

**NEW YORK STATE  
RELIABILITY  
COUNCIL**

*2018 Reliability  
Compliance Program  
Highlights*

*Prepared by the  
Reliability Compliance  
Monitoring Subcommittee*

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# NYSRC 2018 Reliability Compliance Program Highlights

## Introduction

This report presents the highlights of the 2018 New York State Reliability Council (NYSRC) Reliability Compliance Program, the major process used by the NYSRC to monitor the New York Independent System Operator (NYISO) compliance with the Reliability Rules and related Requirements.

The NYSRC Reliability Compliance Program is designed to measure and ensure compliance with NYSRC Reliability Rules in order to provide for a reliable bulk electric supply and delivery system in New York State. The NYSRC Reliability Compliance Monitoring Subcommittee (RCMS) manages the compliance program, which includes conducting reviews to ensure that the NYISO is in compliance with all NYSRC Reliability Rules, including those identified in the Rules as requiring actions by market participants. The NYISO has the responsibility of ensuring market participant compliance through its procedures and Tariffs`. The objective of the compliance program is to encourage compliance with the NYSRC Reliability Rules necessary to preserve the reliability of the New York Control Area.

The NYISO and market participants are responsible for complying with the reliability requirements related to the Reliability Rules. Full compliance with a reliability requirement, as defined by an associated measure, is demonstrated by evidence provided by the NYISO or a market participant. The Reliability Rules also include levels of non-compliance and a description of the compliance process associated with each measure. These compliance elements are described in detail in the Introduction to the RR&C Manual.

Compliance with the NYSRC Reliability Rules is reviewed and evaluated in accordance with NYSRC Policy 4-8, *Procedure for Monitoring Compliance with the NYSRC Reliability Rules*, at: <http://www.nysrc.org/policies.asp>

In 2017 a three-year NYSRC compliance review plan was adopted by RCMS. The NYSRC 2018 Reliability Review Program described in this report represents the first year of this three-year plan.

## 2018 NYSRC Reliability Compliance Program

At the beginning of 2018 the NYSRC maintained a total of 85 reliability requirements related to 26 Reliability Rules. The 2018 Compliance Program included 33 assessments which reviewed compliance with 44 reliability requirements or 52% of NYSRC’s reliability requirements.

As shown in Table 1 below, the 2018 Reliability Compliance Program included compliance reviews of 29 reliability requirements having NYISO reporting responsibility and 15 reliability requirements having market participant reporting responsibility. Table 1 also shows that the NYISO and market participants were in full compliance with all reliability requirements for which compliance was reviewed in the 2018 Reliability Compliance Program.

**Table 1**  
**2018 NYSRC Compliance Program Summary**

	# of Compliance Assessments	Reliability Requirements Found in Full Compliance	Reliability Requirements Found in Non-Compliance
NYISO	18	29	0
Market Participants	15	15	0
<b>Totals</b>	<b>33</b>	<b>44</b>	<b>0</b>

Appendix A is a summary of the 2018 Reliability Compliance Program that depicts the Requirements that were assessed, milestone dates, and compliance findings. Appendix B depicts compliance documentation requirements.

### New York Control Area (NYCA) Transmission and Resource Adequacy Assessments

NYSRC Reliability Rules B.2 and A.3 require that the NYISO provide NYCA transmission and resource adequacy assessments, respectively, to demonstrate that the NYISO is in compliance with these Reliability Rules.

The timing of the NYISO’s transmission review submissions to the NYSRC are coordinated with that of similar transmission review submissions required by NPCC. In addition to NPCC reporting requirements, the NYSRC requires the NYISO to provide supplemental information as described in the “NYSRC Procedure for NYCA Transmission Reviews.”

A 2017 NYCA Interim Area Transmission Review was submitted to RCMS in November 2017, several months earlier than normal; therefore, the 2018 Compliance Program did not include a transmission review.

To demonstrate compliance with NYSRC resource adequacy assessment requirements, the NYISO prepared the report, *Annual Assessment of Resource Adequacy for the Years 2018-2020*. The assessment concluded that for existing and planned NYCA resources and a baseline forecast of peak load, an NYCA IRM requirements would be met throughout the assessment period, even under an extreme high load case.

