

**NEW YORK STATE
RELIABILITY
COUNCIL**

*2016 Reliability
Compliance Program
Highlights*

*Prepared by the
Reliability Compliance
Monitoring Subcommittee*

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NYSRC 2016 Reliability Compliance Program Highlights

Introduction

This report presents the highlights of the 2016 NYSRC Reliability Compliance Program, the major process used by the NYSRC to monitor NYISO compliance with the Reliability Rules and related Requirements.

The New York State Reliability Council (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 Market Services Tariff. 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 4-7, *Procedure for Monitoring Compliance with the NYSRC Reliability Rules*, at: <http://www.nysrc.org/policies.asp>. In late 2015 a three-year NYSRC compliance review plan was developed and adopted by RCMS. The NYSRC 2016 Reliability Review Program described in this report represents the first year of this three-year plan.

2016 NYSRC Reliability Compliance Program

In 2016 the NYSRC maintained a total of 103 reliability requirements related to 29 Reliability Rules. The 2016 Compliance Program constituted 33 assessments which reviewed compliance with 58 requirements or 56% of NYSRC's requirements.

As shown in Table 1 below, the 2016 Reliability Compliance Program included compliance reviews of 43 requirements having NYISO reporting responsibility and 15 requirements having market participant reporting responsibility. Table 1 also shows that the NYISO and market participants were in full compliance with all Requirements for which compliance was reviewed in the 2016 Reliability Compliance Program.

Table 1
2016 NYSRC Compliance Program Summary

	# of Compliance Assessments	Reliability Requirements Found in Full Compliance	Reliability Requirements Found in Non-Compliance
NYISO	18	43	0
Market Participants	15	15	0
Totals	33	58	0

Appendix A is a summary of the 2016 Reliability Compliance Program that depicts the Requirements that were assessed, milestone dates, and compliance findings. Appendix B depicts compliance documentation requirements.

PRR 116A Implementation Plan: Identification of Eligible Black Start Resources for Con Edison System Restoration Plan

After pursuing and securing NYISO tariff revisions necessary to establish the authority required for identifying eligible black start resources needed for an effective Con Edison system restoration plan in 2015 – in accordance with the PRR 116A Implementation Plan – Con Edison was required by PRR 116A to submit evidence that it had conducted a study for identifying eligible black start resources that could provide a material benefit to Con Edison's system restoration plan. In 2016 results of this required study were reported to RCMS: it had identified the need for two new facilities for Con Edison's black start program: the NYCA Hellgate and Harlem River gas turbine units. Accordingly, Con Edison was found in full compliance with the Reliability Rules.

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

NYSRC Reliability Rules require that the NYISO provide NYCA transmission and resource adequacy assessments to demonstrate that the NYISO is in compliance with these Rules.

The timing of the annual transmission review is coordinated with that of a similar transmission review submission required by NPCC. A 2015 NYCA Comprehensive Transmission Review, submitted to RCMS in 2016, concluded that the NYS Bulk Power System, as planned through the year 2020, conforms to NYSRC Reliability Rules. However, implementation of Corrective Action Plans described in the NYISO report will be required to meet criteria. With these mitigation plans in place, no additional upgrades will be necessary to meet the performance requirements defined by the Reliability Rules. RCMS will review the status of these Correction Action Plans in future transmission reviews.

To demonstrate compliance with NYSRC resource adequacy assessment requirements, the NYISO prepared the report, *Annual Assessment of Resource Adequacy for the Years 2016-2018*. The assessment concluded that for the NYCA baseline load forecast, a 17.5% IRM requirement would be met throughout the study period even if all planned resources are unavailable. However, a 17.5% IRM requirement would not be met during the 2016-2018 period, with only resources internal to New York, if a peak loads in excess of the 90th percentile of the forecast load actually occur.

NYISO Compliance Documentation Submissions

The success of the NYSRC Compliance Program depends on timely and complete submissions of compliance documentation prepared by the NYISO. Since 2014, all required compliance documentation has been submitted to RCMS by the NYISO in accordance with compliance documentation due dates, and all submissions were found to be complete.

