to Measure #3 included in the PRR 156 due to the proposed change in A.2 R3.**

Background – Winter Reliability Risks

- **Historically, the reliability risks of the NYCA system, both during grid operation and in the IRM study, were concentrated during the peak demand period within the summer season. Therefore, the installed capacity requirements based on summer peak conditions are sufficient to address reliability risk for the entire year.**
 - Winter demand has been substantially lower than demand during the summer season and the majority of the NYCA thermal fleet typically has higher capability during the winter season
- **Over the recent years, tightening conditions have been experienced during winter grid operations and reliability risks during winter are expected to grow in the future. Currently, winter Loss of Load Expectation (LOLE) is present in the 2026-2027 IRM model for the Preliminary Base Case**
 - The NYISO's 2025 Load & Capacity Data report (Gold Book) forecasts that the NYCA will become a winter peaking system by 2040
 - Starting with the IRM study for 2026-2027 Capability Year, winter fuel availability constraint modeling is included to reflect reduced capacity during winter peak periods due to constraints on available fuel for fossil-fired generation.
 - In addition, the Champlain Hudson Power Express (CHPE) project is expected to become a capacity resource during the 2026-2027 Capability Year, with an expectation of significantly lower capability during the winter season compared to the summer season
- **With the growing winter reliability risks, the installed capacity requirements will need to consider winter peak conditions.**
 - The NYISO is currently developing market design enhancements to establish capacity requirements for LSEs on a seasonal basis while respecting the annual IRM as approved by the NYSRC.¹

1. [August 15, 2025 NYSRC Executive Committee Presentation](#)

Background – Alignment with Markets

- **Since the implementation of ICAP Demand Curves in 2003, the NYISO tariff requires LSEs to meet the minimum capacity requirements and potentially purchase additional capacity beyond such minimum requirements through NYISO-administered monthly spot auctions**
 - Requiring LSEs to purchase capacity to meet the minimum requirements as well as excess capacity beyond such minimum requirements is done automatically by the auction engine
 - The NYISO's monthly spot auction process serves to satisfy the reliability requirement specified in Reliability Rule A.2 R2 and the NYISO annually certifies that the all LSEs participating in the NYISO capacity markets have signed the NYISO tariff
- **In addition, under the Reliability Rules A.3 R1 and R2, the NYISO performs Resource Adequacy assessments for both the next Capability Year and a 10-year forward looking period**
 - The NYISO also performs seasonal assessments to determine the amount of available capacity in meeting various seasonal load forecast levels
- **Therefore, the NYISO recommends amending Reliability Rule A.2 R3 to require annual verification of the NYISO monthly spot market auction outcomes in meeting LSE capacity purchases to meet the minimum capacity requirements**
 - If a shortage occurs, the NYISO tariff includes procedures for seeking to procure supplemental capacity supply using “deficiency charges” assessed to LSEs

Background – Clarification on IRM/LCR Alignment

- **During the closed session of the 9/12/2025 EC meeting, EC members discussed Reliability Rule A.2 R1.3 and the potential need for additional clarity regarding the NYISO LCR study process and inputs**
 - Unlike the IRM study, the NYISO's LCR study considers transmission security limits for Localities (Load Zones G-J, New York City, and Long Island) in establishing the final LCRs
 - The current language in Reliability Rule A.2 R1.3 can create confusion and/or differences of interpretation regarding the NYISO's consideration of transmission security as part of its LCR study process
- **Today, the NYISO's LCR study uses the final IRM study data base, the finalized IRM, and the study case LOLE as inputs. Additionally, transmission security limits are applied as constraints on the allowable LCR values. Such practice is in accordance with NYSRC requirements and the requirements of the NYISO's tariff**
 - The data base used for the NYISO's LCR study is developed from the load, capacity, topology, Emergency Operating Procedures (EOPs), external control area modeling, as well as the same GE MARS version and the starting point "preliminary" LCRs determined as part of the Tan45 process, as specified in Section 3.2 and 3.5 of the NYSRC Policy 5
 - As noted in the NYSRC Policy 5 Section 3.5.5, preliminary LCRs for Load Zone J and Load Zone K are established during the IRM calculation process, prior to the NYISO's LCR study
 - NYSRC Policy 5 Appendix C specifies the alignment procedure for the Final IRM Base Case in establishing the inputs to the NYISO's LCR study, with recognition that final LCRs are established by the NYISO
 - NYISO Market Administration and Control Area Services Tariff Section 5.11.4 specifies that the LCRs are to be established using the data base from the final IRM, respecting the 0.1 LOLE resource adequacy criterion as well as other considerations including NYISO-determined transmission security limits
 - Transmission security limits are implemented in the NYISO's LCR optimizer as the minimum allowable locational capacity requirement percentages, without modifying the underlying data base for load, capacity, topology, EOPs and external areas

Background – Clarification on IRM/LCR Alignment (cont)

- The NYISO's current practices align with the requirements of Reliability Rule A.2 R1.3, recognizing the NYISO's responsibility of establishing the final LCRs (as acknowledged in the language of Reliability Rule A.2 R1) includes consideration of factors beyond the IRM study assumptions
 - Recently, NYISO has proposed enhancements to its existing tariff to allow LCR and capacity market parameter updates during the Capability Year in response to certain new market entry (see [7/18/2025 EC Meeting Presentation](#) and Appendix for further details).
 - If approved, the proposed changes would become effective starting with the upcoming 2026-2027 Capability Year
- Revisions to Reliability Rule A.2 R1.3 are recommended to provide the additional clarity on the NYISO's LCR study process and inputs

Questions?

Our Mission and Vision



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

