

**NEW YORK STATE
RELIABILITY
COUNCIL**

*2007 Reliability
Compliance Program*

*Prepared by the
Reliability Compliance
Monitoring Subcommittee*

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NYSRC 2007 RELIABILITY COMPLIANCE PROGRAM

Introduction

The New York State Reliability Council (NYSRC) Reliability Compliance Program is designed to measure and ensure compliance with NYSRC New York-Specific 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, even 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 to the NYSRC Reliability Rules necessary to preserve the reliability of the New York Control Area. This report presents the highlights of results of the 2007 NYSRC Reliability Compliance Program.

Compliance with the NYSRC New York-Reliability Rules is reviewed and evaluated in accordance with NYSRC Policy 4, *Procedure for Monitoring Compliance with the NYSRC Reliability Rules*. Policy 4 was revised in 2007 to incorporate market participant compliance review procedure changes and other NYSRC compliance program procedural updates.

Another major reference document for the compliance monitoring process is the NYSRC Compliance Template Manual. The Compliance Template Manual includes a compliance template for each Measurement. These templates cover reporting and compliance monitoring responsibilities, reporting frequencies, and statements of requirements for full compliance and levels of non-compliance. The Compliance Template Manual also describes the types of non-compliance notification letters that must be issued for various levels of non-compliance. The Compliance Template Manual was updated three times during 2007 reflecting adoption of eight new or modified measurements.

Each year's Reliability Compliance Program includes compliance review of a portion of NYSRC Measurements. Factors used for selecting the group of Measurements to be reviewed each year include: (1) Measurements that require annual or monthly review, (2) Measurements that have not been reviewed in the past three years, (3) Measurements that have been adopted or modified over the previous year, and (4) Measurements that were found in non-compliance during the previous year or if other issues associated with NYISO compliance require a follow-up review.

2007 Reliability Compliance Program Measurements

As shown in Table 1, the 2007 Reliability Compliance Program included 26 NYSRC measurements having NYISO reporting responsibility, and eight measurements having Market Participant reporting responsibility. This number of measurements, for which NYISO and Market Participant compliance was assessed, represents about 60% of the total NYSRC measurements. A summary table is attached showing an overview of the NYSRC 2007 Reliability Compliance Program, including the measurements assessed, milestone dates, and compliance results.

Table 1 – NYSRC 2007 Reliability Compliance Program Summary

	Measurements Requiring Actions by the NYISO	Measurements Requiring Actions by Market Participants	Total Measurements
Total NYSRC Measurements	46	12	58
Total Measurements in 2007 NYSRC Compliance Program	26	8	34
2007 Program Measurements in Full Compliance	25	8	33
2007 Program Measurements in Non-Compliance	0	0	0
2007 Program Measurements Compliance Review Rescheduled to 2008	1	0	1

Table 1 shows that the NYISO and Market Participants were in full compliance with all measurements that were assessed in 2007. The table also shows that there was one measurement, B-M3, for which compliance review was rescheduled to 2008. Compliance review of this measurement was rescheduled because it was modified shortly after the 2007 Compliance Program schedule was finalized and there was insufficient time for the NYISO to complete the required compliance documentation during 2007.

Highlights of the NYSRC 2007 Reliability Compliance Program

1. System Restoration Requirements

One of the NYSRC Executive Committee’s 2003 Blackout initiatives was to enhance the requirements of NYSRC System Restoration Rules G-1 through G-4 considering recommendations from the NYISO System Restoration Working Group. NPCC and NERC Blackout recommendations and standards were also to be recognized. Accordingly, RRS modified the existing NYSRC System Restoration Reliability Rules and four related measurements. These modified Rules and measurements were adopted in March 2006 and an RCMS compliance assessment was conducted in late 2006. However, it was found during this compliance review that revised NYISO restoration procedures to comply with the new NYSRC requirements were not yet completed because expected revisions to NPCC emergency restoration criteria had not yet been adopted. Accordingly, a follow-up compliance review was scheduled as part of the 2007 Compliance Program after the NYISO restoration procedures were finalized to reflect new NPCC emergency restoration criteria, as well as NYSRC Reliability Rule G-R1 through G-R4 requirements.