NERC and NPCC 2016 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 NYISO compliance with these standards and criteria. NPCC has direct responsibility and authority to implement a compliance monitoring and enforcement program for NERC and regional standards, as well as monitoring compliance with NPCC-specific

reliability criteria. During 2016, as a part of the NERC/NPCC Standards Compliance Program, NPCC reviewed and found the NYISO in full compliance with one NERC Standard with one Requirement (by conducting a Guided Self-certification), as well as five NPCC directories. In addition, in April, NPCC performed an on-site comprehensive Audit of the NYISO's compliance with 32 Requirements contained in 10 NERC version five CIP Standards.

Conclusions

The following conclusions were reached by RCMS with regard to the NYSRC 2016 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 58 NYSRC reliability requirements that were assessed by RCMS in the 2016 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 2016.
3. All required NYISO compliance documentation associated with the 2016 Reliability Compliance Program was submitted on time to RCMS and found to be complete.

APPENDIX A
NYSRC 2016 RELIABILITY COMPLIANCE PROGRAM

REQUIREMENT(S)	REQUIREMENT DESCRIPTION	MEASURE	COMPLIANCE DOCUMENTATION DUE 1	DATE RECEIVED	DATE OF RCMS REVIEW	NYISO COMPLIANCE LEVEL 2
YSRC						
A.1 (R1, R2)	IRM study and report	M1	2/25/16	2/25/16	3/3/16	FC
A.2 (R1 to R3)	Locational Capacity Requirements	M1	3/24/16	3/24/16	3/31/16, 5/5/16	FC
A.2 (R4)	LSE ICAP obligations	M2*	11/22/16	11/22/16	11/29/16	FC
A.3 (R1)	NYCA resource adequacy assessment for 2016-18 period	M1	5/26/16	5/27/16	6/2/16	FC
Transmission Planning						
B.1 (R1 to R5)	NYCA transmission facilities planned in accordance with NYSRC transmission planning criteria	M1	10/27/16	10/27/16	11/3/16	FC
B.2 (R1)	2015 NYCA Transmission Review	M1	3/24/16	3/24/16	3/31/16, 5/5/16	FC
B.3 (R1 to R3)	List of NYS BPS Facilities	M1	10/27/16	10/27/16	11/3/16	FC
Transmission Operation						
C.1 (R1, R2)	Establishment of operating transfer capabilities	M1	4/28/16	4/28/16	5/5/16	FC
C.3 (R1 to R6)	Transmission outage coordination procedures	M1	4/28/16	4/28/16	5/5/16	FC
C.4 (R1 to R3)	Operating procedures for impending severe weather and solar magnetic disturbances	M1	4/28/16	4/28/16	5/5/16	FC
C.5 (R1, R3)	Annual NYISO fault current assessment	M1	5/26/16	5/27/16	6/2/16	FC
C.5 (R2)	Equipment Owner fault current assessment actions	M2*	5/26/16	5/27/16	6/2/16	FC
C.6 (R1, R2)	Applications of the NYSRC Reliability Rules	M1	10/27/16	10/27/16	11/3/16	FC
C.7 (R1)	Exceptions to the NYSRC Reliability Rules	M1	10/27/16	10/27/16	11/3/16	FC
C.8 (R1)	Real-time operations of the NYS BPS	M1	Monthly	1/4/16	1/5/17 4	FC 4
Emergency Operations						
D.1 (R10)	Annual statewide voltage reduction tests	M3	7/28/16	7/28/16	8/4/16	FC
D.2 (R3)	TO load shedding documentation	M2*	7/28/16	7/28/16	8/4/16	FC