RCMS found the above NYISO resource adequacy assessment in full compliance with NYSRC Reliability Rules.

#### Special Compliance Review

Prior to 2018 the NYISO initiated stakeholder discussion on evaluating alternate methodologies for setting Locational Capacity Requirements (LCRs). The Installed Capacity Subcommittee monitored this NYISO effort to develop an alternate LCR calculation methodology. In addition, the Executive Committee requested that a special compliance review to be conducted by RCMS to assure that the NYISO's new LCR calculation methodology meets NYSRC Reliability Rules. Accordingly, in 2018 RCMS requested that the NYISO certify that the proposed LCR calculation methodology is compliant with NYSRC Reliability Rule A.2 "Establishing Load Serving Entity Installed Capacity Requirements," Requirements R1 and R1.1 through R1.4. In response, the NYISO transmitted a letter to the NYSRC that affirmed that the new LCR calculation methodology will utilize and respect the criteria set forth in Rule A.2 R1.1- R.1.4. On November 29, 2018, based on the documentation provided in the letter, RCMS confirmed that the NYISO's Alternate LCR methodology is in full compliance with the NYSRC Requirements stated above.

#### NYISO Compliance Documentation Submissions

The success of the NYSRC Compliance Program depends on timely and complete submissions of compliance documentation prepared by the NYISO. With one minor exception, in 2018 all required compliance certifications and related compliance documents were submitted to RCMS by the NYISO in accordance with compliance documentation due dates, and all submissions were found to be complete.

## **NERC and NPCC 2018 Reliability Compliance Programs**

In addition to complying with the NYSRC Rules, the NYISO must also comply with all applicable NERC standards and NPCC criteria. Compliance with NERC standards is mandatory. RCMS has oversight responsibility concerning the NYISO's compliance with these standards and criteria. NPCC has direct responsibility and authority to implement a Compliance Monitoring and Enforcement Program (CMEP) for NERC and regional standards, as well a Compliance Criteria Enforcement Program (CCEP) for NPCC-specific reliability criteria. During 2018, as a part of the CCEP, NPCC reviewed and found the NYISO in full compliance with five NPCC directories. In addition, in December, NPCC performed an on-site comprehensive Audit of the NYISO's compliance with 42 Requirements contained in four NERC Critical Infrastructure Protection Standards.

### **Conclusions**

The following conclusions were reached by RCMS with regard to the NYSRC 2018 Reliability Compliance Program:

1. The NYISO staff continued to provide valued assistance during the NYSRC reliability compliance review process.
2. The NYISO and market participants were in full compliance with all 44 NYSRC reliability requirements that were assessed by RCMS in the 2018 NYSRC Reliability Compliance Program. In addition, NPCC found the NYISO in full compliance with all NERC reliability requirements and NPCC directories that were assessed during 2018.
3. All required NYISO compliance documentation associated with the 2018 Reliability Compliance Program was submitted to RCMS during a reasonable time period and found to be complete.