In July 2007, RCMS reviewed the NYISO’s new System Restoration Manual and found that the new manual is in full compliance with NYSRC system restoration requirements. During this review RCMS concluded that NYSRC restoration training and simulation requirements needed clarification. As a result, PRR #95 was prepared to clarify these requirements.

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2. NYCA Transmission and Resource Adequacy Assessments

The NYSRC Reliability Rules require that the NYISO annually provide NYCA transmission and resource adequacy assessments to demonstrate that the NYISO conform to the NYSRC Reliability Rules.

To demonstrate compliance with NYSRC transmission design criteria (Reliability Rules B-1 through B-4) and annual transmission assessment requirements, the NYISO prepared the report, *2006 Interim Transmission Review Through 2011*. The study concluded that the NYS Bulk Power System, as planned through the year 2011, is in conformance with NYSRC Reliability Rules. RCMS accepted this report and concluded that the NYISO was in full compliance with NYSRC transmission design and reliability assessment requirements. Following this review RCMS requested NYISO staff to include as part of its next transmission review: (1) (N-1) -1 assessments; (2) identification of the impacts of the planned transmission system on the NYCA System Restoration Plan, in accordance with B-M3; (3) an extreme contingency assessment for the loss of gas delivery system; and (4) an extreme contingency condition assessment assuming generating unit loss of gas supply. The latter two assessments are appropriate in light of pending environmental regulations.

To demonstrate compliance with NYSRC resource adequacy assessment requirements, the NYISO prepared the report *Annual Assessment of Resource Adequacy covering the NYCA for 2007-2010*. The study concluded that an NYCA IRM requirement of 16.5% could be met throughout the 2007-2010 study period, assuming all planned resources were completed on schedule. Under a scenario whereby all planned resources do not materialize, a 16.5% IRM could be met through 2009. RCMS accepted the report and concluded that the NYISO was in full compliance with NYSRC resource adequacy assessment requirements.

3. NYS Bulk Power System Facilities

Measurement B-M4, which was adopted in 2002, requires that the NYISO establish a procedure for developing a list of Bulk Power System facilities, and to publish this list. Shortly afterwards, NPCC decided to develop such a procedure covering the NPCC Region. Accordingly, the NYISO worked with NPCC to prepare NPCC Document A-10, *Criteria for Classification of BPS Elements*, which was intended by the NYISO as the basis for NYISO compliance with B-M4. After several years of developing and testing this procedure, A-10 was adopted by NPCC in April 2007. The NYISO adopted A-10 for meeting Measurement B-4 procedural requirements and has prepared a BPS facilities list using the A-10 procedures. However, because of Federal data security guidelines, there is uncertainty of the extent as to the publishing and distribution of the BPS facilities list as required by B-M4. RCMS has requested the NYISO to prepare a procedure for distributing the BPS facilities list recognizing these confidentiality guidelines.

2007 NPCC and NERC Reliability Compliance Program

In addition to complying with NYSRC Rules, the NYISO must also comply with all NPCC and NERC Standards. RCMS has oversight responsibility concerning NYISO compliance with these NPCC and NERC criteria. NPCC has the 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 2007, NPCC reviewed NYISO compliance relative to 10 NPCC and 39 NERC standards and criteria that were included in the 2007 NPCC and NERC Reliability Compliance Programs. NPCC has concluded that the NYISO was in full compliance with all 49 NERC and NPCC standards and criteria included in these reliability assessments.

Conclusions

The following conclusions were reached by RCMS based on its experience with the 2007 Reliability Compliance Program:

1. As in past years, the NYISO staff provided valued assistance during the RCMS compliance review process.
2. RCMS is pleased that for the fourth year in a row, the NYISO and Market Participants were found to be in full compliance with all NYSRC measurements plus all NPCC standards and criteria and NERC standards that were assessed.
3. The previous 2006 Reliability Compliance Program report expressed concern that during 2006, NYISO compliance documentation was delayed past due dates for several compliance assessments. In early 2007 RCMS worked with the NYISO to minimize compliance documentation delays. Although there were some delays in 2007, they were relatively minor. RCMS is pleased that substantial progress in this area has been made by NYISO staff. RCMS will continue to work with NYISO in this regard.