REQUIREMENT(S)	REQUIREMENT DESCRIPTION	MEASURE	COMPLIANCE DOCUMENTATION DUE 1	DATE RECEIVED	DATE OF RCMS REVIEW	NYISO COMPLIANCE LEVEL 2
Operating Reserves						
E.1 (R1 to R7)	Operating reserve adequacy	M1	8/25/16	8/25/16	9/1/16	FC
System Restoration						
F.1 (R2)	TO system restoration plans	M2*	8/25/16	8/25/16	9/1/16	FC
F.1 (R3)	Black Start Provider requirements	M3*	8/25/16	8/25/16	9/1/16	FC
Local Area Operation						
G.1 (R7)	Con Edison NYC operating requirements	M3*	7/28/16	7/28/16	8/4/16	FC
G.2 (R1)	Con Edison loss of gas supply requirements	M1*	7/28/16	7/28/16	8/4/16	FC
G.3 (R1)	LIPA loss of gas supply requirements	M1*	7/28/16	7/28/16	8/4/16	FC
G.4 (R2)	Con Ed identification of Eligible Black Start Resources	M2*	2/25/16	6/1/16 3	6/2/16	FC
Modeling and Data						
I.1 (R3)	GO generation net dependable capacity tests	M2*	3/24/16	3/24/16	3/31/16	FC
I.1 (R4)	GO generation reactive power capacity tests	M3*	3/24/16	3/25/16	3/31/16	FC
I.2 (R2)	GO generating unit outage data reporting	M2*	9/29/16	9/29/16	10/6/16	FC
I.2 (R3)	Generating unit outage statistics	M3	9/29/16	9/29/16	10/6/16	FC
I.2 (R4)	SCR performance report	M4	9/29/16	9/29/16	10/6/16	FC
I.2 (R5)	RIP SCR performance data reporting	M5*	9/29/16	9/29/16	10/6/16	FC
I.3 (R2)	Annual actual and forecast load data	M2	6/23/16	6/23/16	6/30/16	FC
I.4 (R3)	MP transmission data reporting and review	M3*	6/23/16	6/23/16	6/30/16	FC
I.5 (R2)	MP disturbance recording devices and data reporting	M2*	3/24/16	3/24/16	3/31/16	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
4. This compliance review was delayed pending the installation of the required physical equipment to provide a unit with eligible black start capability.
5. This date and compliance level applies to approval of the November and December 2016 operations reports. All prior 2016 monthly reports were found in full compliance.
6. In addition to a RCMS compliance review on 5/6/16 in accordance with the 2016 Compliance Program, these requirements were also reviewed on 10/6/16 in accordance with the PRR 130 Implementation Plan, and found in full compliance.

2016 “As Required” NYISO Compliance Reports

Requirement	Reported Event	Date NYISO Event Report was Received	RCMS Review Date	RCMS Comments	NYISO Compliance Level
H.1(R4)	On 1/28/16 the NYISO experienced a loss of EMS monitoring capability for more than 30 minutes. This was caused when a Freon leak in an a/c unit inside the Carman Rd. Data Center triggered the fire alarm, which resulted in a programmed response to cut power to the Data System and discharge the fire suppression system.	2/25/16	3/3/16	None	FC
D.1(R9)	On 7/27/16 the NYISO declared a major emergency caused by a trip of the Gilboa-Frazer 345Kv line.	7/27/16	8/4/16	None	FC
D.1(R9)	On 7/30/16 the NYISO declared a major emergency caused by a trip of the Gilboa-Frazer 345Kv line.	8/1/16	8/4/16	None	FC

APPENDIX B: 2016 RELIABILITY COMPLIANCE PROGRAM – COMPLIANCE DOCUMENTATION REQUIREMENTS

Requirements	Type of Reporting **	Compliance Period	Compliance Documentation Requirements
A.1 (R1, R2)	Complete documentation according to M1.		The report, <i>NYCA Installed Capacity Requirement for the Period 2016-17</i> , shall be provided by the NYSRC ICS.
A.2 (R1 to R3)	Complete documentation according to M1.		A NYISO Locational Capacity Requirement Report, covering the 2016-17 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 this information and answer questions.
A.2 (R4) *	Certification according to M2.	Nov 2015-Oct 2016	
A.3 (R1)	Complete documentation according to M1.		A NYCA Resource Adequacy report covering the 2016-18 period shall be provided. Prior to the assessment, 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.1 (R1 to R5)	Self-Certification according to M1.		The self-certification shall be accompanied by: (1) references to NYISO procedures that specify R1 to R5 requirements, and (2) a statement as to whether NYISO procedures require MPs to plan their BPS in accordance with appropriate transmission planning criteria.
B.R2 (R1 to R7)	Complete documentation according to M1.		Provide a NYCA 2015 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 thermal rule violations that were identified in previous transmission reviews and Corrective Action Plans as required. The timing of this submission shall be coordinated with the NYISO's Transmission Review submission to NPCC.
B-R3 (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.
C.1 (R1, R2)	Self-Certification		The self-certification shall be accompanied with references to: (1) NYISO procedures for