**APPENDIX A  
NEW YORK STATE RELIABILITY COUNCIL  
2018 RELIABILITY COMPLIANCE PROGRAM**

REQUIREMENT(S)	REQUIREMENT DESCRIPTION	MEASURE	COMPLIANCE DOCUMENTATION DUE 1	DATE RECEIVED	DATE OF RCMS REVIEW	NYISO COMPLIANCE <i>Level</i> 2
<b>Resource Adequacy</b>						
A.1:R1, R2	2018 IRM Requirements	M1	2/22/18	2/22/18	3/1/18	FC
A.2:R1 to R3	2018 Locational Capacity Requirements	M1	3/29/18	3/29/18	4/5/18	FC
A.2:R4	LSE ICAP obligations	M2*	11/22/18	11/21/18	11/29/18	FC
A.3:R1	2018-20 NYCA resource adequacy assessment	M1	6/21/18	6/21/18	6/28/18	FC
<b>Transmission Planning</b>						
B.2: R1	2018 NYCA Transmission Review 3	M1				
B.3: R1 to R3	List of NYS BPS Facilities	M1	4/26/18	4/26/18	5/3/18	FC
<b>Transmission Operation</b>						
C.5: R1, R3	NYISO 2018 fault current assessment	M1	6/21/18	6/21/18	6/28/18	FC
C.5: R2	Equipment Owner fault current assessment actions	M2*	6/21/18	6/21/18	6/28/18	FC
C.8: R1	Real-time operations of the NYS BPS	M1	Monthly	12/5/18	1/3/19	FC 4
<b>Emergency Operations</b>						
D.1: R10	Annual statewide voltage reduction tests	M3	7/26/18	7/26/18	8/2/18	FC
<b>System Restoration</b>						
F.1: R1	NYISO system restoration procedures and actions (PRR 133 Implementation Plan)	M1	12/28/17	12/28/17	1/4/18	FC
F.1: R2	TO system restoration plans	M2*	11/22/18	11/21/18	11/29/18	FC
F.1: R3	Black Start Provider requirements	M3*	11/22/18	11/21/18	11/29/18	FC

<b>Local Area Operation</b>						
<b>G.1:</b> R1, R2, R4, and R5	NYISO requirements for Con Ed operating procedures	M1	8/30/18	8/30/18	9/6/18	FC
<b>G.1:</b> R3 and R6	NYISO requirements for Con Ed operating reserves	M2	8/30/18	8/30/18	9/6/18	FC
<b>G.1:</b> R7	Con Ed operating procedures and reserves	M3*	8/30/18	8/30/18	9/6/16 6	FC
<b>G.2:</b> R1	NYISO requirements for Con Ed loss of gas facility proc.	M1	5/24/18	5/24/18	5/31/18	FC
<b>G.2:</b> R2	Con Ed loss of gas supply procedures and actions	M2*	5/24/18	5/24/18	5/31/18	FC
<b>G.2:</b> R3, R4	NYISO requirements for GO duel fuel capability testing of MOB combined cycle units (PRR 131c)	M3	1/25/18	1/25/18	2/1/18	FC
<b>G.2:</b> R5	GO procedures for testing duel fuel capability of MOB combined cycle units	M4*	9/27/18	9/27/18	10/4/18	FC
<b>G.2:</b> R6	GO duel fuel capability testing of combined cycle units	M5*	9/27/18	9/27/18	10/4/18	FC
<b>G.3:</b> R1	NYISO requirements for LIPA loss of gas supply procedure	M1	5/24/18	5/24/18	5/31/18	FC
<b>G.3:</b> R2	LIPA loss of gas supply procedures and actions	M2*	5/24/18	5/24/18	5/31/18	FC
<b>G.4:</b> R1	NYISO req. for identification of Eligible Black Start units	M1	10/25/18	10/25/18	11/1/18	FC
<b>G.4:</b> R2	Con Ed identification of Eligible Black Start units	M2*	10/25/18	10/25/18	11/1/18	FC
<b>Modeling and Data</b>						
<b>I.1:</b> R3	GO generation net dependable capacity tests	M2*	3/29/18	3/29/18	4/5/18	FC
<b>I.1:</b> R4	GO generation reactive power capacity tests	M3*	3/29/18	3/29/18	4/5/18	FC
<b>I.2:</b> R2	GO generating unit outage data	M2*	3/29/18	4/26/18 5	5/3/18	FC

	reporting					
<b>I.2: R3</b>	Generating unit outage statistics	M3	7/26/18	7/26/18	8/2/18	FC
<b>I.2: R4</b>	SCR performance report	M4	7/26/18	7/26/18	8/2/18	FC
<b>I.2: R5</b>	RIP SCR performance data reporting	M5*	7/26/18	7/26/18	8/2/18	FC
<b>I.3: R2</b>	Annual actual and forecast load data	M2	7/26/18	7/26/18	8/2/18	FC
<b>I.4: R3</b>	MP transmission data reporting	M3*	9/27/18	9/27/18	10/4/18	FC

\*Applicable to Market Participants; NYISO compliance certification required.

