NEW YORK STATE RELIABILITY COUNCIL

2017 Reliability Compliance Program Highlights

Prepared by the Reliability Compliance Monitoring Subcommittee

March 1, 2018



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Introduction

This report presents the highlights of the 2017 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. Policy 4 was revised in 2017 to require reviews of NYSRC Reliability Rules to ensure they are more stringent or specific that NERC and NPCC standards and criteria.

In 2015 a three-year NYSRC compliance review plan was adopted by RCMS. The NYSRC 2017 Reliability Review Program described in this report represents the final year of this three-year plan.

2017 NYSRC Reliability Compliance Program

At the beginning of 2017 the NYSRC maintained a total of 103 reliability requirements related to 27 Reliability Rules. The 2017 Compliance Program included 33 assessments which reviewed compliance with 56 reliability requirements or 54% of NYSRC's reliability requirements.

As shown in Table 1 below, the 2017 Reliability Compliance Program included compliance reviews of 43 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 2017 Reliability Compliance Program.

Table 1
2017 NYSRC Compliance Program Summary

	# of Compliance Assessments	Reliability Requirements Found in	Reliability Requirements Found in	
	Assessments	Full Compliance	Non-Compliance	
NYISO	20	43	0	
Market Participants	13	13	0	
Totals	33	56	0	

Appendix A is a summary of the 2017 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."

The NYISO submitted two NYCA transmission reviews to the NYSRC for compliance review in 2017. A 2016 NYCA Intermediate Area Transmission Review, submitted to RCMS in February 2017, concluded that the NYS Bulk Power Transmission Facilities, as planned through year 2021, conform to NYSRC Reliability Rules and NPCC Transmission Design Criteria. A 2017 NYCA Interim Area Transmission Review, submitted to RCMS in November 2017 concluded that the NYS Bulk Power Transmission Facilities, as planned through the year 2022, also conform to NYSRC Reliability Rules and NPCC Transmission Design Criteria. Both the 2016 and 2017 transmission assessments show the need to implement Corrective Action Plans in order to meet NYSRC Reliability Rules and NPCC criteria: (1) terminal equipment upgrades to each Clay-Pannell 345kV – both upgrades are scheduled to be in-service in 2019, and (2) an Oakdale 345/115kV 3rd transformer and 345kV reconfiguration project. This project is scheduled to be in-service in 2021.

To demonstrate compliance with NYSRC resource adequacy assessment requirements, the NYISO prepared the report, *Annual Assessment of Resource Adequacy for the Years 2017-2019*. The assessment concluded that for existing and planned NYCA resources and a baseline forecast of peak load, an 18.0% statewide IRM would be met throughout the assessment period, even under an extreme high load case.

RCMS found the above NYISO transmission and resource adequacy assessments in full compliance with NYSRC Reliability Rules.

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 certifications and related compliance documents have 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 2017 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 2017, as a part of the CCEP, NPCC reviewed and found the NYISO in full compliance with five NPCC directories. In addition, in April, NPCC performed an on-site comprehensive Audit of the NYISO's compliance with 21 Requirements contained in 11 NERC Operations Standards.

Conclusions

The following conclusions were reached by RCMS with regard to the NYSRC 2017 Reliability Compliance Program:

- 1. The NYISO staff continued to provide valued assistance during the NYSRC reliability compliance review process.
- The NYISO and market participants were in full compliance with all 56 NYSRC reliability requirements that were assessed by RCMS in the 2017 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 2017.
- 3. All required NYISO compliance documentation associated with the 2017 Reliability Compliance Program was submitted on time to RCMS and found to be complete.

Appendix A NEW YORK STATE RELIABILITY COUNCIL 2017 RELIABILITY COMPLIANCE PROGRAM

REQUIREMENT(S)	REQUIREMENT DESCRIPTION	MEASURE	COMPLIANCE DOCUMENTA- TION DUE 1	DATE RECEIVED	DATE OF RCMS REVIEW	NYISO COMPLIANCE Level 2
Resource Adequacy						
A.2 (R1 to R3)	Locational Capacity Requirements	M1	3/30/17	3/30/17	4/6/17	FC
A.2 (R4)	LSE ICAP obligations	M2*	11/22/17	11/22/17	11/30/17	FC
A.3 (R1)	2017 NYCA resource adequacy assessment	M1	5/25/17	5/25/17	6/1/17	FC
Transmission Planning						
B.2 (R1)	2016 NYCA Transmission Review	M1	2/23/17	2/23/17	3/2/17	FC
B.2 (R1)	2017 NYCA Transmission Review 9	M1		11/2/17	11/30/17	FC
B.3 (R1 to R3)	List of NYS BPS Facilities	M1	8/24/17	8/24/17	8/31/17	FC
Transmission Operation						_
C.5 (R1, R3)	NYISO 2017 fault current assessment	M1	5/25/17	5/24/17	6/1/17	FC
C.5 (R2)	Equipment Owner fault current assessment actions	M2*	5/25/17	5/24/17	6/1/17	FC
C.8 (R1)	Real-time operations of the NYS BPS	M1	Monthly	1/4/18	2/1/18	FC 7
Emergency Operations						
D.1 (R1 to R8)	Procedures for mitigating Major Emergencies	M1	4/27/17	4/27/17	5/4/17	FC
D.1 (R10)	Annual statewide voltage reduction tests	M3	7/27/17	7/27/17	8/3/17	FC
D.2 (R1, R2)	TO load shedding allocation	M1	4/27/17	4/27/17	5/4/17	FC
D.2 (R3)	TO load shedding documentation	M2*	4/27/17	4/27/17	5/4/17	FC
System Restoration						
F.1 (R1)	NYISO system restoration procedures and actions	M1	3			
F.1 (R2)	TO system restoration plans	M2*	11/22/17	11/22/17	11/30/17	FC
-			3			