Requirements	Type of Reporting **	Compliance Period	Compliance Documentation Requirements
	according to M1		establishing operating transfer capabilities, and (2) NYISO procedures that identify actions to be taken whenever the bulk power transmission system's thermal, voltage, and stability limits are exceeded.
C.3 (R1 to R6)	Self-Certification according to M1		The self-certification shall be accompanied by references to NYISO procedures for implementing Requirements R1 through R5.
C.4 (R1 to R3)	Self-Certification according to M1		The self-certification shall be accompanied by references to NYISO procedures for implementing Requirements R1 and R2.
C.5 (R1, R3)	Complete documentation according to M1		A report covering an evaluation of the fault duty at each BPS station for the 2016 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.
C.5 (R2) *	Certification according to M3		This certification applies to Equipment Owner evaluation of the NYISO 2016 Capability Year fault duty evaluation required by C.5 (R1).
C.6 (R1, R2)	Complete documentation according to M1		Submit an up-to-date "Applications of the Reliability Rules" document, noting any changes over the past three years. This document shall be accompanied by a reference to NYISO procedures for preparing and updating the Applications, including transmission owner responsibilities.
C.7 (R1)	Self-Certification according to M1		
C.8 (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.
D.1 (R10)	Complete documentation according to M3		A report on the results of statewide voltage reduction tests for the 2016 summer period shall be provided.
D.2 (R3) *	Certification according to M2	2015 Capability Year	
E.1 (R1 to R7)	Self-Certification according to M1		The self-certification shall be accompanied by references to procedures required by R1 to R6.

Requirements	Type of Reporting **	Compliance Period	Compliance Documentation Requirements
F.1 (R2) *	Certification according to M2	2015 Capability Year	
F.1 (R3) *	Certification according to M3	2015 Capability Year	The certification shall be accompanied by a statement commenting on any black start testing issues or concerns encountered during the 2015 Capability Year testing period.
G.1 (R7) *	Certification according to M3	2015 Capability Year	
G.2 (R1) *	Certification according to M1	2015 Capability Year	In addition, illustrations of the types of Con Edison actions taken for meeting loss of gas supply rules that were reported in these notifications shall be provided.
G.3 (R1) *	Certification according to M1	2015 Capability Year	In addition, illustrations of the types of LIPA actions taken for meeting loss of gas supply rules that were reported in these notifications shall be provided.
G.4 (R2) *	Complete documentation according to M2		Con Edison shall submit a study to RCMS for identifying eligible black start resources in accordance with R2 and the PRR 116A Implementation Plan. ***
I.1 (R3) *	Certification according to M2	Winter 2014-15, Summer 2015	
I.1 (R4) *	Certification according to M3	Summer 2015	
I.2 (R2) *	Certification according to M2	Jan-Dec 2015	
I.2 (R3)	Self-Certification according to M3		In addition, historical generating outage data shall be prepared and submitted to ICS for use in the 2016-17 IRM Study.
I.2 (R4)	Self-Certification according to M4		In addition, SCR performance data and report shall be prepared and submitted to ICS for use in the 2016-17 IRM Study.
I.2 (R5) *	Certification according to M5	2015 Capability Year	
I.3 (R2)	Self-Certification		In addition, load forecast data shall be submitted to ICS for use in the 2016-17 IRM Study.
I.4 (R3) *	Certification according to M3	2015 Capability Year	This requirement may be revised in 2016.

Requirements	Type of Reporting **	Compliance Period	Compliance Documentation Requirements
I.5 (R2) *	Certification according to M2	Jan-Dec 2015	

*This is a Market Participant requirement.

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

*** This compliance documentation is in accordance with the PRR 116A Implementation Plan, dated 4/5/14, as follows: “Within 12 months of receiving FERC approval for the (NYISO) Tariff change (FERC approved the Tariff change on 2/1/15), Con Edison shall complete an initial study for identifying any *Eligible Black Start Resource* that would provide a *Material Benefit* to the SRP if included. This study shall be conducted in accordance with Measurement I-M8 requirements. A summary of the study shall be reviewed by the NYISO and NYSRC subject to appropriate confidentiality protections.” In October 2015, Messrs. Clayton and Adamson reviewed this study on a confidentiality basis, and agreed that it meets G.4 (R2) and Implementation Plan requirements.