**2007 NYSRC RELIABILITY COMPLIANCE PROGRAM
FINAL COMPLIANCE PROGRAM RESULTS**

MEAS./ COMP. TEMP.	RELATED RULE	MEASUREMENT DESCRIPTION	COMPLIANCE DOC. REQUIRED 1	DUE NYSRC	DATE RECV'D	DATE OF RCMS REVIEW	COMP. LEVEL 2
Resource Adequacy							
A-M2	A-R2,3	Establishing LSE ICAP requirements	A	4/1/07	3/8/07	3/8/07	FC
A-M3	A-R2,3	Certifying LSE ICAP obligations are met*	B	11/1/07	11/1/07	11/8/07	FC
Transmission Capability – Planning							
B-M3	B-R5	Demonstration that system is planned considering ease of restoration	C	11/1/07	7	7	
B-M4	B-R6	List of NYS Bulk Power System Facilities	D	11/1/07	11/1/07	11/8/07 10	FC 10
Resource, System & Demand Data Requirements							
C-M5	C-R2	Reporting of resource outage data to the NYISO*	E	9/1/07	9/7/07	9/12/07	FC
C-M7	C-R3	Documentation identifying scope and details of actual and forecast load data requirements	F	4/1/07	4/1/07	4/12/07	FC
C-M8	C-R3	Reporting of required actual & forecast data	G	4/1/07	4/1/07	4/12/07	FC
C-M9	C-R4	Procedure for maintenance of load flow, short-circuit and stability data	H	6/1/07 ⁵	6/6/07	6/6/07	FC
C-M11	C-R4	Reporting of load flow, short-circuit and stability data to the NYISO*	I	12/1/07	12/1/07	12/13/07	FC
C-M12	C-R5	Procedures for disturbance recording device installation and reporting of data	J	6/1/08, 8/1/07 ⁸	8/9/07	8/9/07	FC

MEAS./ COMP. TEMP.	RELATED RULE	MEASUREMENT DESCRIPTION	COMPLIANCE DOC. REQUIRED 1	DUE NYSRC	DATE RECV'D	DATE OF RCMS REVIEW	COMP. LEVEL 2
C-M13	C-R5	Certification that disturbance recording devices have been installed and data reported as required*	K	12/1/07	12/1/07	12/13/07	FC
Operating Reserves							
D-M1	D-R1 to D-R3	Reporting statistics on forecasted and actual reserves	L	8/1/07	8/9/07	8/9/07	FC
D-M2	D-R1 to D-R4	Procedures that ensure adequacy of operating reserves	M	8/1/07	8/9/07	8/9/07	FC
Transmission Capability – Operating							
E-M1	E-R1 to E-R3	Procedures that ensure appropriate actions when transmission limits are violated	N	9/1/07	9/7/07	9/12/07	FC
E-M3	E-R5	Procedures to ensure transmission outages are coordinated	O	9/1/07	9/10/07	9/12/07	FC
E-M4	E-R6, E- R7	Procedures for operating during severe weather conditions, including solar magnetic disturbances	P	9/1/07	9/7/07	9/12/07	FC
E-M6	E-R8	Pre-seasonal fault duty assessments	Q	6/1/07, 7/1/07 6	6/6/07, 8/9/07 6	6/6/07, 8/9/07 6	FC
E-M7	E-R8	MP evaluation of NYISO fault duty assessments*	R	12/1/07	12/1/07	12/13/07	FC
Operation During Major Emergencies							
F-M3	F-R8	Procedures for ensuring that sufficient load shedding capability exists	S	9/1/07	9/7/07	9/12/07	FC
F-M4	F-R8	TO load shedding capability*	T	12/1/07	12/1/07	12/13/07	FC
F-M6	F-R5	Voltage reduction testing	U	10/1/07	10/1/07	10/10/07	FC