REQUIREMENT(S)	REQUIREMENT DESCRIPTION	MEASURE	COMPLIANCE DOCUMENTA- TION DUE 1	DATE RECEIVED	DATE OF RCMS REVIEW	NYISO COMPLIANCE Level 2
Local Area Operation						
G.1 (R1, R2, R4, and R5)	NYISO requirements for Con Ed operating procedures	M1	8/24/17	8/24/17	8/31/17	FC
G.1 (R3 and R6)	NYISO requirements for Con Ed operating reserves	M2	8/24/17	8/24/17	8/31/17	FC
G.1 (R7)	Con Ed operating procedures and reserves	M3*	8/24/17	8/24/17	8/31/17	FC
G.2 (R1)	Con Edison loss of gas supply procedures	M1*	8/24/17	8/24/17	8/31/17	FC
G.2 (R2)	NYISO requirements for Con Ed loss of gas facility proc.	M2	8/24/17	8/24/17	8/31/17	FC
G.2 (R3, R4)	NYISO requirements for GO duel fuel capability testing of MOB combined cycle units	M3	4			
G.2 (R5)	M4*	4				
G.2 (R6)	combined cycle units GO duel fuel capability testing of combined cycle units		4			
G.3 (R1)	LIPA loss of gas supply procedure and actions	M1*	6/22/17	6/22/17	6/29/178	FC
G.3 (R2)	NYISO requirements for LIPA loss of gas supply procedure	M2	6/22/17	6/22/17	6/29/17	FC
G.4 (R1)	NYISO req. for identification of Eligible Black Start units	M1	6/22/17	6/22/17	6/29/178	FC
G.4 (R2)	Con Ed identification of Eligible Black Start units	M2*	6/22/17	6/22/17	6/29/178	FC
Modeling and Data						
I.1 (R3)	GO generation net dependable capacity tests	M2*	3/30/17	3/30/17	4/6/17	FC
I.1 (R4)	GO generation reactive power capacity tests	M3*	3/30/17	3/30/17	4/6/17	FC
I.2 (R2)	GO generating unit outage data reporting	M2*	3/30/17	3/30/17	4/6/17	FC
I.2 (R3)	Generating unit outage statistics	M3	7/27/17	7/27/17	8/3/17	FC
I.2 (R4)	SCR performance report	M4	7/27/17	7/27/17	8/3/17	FC
I.2 (R5)	RIP SCR performance data reporting	M5*	7/27/17	7/27/17	8/3/17	FC
I.3 (R2)	Annual actual and forecast load data	M2	7/27/17	7/27/17	8/3/17	FC
I.4 (R1)	Transmission data reporting requirements (Review #1) 5	M1	12/29/16	1/4/17	1/5/176	FC

REQUIREMENT(S)	REQUIREMENT DESCRIPTION	MEASURE	COMPLIANCE DOCUMENTA- TION DUE 1	DATE RECEIVED	DATE OF RCMS REVIEW	NYISO COMPLIANCE Level 2
I.4 (R1)	Transmission data reporting requirements (Review #2) 5	M1	9/29/17	9/29/17	10/5/17	FC
I.4 (R3)	MP transmission data reporting	M3*	9/29/17	9/29/17	10/5/17	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. Compliance review of these requirements depended on FERC approval of tariff changes required to implement PRR 133 rule changes. FERC approval was too late to schedule compliance review in 2017 this review was rescheduled for 2018.
- 4. Compliance review of these requirements depended on FERC approval of tariff changes required to implement PRR 131c rule changes. FERC approval was too late to schedule compliance review in 2017 this review was rescheduled for 2018.
- 5. **I.4** (R1) Review #1 requires a NYISO compliance submission in accordance with the PRR 132 Implementation Plan. See Appendix 1 for **I.4** (R1) Review #2 requirements.
- 6. From this compliance review in accordance with the PRR 132 Implementation Plan RCMS concluded that a new PRR should be prepared to clarify an intended requirement that Market Participants shall apply NYISO data screening guidelines for identifying suspect data.
- 7. This Full Compliance finding applies to the December 2017 operations report. Operation reports for all previous months in 2017 were also found in Full Compliance.
- 8. Administrative revisions on the compliance certification form for this Requirement were satisfactorily completed by the NYISO on 6/29/17.
- 9. In November 2017 NYISO staff requested that compliance review of the 2017 NYCA Transmission Review be included in the 2017 Compliance Program.