Footnotes:

1. Compliance documentation due dates are generally scheduled seven days prior to RCMS meetings. Compliance documentation requirements are shown in Appendix 1.
2. NYISO Compliance Levels
  - FC – Full Compliance
  - NC1 – Non-Compliance Level 1
  - NC2 – Non-Compliance Level 2
  - NC3 – Non-Compliance Level 3
  - NC4 – Non-Compliance Level 4
3. The 2018 NYCA Transmission Review will be completed in 2019 and included in the NYSRC 2019 Reliability Compliance Program.
4. This Full Compliance finding applies to the December 2018 operations report. All previous 2018 operating reports were found in full compliance.
5. The NYISO requested a delay for submission of compliance documentation because it was unprepared for its submission on 3/29/18. In accordance with Policy 4, RCMS granted a 30-day delay to submit required compliance documentation without declaring a compliance violation. The required documentation was received from the NYISO during this grace period.
6. After reviewing the NYISO compliance certification, RCMS requested the NYISO to submit the six Con Edison procedures referenced in the certification statement for review at the October 4 RCMS meeting. These documents, which are designated CEII, were reviewed by RCMS members at the October 4 meeting.



## OTHER TYPES OF COMPLIANCE REVIEWS CONDUCTED IN 2018

Other than the above 2018 Reliability Compliance Program, two other types of compliance reviews were conducted in 2018 by RCMS, a special “spot checking” review and two “as required” reviews, as presented below:

Spot Checking Review: The Executive Committee requested that a special review to be conducted to assure that the NYISO’s Alternate Locational Capacity Requirement (LCR) calculation methodology meets NYSRC Reliability Rules. Accordingly, RCMS requested that the NYISO certify that the proposed LCR calculation methodology is compliant with NYSRC Reliability Rule A.2 – “Establishing Load Serving Entity Installed Capacity Requirements,” Requirements R1 and R1.1 through R1.4. In response, the NYISO transmitted a letter to the NYSRC that affirmed that the new LCR calculation methodology will utilize and respect the criteria set forth in Rule A.2 R1.1- R1.4. On November 29, 2018, based on the documentation provided in the letter, RCMS confirmed that the NYISO’s Alternate LCR methodology is in full compliance with the NYSRC Requirements stated above.

### 2018 “As Required” NYISO Compliance Reports

Requirement	Reported Event Summary	Date NYISO Event Report was Received	RCMS Review Date	RCMS Comments	NYISO Compl. Level
<b>H.1:R4</b> NYISO shall submit a report summarizing loss of critical voice and/or data systems.	On 2/27/18, beginning at 01:17:55, the NYISO experienced a momentary interruption of its ICCP data links. ICCP on the primary server encountered a communications problem with the NYISO’s telecom provider and immediately failed over as designed to a redundant server. Most ICCP links were restored within three minutes. Some ICCP links, including four New York Transmission Operators, sustained an extended outage and was fully restored at 02:05:13.	3/27/18	4/5/18	None	FC
<b>D.1:R9</b> The NYISO shall report to the NYSRC on every instance of a Major Emergency.	On three recent occasions, on October 8, 2017, March 8, 2018, and March 14, 2018, Major Emergencies were declared by the NYISO when the power flows on the Central East (C-E) interface exceeded the 105% voltage transfer limit. A final report was provided by the NYISO for these incidents in accordance with this Requirement and an RRS request.	5/2/18	5/3/18	An ISO-NE events analysis was requested by RRS.	FC