MEAS./ COMP. TEMP.	RELATED RULE	MEASUREMENT DESCRIPTION	COMPLIANCE DOC. REQUIRED 1	DUE NYSRC	DATE RECV'D	DATE OF RCMS REVIEW	COMP. LEVEL 2
System Restoration							
G-M1	G-R1,2	Procedure for maintaining a NYCA System Restoration Plan	V	7/1/07	7/3/07	7/12/07	FC
G-M2	G-R1,2	Transmission Owner Restoration Plan requirements*	W	12/1/07	12/1/07	12/13/07	FC
G-M3	G-R2	Blackstart Provider requirements*	X	12/1/07	12/1/07	12/13/07	FC
G-M4	G-R3	System restoration training requirements	Y	7/1/07, 8/1/07, 12/1/07 9	7/3/07 12/1/07	7/12/07, 8/9/07 9 12/13/07	FC
System Protection							
H-M1	H-R1	Documentation for meeting NPCC A-5	Z	10/1/07	10/1/07	10/10/07	FC
H-M2	H-R2	Documentation for meeting procedures required by H-M3	AA	10/1/07	10/1/07	10/10/07	FC
H-M3	H-R2	Procedure for monitoring compliance with NPCC A-4	BB	10/1/07	10/1/07	10/10/07	FC
NYISO Control Center Communications							
J-M1	J-R1, R2	Procedures for supporting NYISO/MP communications	CC	5/1/07	5/10/07	5/10/07	FC
J-M2	J-R2	Report providing performance data of control center communications interfaces	DD	5/1/07	5/10/07	5/10/07	FC
Reliability Assessment							
K-M2a, K-M3	K-R2	Annual transmission assessment & Extreme system condition assessment	EE	4/1/07	4/1/07	4/12/07 4	FC
K-M2b	K-R2	Annual resource adequacy assessment	FF	6/1/07	6/6/07	6/6/07, 7/12/07	FC
K-M2d	K-R2	Monthly operating report		11/8/07	11/8/07 3	11/8/07 3	FC 3

* Market Participant requirements.

Footnotes

1. NYISO Compliance Documentation Requirements:

- A. The NYISO Locational Capacity Requirement (LCR) Report for the 2007-08 capability period. LCRs should be determined using the “Unified Methodology”. In addition, provide either in the LCR report, or in a separate report, the required 2007 LSE capacity and IRM requirements for meeting the 2007 NYCA IRM requirement of 16.5%; and whether any intra-zonal transmission constraints indicating “bottled” generation have been identified by the NYISO. (A-M2)
- B. Certification that each LSE has demonstrated that it has procured sufficient capacity for the November 2006 to October 2007 period to meet its ICAP requirement in accordance with NYISO procedures and A-M3.
- C. Provide either the required procedures, or reference to the required procedures, for assessing the impact of the system expansion plan on the NYCA Restoration Plan. (B-M3)
- D. NYISO procedure for developing a list of NYS Bulk Power System facilities, in addition to the facilities list itself. (B-M4)
- E. Certification that ICAP providers submitted outage data to the NYISO during the May 2006 to April 2007 period as required by NYISO procedures. (C-M5)
- F. Documentation that identifies the actual & forecast demand and energy data that must be reported to the NYISO. (C-M7)
- G. Reported actual & forecast demand and energy data, in accordance with C-M8 requirements.
- H. Self-Certification that there is a procedure in place for the development of load flow, short-circuit, and stability data bases in accordance with C-M9. Either a final technical bulletin or reference to the appropriate NYISO procedure related to reporting data base changes, should be also provided.
- I. Certification that market participants have provided load flow, short-circuit, and stability data bases to the NYISO in accordance with C-M11.
- J. Self-Certification that the NYISO has in place procedures for the installation of disturbance recording devices and market participant reporting of data, or is in compliance with NPCC A-15 requirements if the NPCC requirements are consistent with C-M12 requirements. (C-M12)
- K. Certification that Market Participants have installed disturbance recording devices and reported data in accordance with NYISO procedures and C-M13.
- L. Daily forecast and actual operating reserves in accordance with D-M1 requirements.
- M. Self-Certification that the required NYISO procedures are in place for ensuring adequacy of operating reserves. (D-M2)
- N. Self-Certification that the required NYISO procedures are in place for ensuring that appropriate actions are taken when transmission limits are violated. (E-M1)
- O. Self-Certification that the required NYISO procedures are in place for ensuring that transmission outages are coordinated for maintaining reliability. (E-M3)
- P. Self-Certification that the required procedures are in place for operating during severe weather conditions and solar magnetic disturbances. (E-M4)

