New York State Reliability Council

2020 Reliability Rules Subcommittee Report

February 17, 2021

NYSRC 2020 Reliability Rules Subcommittee Report

Introduction

The Reliability Rules Subcommittee ("RRS") manages the review, development, and modification of the NYSRC Reliability Rules to maintain or enhance the reliability of the NYS Bulk Power System. Reliability is monitored in accordance with the NYSRC and NYISO/NYSRC Agreements, NYSRC Policy 1, *Procedure for Reviewing, Modifying, and Disseminating NYSRC Reliability Rules,* and other processes and procedures established by the NYSRC Executive Committee. RRS is an open subcommittee whose meetings are open to all interested parties who wish to attend. Meetings are publicly posted on the NYSRC website.

The responsibilities of RRS include:

1. Recommend to the NYSRC Executive Committee processes and procedures, including Policy 1 revisions, for reviewing, developing, and modifying the NYSRC Rules.

2. Consider requests by the Executive Committee for development of new Reliability Rules or modifications of existing Reliability Rules, and recommend to the Executive Committee whether such requests should be accepted or denied.

3. For those Reliability Rule change requests approved by the Executive Committee, recommend to the NYSRC Executive Committee Reliability Rule additions or modifications. The process of developing new reliability rules and modifying existing rules, when the change is intended to enhance reliability, should consider the economic and environmental implications of the proposed rule change.

4. When requested by the Executive Committee, review and comment on requests for exceptions to the Reliability Rules[1].

5. Recommend to the NYSRC Executive Committee revisions to the NYSRC Reliability Rules Manual when appropriate.

6. Conduct self-assessments of the NYSRC Rules to ensure consistency with NERC and NPCC standards and criteria.

7. Participate in NPCC, NERC, or other related open processes for developing and approving new reliability standards or modifications of existing standards. Review and comment on proposed standards, when appropriate. Address issues associated with the potential impact of proposed NPCC, NERC, or other standards on New York Control Area reliability.

8. Maintain a data base for the tracking of new and revised NERC and NPCC standards and criteria.

[1] Includes removal of and modification to existing Exceptions

9. Review Reliability Rule disputes and recommend potential solutions to the NYSRC Executive Committee.

10. Prepare and submit status reports requested by the NYSRC Executive Committee. Also prepare, on request, reports for the NYSRC Executive Committee to disseminate to FERC and the PSC.

11. Review system operations trending information collected by the Reliability Compliance Monitoring Subcommittee (RCMS) when requested by the Executive Committee or RCMS.

12. Develop interpretations of the Reliability Rules when requested by the Executive Committee.

2020 Highlights

NYSRC Reliability Rules and Compliance Manual

The initial NYSRC rules, adopted in 1999, were based on former New York Power Pool criteria. Since then, these rules have been revised numerous times to reflect the need for: new and modified NYSRC rules; NERC and NPCC standards; and criteria changes.

The NYSRC has always worked towards improving its Reliability Rules by introducing new Rules, revising existing Rules and retiring existing Rules when appropriate. Potential Reliability Rule (PRR) changes are considered by RRS to ensure that the NYSRC Reliability Rules and related requirements are consistent with, or more specific, or more stringent than the corresponding NERC and NPCC reliability standards and criteria.

2020 New & Revised NYSRC Reliability Rules

The following is a list of new or revised Reliability Rules considered in 2020:

1. PRR128 Definition of New York State Bulk Power System (NYS Bulk Power System)
   The existing legacy definition of the NYS Bulk Power System requires an update due to NPCC modifications to its Document A-10 "Classification of Bulk Power System Elements" which provides the methodology to identify the Bulk Power System (BPS) Elements, or parts thereof, of the interconnected NPCC Region. NPCC Criteria and Directories, which establish more stringent requirements than the NERC Standards, are applicable to the BPS. New York is part of the NPCC Region.
   Normal Process Review
   Posted on May 11, 2020
   Comments were due on June 26, 2020
   Approved by the NYSRC Executive Committee on July 17, 2020
   http://www.nysrc.org/PDF/Revisions/PRR 128_BPS Definition_6_25_2020_red_line.pdf

2. PRR 148 Mitigation of Major Emergencies
   Under current NYSRC reliability rules, the NYISO is required to declare a Major Emergency immediately if the post-contingency loading of an interface exceeds the

stability or voltage collapse limits by greater than 5%. Recent events have demonstrated that exceedances meeting this criterion can in some circumstances pose little immediate threat to reliability and can be easily resolved through application of normal NYISO procedures.
Normal Process Review
Posted on April 9, 2020
Comments were due on May 25, 2020
No comments were received
Approved by the NYSRC Executive Committee on June 12, 2020
http://www.nysrc.org/PDF/Revisions/RR 148 Rev 3-19-20.pdf

3. PRR 146 - B.4: Transmission System Interconnection Special Studies
NYISO Interconnection requirement studies shall include, as applicable, special studies to examine the impacts of dynamically active technologies.
Studies associated with the interconnection of dynamically active transmission devices have been included in the NYISO's interconnection process and periodic transmission planning/operating studies on an ad-hoc basis. Based on the proliferation of inverter-based resources, as well as applications of active-series/shunt compensation and HVDC connections to the NYCA system, it is proposed to include a requirement for special studies in the NYSRC Reliability Rules.
Normal Process Review
Posted on February 20, 2020
Comments were due April 6, 2020
Approved by the Executive Committee of the NYSRC on May 8, 2020
http://www.nysrc.org/PDF/Revisions/RR 146_4-30-20_rec.pdf