## APPENDIX B: 2018 RELIABILITY COMPLIANCE PROGRAM – COMPLIANCE DOCUMENTATION REQUIREMENTS

Requirements	Type of Reporting**	Compliance Period	Compliance Documentation Requirements
<b>A.1:</b> R1, R2	Complete documentation according to M1.		The NYSRC Installed Capacity Subcommittee shall certify that it has conducted a study to calculate the NYCA IRM requirement for the 2018-19 Capability Year in compliance with Reliability Rule A.1: R1 & R2, and that the study followed procedures in accordance with NYSRC Policy 5. An IRM report covering this study shall be submitted to RCMS. The report shall include a description of IRM study assumptions, models, procedures, and results – as required by R2.
<b>A.2:</b> R1 to R3	Complete documentation according to M1.		A NYISO Locational Capacity Requirement (LCR) Report, covering the 2018-19 Capability Year, shall be provided. The NYISO shall also provide the allowable amount of LSE ICAP requirements that may be located externally to the NYCA, and how this was calculated. An appropriate NYISO staff person shall be available at the RCMS meeting to discuss the compliance submission, including the status of future LCR methodology changes.
<b>A.2:</b> R4 *	Certification according to M2.	Nov 2017-Oct 2018	
<b>A.3:</b> R1	Complete documentation according to M1.		A NYCA Resource Adequacy report covering the 2018-20 period shall be provided. One month before the assessment is presented for compliance, the RCMS and NYISO staff shall agree on the scenarios to be included in the analysis. An appropriate NYISO staff person should be available at the RCMS meeting to discuss this report and answer questions.
<b>B.1:</b> R1 to R4	Self-Certification	Jan 2017-Dec 2017	
<b>B.2:</b> R1	Complete documentation according to M1.		A NYCA 2018 Transmission Review, in accordance with the <i>NYSRC Procedure for NYCA Transmission Reviews</i> , shall be provided. This transmission assessment shall include the status of upgrades that are necessary avoid NYSRC reliability rule violations that were identified in previous transmission reviews and Corrective Action Plans as required. An appropriate NYISO staff person should be available at the RCMS meeting to discuss this report and answer questions.
<b>B.3:</b> R1 to R3	Complete documentation according to M1.		Reference the NYISO procedure for developing a list of NYS Bulk Power System facilities and submit the list to the NYSRC in accordance with any confidentiality restrictions. A current list of NYS Bulk Power System facilities shall be submitted to RCMS, recognizing confidentiality protection requirements.
<b>C.5:</b> R1, R3	Complete documentation according to M1		A report covering an evaluation of the fault duty at each BPS station for the 2018 Capability Year shall be provided. If the report shows fault duty levels exceed equipment ratings, provide mitigation plans jointly approved by the NYISO and equipment owners.
<b>C.5:</b> R2 *	Certification according to M3		This certification applies to Equipment Owner evaluation of the NYISO 2018 Capability Year fault duty evaluation required by C.5 (R1).
<b>C.8:</b> R1	Complete documentation according to M1	Monthly	Monthly operations reports that provide data on the performance of the NYCA system for that month shall be provided. Data to be included in this report shall be in accordance with R1.1 to R1.8 requirements.