- Q. A report covering an annual pre-seasonal 2007 assessment evaluating fault duty at each BPS station. If the report shows fault duty levels exceed equipment ratings, mitigation plans jointly approved by the NYISO and equipment owners should be reported to the NYSRC. (E-M6)
- R. Certification that applicable equipment owners have evaluated NYISO fault duty assessments in accordance with E-M7.
- S. Self-Certification that the required NYISO procedures are in place for ensuring sufficient load shedding capability exists. (F-M3)
- T. Certification that TOs have reported to the NYISO load shedding documentation in accordance with NYISO procedures and F-M4.
- U. A report of the results of statewide voltage reduction tests for the 2007 summer period, in accordance with F-M6.
- V. Applicable documentation and references showing that the NYISO has developed system restoration procedures addressing all of the requirements specified in G-M1.
- W. Certification that all TOs have established restoration plans and if required, blackstart capability plans, in accordance with NYISO procedures and G-M2 requirements.
- X. Certification that blackstart providers are in compliance with NYISO procedures and G-M3 requirements.
- Y. Self-Certification that the NYISO maintains restoration training programs in accordance with G-M4 requirements.
- Z. Self-Certification that the NYISO is in compliance with NPCC A-5 requirements. (H-M1)
- AA. Documentation showing compliance with NYISO system protection maintenance procedures. (H-M2)
- BB. Self-Certification that the required NYISO procedures are in place for monitoring compliance with NPCC A-4. (H-M3)
- CC. Self-Certification that the required NYISO procedures are in place for complying with Rules J-R1 & J-R2. (J-M1)
- DD. A report summarizing the performance data of control center communications interfaces. (J-M2)
- EE. Annual NYCA Transmission Assessment Report, including an assessment of the impact of Extreme System Conditions in accordance with K-M3 requirements. (K-M2a, K-M3)
- FF. NYCA Resource Adequacy Report for the 2007-2010 period. (K-M2b)

Note: All the above self-certification statements must include references to where required procedures or other required documentation can be found.

2. Levels of Non-Compliance:

- L1 – Non-Compliance Level 1
- L2 – Non-Compliance Level 2
- L3 – Non-Compliance Level 3
- L4 – Non-Compliance Level 4

- 3. This information is for the November 2007 operating report. All previous 2007 monthly reports were in Full Compliance.
- 4. The NYISO will provide the additional assessments specified in the April 12, 2007 minutes in the next Transmission Review, and coordinate RCMS review of the report with the TFSS review.

5. RCMS granted a one-month delay from the original 5/1/07 due date due to a delay in the issuance of the draft technical bulletin, *MP Notification of ISO Network Power System Model Updates*, which is a compliance requirement.
6. RCMS granted a one month delay to 7/12/07 for submitting mitigation plans for meeting E-M6 requirements. However, these mitigations plans were further delayed to 8/9/07, when E-M6 was found in full compliance (this second delay fell within the 30-day lateness grace period).
7. B-M3 requirements are included in annual transmission assessments. The next transmission assessment is not due until early 2008; therefore compliance review for B-M3 will be delayed to 2008. See PRR #90 Implementation Plan.
8. RCMS granted a 2-month delay from an original 6/1/07 due date for C-M12 compliance documentation.
9. On 7/9/07, to fully meet G-M4 requirements, RCMS requested the NYISO to provide by 8/1/07 (on 8/9/07 RCMS granted a delay to 12/1/07), the results of annual TO restoration simulations. PRR #95 was prepared by RCMS to clarify G-M4 requirements.
10. Because of NYISO confidentiality issues concerning the NYCA BPS facilities list, the NYISO cannot publish this list in NYISO publications as required by B-M4. Accordingly, RCMS waived this requirement and declared the NYISO in full compliance with B-M4. RRS will be requested to modify B-M4 accordingly.