4. PRR 145 - Reliability Rule Revision to Modify A.3: Resource Adequacy Assessments
New rule replaces the current rule A.3, which now requires a 3-year resource adequacy assessment, with one that requires: (1)an annual "Next Capability Year" Resource Adequacy Assessment, (2) a biennial Long-Term Resource Adequacy Assessment, and (3) a long-term Resource Adequacy Assessment in order to inform the NYSRC of any significant updates.
Normal Process Review
Posted on January 14, 2020
Comments were due on February 28, 2020
No comments were received.
Approved by the Executive Committee of the NYSRC on March 13, 2020
http://www.nysrc.org/PDF/Revisions/RR 145 3-13-2020.pdf

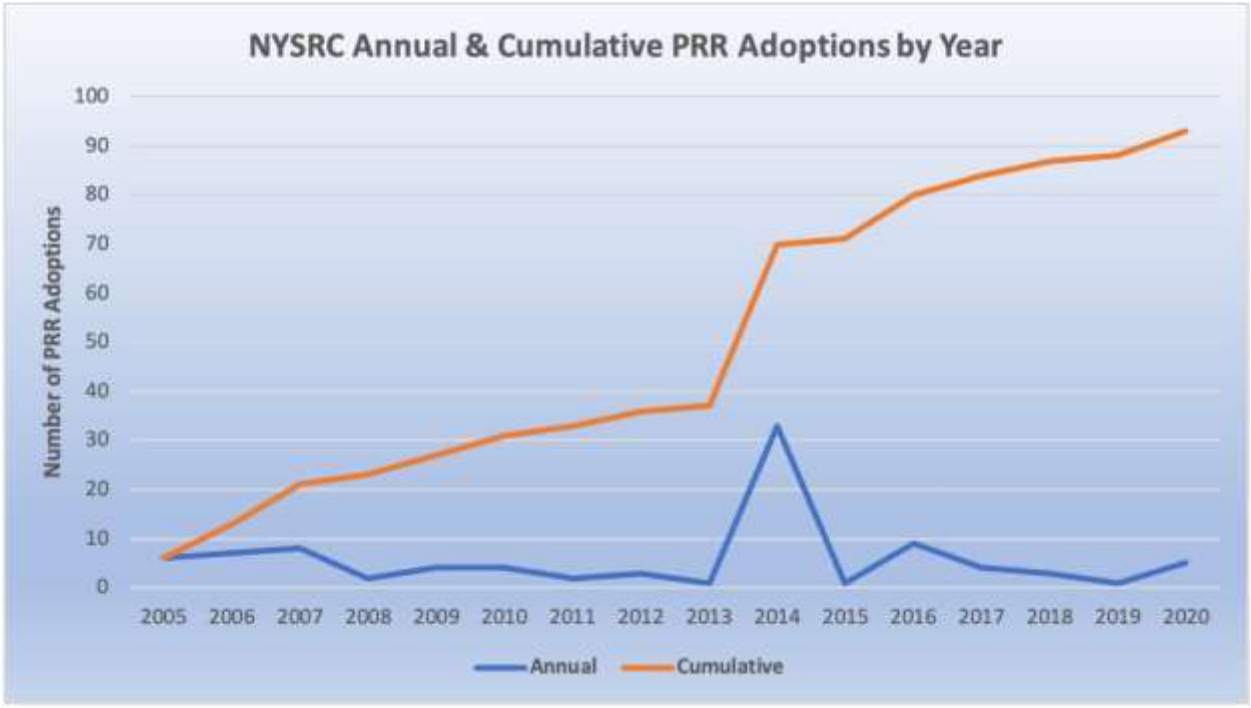
5. PRR 147 - Reliability Rule Revision: NYSRC Resource Adequacy Criterion
Rule clarifies that the NYSRC Resource Adequacy LOLE Criterion applies to all resource capacity probability assessments, including resource adequacy analysis (see related PRR145) and IRM requirement studies.
Normal Process Review
Posted on January 14, 2020
Comments were due on February 28, 2020

No comments were received
Approved by the Executive Committee of the NYSRC on March 13, 2020
http://www.nysrc.org/PDF/Revisions/RR 147 3-13-2020.pdf

RRS discussed several issues potentially affecting NYCA long-term reliability including:

- Impact of high renewable resources on NYCA's transmission requirements and installed reserve margin. (Note: New York State's "Climate Leadership & Community Protection Act" legislates: 70% renewable energy target by 2030; 9 GW off-shore wind by 2035; 6 GW solar by 2025; 3 GW energy storage by 2030)
- Data, modeling and study methodologies required to accurately assess system reliability with behind the meter and system connected distributed energy resources.
- Impact of extreme weather conditions on NYCA reliability.

The annual and cumulative adoption of Potential Reliability Rules by NYSRC through 2020 is shown below.



Conclusions

The Reliability Rules Subcommittee reached the following conclusions with regard to its 2020 activities:

1. NYISO Staff continued to provide timely and valued assistance to RRS during 2020.
2. RRS considers that the NYCA Bulk Power System will experience significant operating and transmission planning challenges in the next decade with the ongoing retirement of NYCA fossil and nuclear resources, and a corresponding increase in renewable resources.

3. RRS continues to monitor current and predicted reliability trends in the NYCA BPS with the goal of developing new, revised or retirement of individual Reliability Rules.
4. Five PRRs were adopted by the Executive Committee in 2020. The average PRR adoption rate since NYSRC inception is 5.8 PRRs per year and the cumulative total of adopted PRRs is 93.
5. RRS provides an active technical forum for discussion of NYS reliability matters. All parties including Transmission Owners, Developers, the public and NYISO staff have a platform to develop new or revised Reliability Rules, and continue to do so in a collegial and cooperative manner.