Requirements	Type of Reporting**	Compliance Period	Compliance Documentation Requirements
D.1: R10	Complete documentation according to M3		A report on the results of statewide voltage reduction tests for the 2018 summer period shall be provided.
F.1: R1	Self-Certification according to M1		This self-certification shall be accompanied by a statement describing the NYISO process for reviewing the adequacy of the black start resources as identified by the TOs, for assuring the NYISO that the local operating systems would be restored in a safe and orderly manner and as promptly as reasonable possible following a major or total blackout, as defined by R1. In addition, in accordance with the PRR 133 Implementation Plan, the NYISO shall submit evidence that it has modified its procedures to comply with R1.5 rule changes, and has notified Black Start Providers to revise their procedures as necessary for meeting new R2 and R3 requirements.
F.1: R2 *	Certification according to M2	2017 Capability Year	The NYISO shall certify that each TO has a SRP in accordance with R2, and each TO has confirmed that the black start resources that each TO has identified as necessary for implementing its SRP will assure that the TO system will be restored in a safe and orderly manner, and as promptly as reasonably possible following a major or total blackout.
F.1: R3 *	Certification according to M3	2017 Capability Year	The NYISO certified that (1) each Black Start Provider has revised its procedures as necessary for meeting new R2 and R3 requirements in PRR 133, (2) it received the annual letter from each <i>Black Start Provider</i> confirming that it maintained a list of critical components and tests these components accordingly, in accordance with R3.3, (3) it received sufficient documentation from each <i>Black Start Provider</i> showing that the <i>Black Start Provider</i> developed required test procedures and accordingly successfully tested its black start facilities for each <i>Capability Year</i> in accordance with R3.1, and (4) each <i>Black Start Provider</i> met NYISO training requirements in accordance with R3.4.
G.1: R1,R2, R4, and R5	Self-Certification according to M1		The NYISO shall provide references to documentation requiring Con Ed to provide operating procedures in accordance with R5.
G.1: R3, R6	Self-Certification according to M2		Provide references to NYISO procedures for ensuring adequate 10-minute reserves in NYC in accordance with R6.
G.1: R7 *	Certification according to M3	2017 Capability Year	
G.2: R1*	Certification according to M1		The NYISO shall certify that it has revised its procedures, as necessary, in accordance with PRR 139 rule revisions. The NYISO shall also submit dates and descriptions of R.1.2 required actions during the 2017 Calendar Year – when implemented by Con Ed – to the NYSRC.
G.2: R2 *	Self-Certification according to M2	2017 Calendar Year	The NYISO shall certify that Con Ed has in place procedures for operating its system to comply with G.2 and NYISO procedures in accordance with R.1.1 and R2 and that in 2017 Con Ed notified the NYISO when actions were taken in accordance with R.1.2 and R2, in accordance with PRR 139.
G.2: R3, R4	Self-Certification according to M3		The NYISO shall provide evidence of NYISO procedures requiring testing of MOB dual fuel units and a list of such units, in accordance with R3. This list shall be provided to RCMS in accordance with NYISO

Requirements	Type of Reporting**	Compliance Period	Compliance Documentation Requirements
			confidentiality requirements. See PRR 131c Implementation Plan.
<b>G.2: R5</b>	Certification according to M4		The NYISO certified that each applicable owner of MOB dual fuel units prepared test procedures in accordance with R5 requirements.
<b>G.2: R6</b>	Certification according to M5		The NYISO certified that each applicable owner of MOB dual fuel units tested its dual fuel capability in accordance with R6 requirements.
<b>G.3: R1</b>	Self-Certification according to M1		The NYISO shall certify that it has revised its procedures, as necessary, in accordance with PRR 138 rule revisions. The NYISO shall also submit dates and descriptions of R.1.2 required actions during the 2017 Calendar Year– when implemented by LIPA – to the NYSRC.
<b>G.3: R2 *</b>	Certification according to M2	2017 Calendar Year	The NYISO shall certify that LIPA has in place procedures for operating its system to comply with G.3 and NYISO procedures in accordance with R.1.1 and R2 and that in 2017 LIPA notified the <i>NYISO</i> when actions were taken in accordance with R.1.2 and R2.
<b>G.4: R1</b>	Self-Certification according to M1		The NYISO shall reference applicable procedures.
<b>G.4: R2 *</b>	Certification according to M2	2017 Capability Year	Con Edison shall conduct a study for identifying eligible black start resources, or shall certify that a study was not required because there were no changes to relevant system conditions that would have affected the results of the previous study, in accordance with R2.
<b>I.1: R3 *</b>	Certification according to M2	Winter 2017-18, Summer 2018	
<b>I.1: R4 *</b>	Certification according to M3	Summer 2018	
<b>I.2: R2 *</b>	Certification according to M2	Jan-Dec 2017	
<b>I.2: R3</b>	Self-Certification according to M3		In addition, historical generating outage data shall be prepared and submitted to ICS for use in the 2019-20 IRM Study.
<b>I.2: R4</b>	Self-Certification according to M4		
<b>I.2: R5 *</b>	Certification according to M5	2017 Capability Year	
<b>I.3: R2</b>	Self-Certification according to M1		In addition, appropriate load forecast data shall be submitted to ICS for use in the 2019-20 IRM Study.
<b>I.4: R3 *</b>	Certification according to M3	January through June 2018	

\*This is a Market Participant requirement.

\*\* Types of compliance reporting are described in NYSRC Policy 4, Section 4.