<u>APPENDIX 2</u>: 2017 RELIABILITY COMPLIANCE PROGRAM – COMPLIANCE DOCUMENTATION REQUIREMENTS

Requirements	Type of Reporting **	Compliance Period	Compliance Documentation Requirements
A.2 (R1 to R3)	Complete documentation according to M1.		A NYISO Locational Capacity Requirement (LCR) Report, covering the 2017 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, including the status of LCR methodology changes.
A.2 (R4) *	Certification according to M2.	Nov 2016-Oct 2017	, , <u>, , , , , , , , , , , , , , , , , </u>
A.3 (R1)	Complete documentation according to M1.		A NYCA Resource Adequacy report covering the 2017-19 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.R2 (R1)	Complete documentation according to M1.		A NYCA 2016 Transmission Review, in accordance with the NYSRC Procedure for NYCA Transmission Reviews, 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-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. A current list of NYS Bulk Power System facilities shall be submitted to RCMS, recognizing confidentiality protection requirements.
C.5 (R1, R3)	Complete documentation according to M1		A report covering an evaluation of the fault duty at each BPS station for the 2017 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 2017 Capability Year fault duty evaluation required by C.5 (R1).
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.

Requirements	Type of Reporting **	Compliance Period	Compliance Documentation Requirements
D.1 (R1 to R8)	Self Certification according to M1		Include references to NYISO procedures for complying with R1 to R8.
D.1 (R10)	Complete documentation according to M3		A report on the results of statewide voltage reduction tests for the 2017 summer period shall be provided.
D.2 (R1, R2)	Self Certification according to M1		Provide references to NYISO procedures for complying with R1 and R2, in addition to providing evidence that analyses were conducted during the 2016 Capability Year to ensure that sufficient load shedding is available to meet NYISO load shedding requirements.
D.2 (R3) *	Certification according to M2	2016 Capability Year	
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 – following a necessary tariff change – 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 R3 requirements.
F.1 (R2) *	Certification according to M2	2016 Capability Year	
F.1 (R3) *	Certification according to M3	2016 Capability Year	The certification shall be accompanied by a statement commenting on any black start testing issues or concerns encountered during the 2016 Capability Year testing period.
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 (R.3, 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	2016 Capability Year	
G.2 (R1) *	Certification according to M1	2016 Capability Year	Provide selected examples of Con Edison actions taken during the 2016 Capability Year for complying with loss of gas supply rules that were reported to the NYISO in accordance with R1.

Requirements	Type of Reporting **	Compliance Period	Compliance Documentation Requirements
G.2 (R2)	Self Certification according to M2		Provide references to NYISO procedures in accordance with R2.
G.2 (R3, R4)	Self Certification according to M3		Provide references to NYISO procedures requiring testing and a list of MOB duel fuel units, in accordance with R3. This list shall be provided to RCMS in accordance with NYISO confidentiality requirements. See PRR 131c Implementation Plan.
G.3 (R1) *	Certification according to M1	2016 Capability Year	Provide selected examples of LIPA actions taken during the 2016 Capability Year for complying with loss of gas supply rules that were reported to the NYISO in accordance with R1.
G.3 (R2)	Self Certification according to M2		
G.4 (R1)	Self Certification according to M1		The NYISO shall reference modified procedures in accordance with PRR 135 changes and Implementation Plan.
G.4 (R2) *	Certification according to M2	2016 Capability Year	Con Edison shall conduct a study for identifying eligible black start resources in accordance with R2. See PRR 135 modified requirements and Implementation Plan.
I.1 (R3) *	Certification according to M2	Winter 2015-16, Summer 2016	
I.1 (R4) *	Certification according to M3	Summer 2016	
I.2 (R2) *	Certification according to M2	Jan-Dec 2016	
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 NYSRC 2018-19 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 NYSRC 2018-19 IRM Study.
I.2 (R5) *	Certification according to M5	2016 Capability Year	
I.3 (R2)	Self Certification according to M1		In addition, appropriate load forecast data shall be submitted to ICS for use in the 2018-19 IRM Study.
I.4 (R1) (Review #2)	Self Certification according to M1		The NYISO shall report to RCMS a summary – subject to appropriate confidentiality protection – of all assessments conducted during January to June 2017 that examined the potential for an adverse material impact of a Market Participant's data error on the reliability of the NYS Bulk Power System, in accordance with R1.7 requirements, and the

2/1/18

Requirements	Type of	Compliance Period	Compliance Documentation Requirements
	Reporting **		
			results of such assessments. An appropriate NYISO staff person should be available at the
			RCMS meeting to discuss these assessments.
I.4 (R3) *	Certification	January through	
	according to M3	June 2017	

^{*}This is a Market Participant requirement.

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