



NORTHEAST POWER COORDINATING COUNCIL, INC.
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NCR ID :	NCR07160		
Registered Entity Name:	New York Independent System Operator		
Registered Entity Acronym:	NYISO		
Reliability Standards Scope:	Operations & Planning Standards		
Compliance Monitoring Process:	Compliance Audit		
Distribution:	Public Version. Confidential Information Has Been Removed, Including Privileged and Critical Energy Infrastructure Information.		
Regional Entity:	Northeast Power Coordinating Council, Inc. (NPCC)		
Date of Opening Presentation:	April 11, 2017	Date of Closing Presentation:	April 12, 2017
Date of Report:	5/10/2017	IP Year:	2017
Potential Noncompliance:	None (zero)		
Jurisdiction:	United States		

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I. Executive Summary

Northeast Power Coordinating Council, Inc. (NPCC) conducted an Operations & Planning Standards Compliance Audit of 2017 (NYISO), NERC ID NCR07160 from April 11, 2017 to April 12, 2017.

At the time of the Compliance Audit, NYISO was registered for the functions of Balancing Authority (BA), Planning Authority (PA), Reliability Coordinator (RC), Resource Planner (RP), Transmission Service Provider (TSP), Transmission Operator (TOP), and Transmission Planner (TP).

The Compliance Audit team (team) evaluated NYISO for compliance with 21 requirements for the 2017 ERO Enterprise Compliance Monitoring and Enforcement Program (CMEP). The team assessed compliance with the NERC Reliability Standards for the period of February 13, 2014 to March 10, 2017.

NYISO submitted evidence for the team's evaluation of compliance with requirements. The team reviewed and evaluated all evidence provided to assess compliance with Reliability Standards applicable to NYISO at this time.

Based on the evidence provided, no findings of non-compliance were noted for the Reliability Standards and applicable Requirements in scope for this engagement.

The team notified NYISO of two (2) recommendations.

The NPCC Compliance Audit Team Lead certifies that the team adhered to all applicable requirements of the NERC Rules of Procedure (ROP) and Compliance Monitoring and Enforcement Program (CMEP).¹

¹This statement replaces the Regional Entity Self-Certification process.

II. Compliance Audit Process

The Compliance Audit process steps are detailed in the NERC ROP. The Compliance Monitoring and Enforcement Program generally conforms to the United States Government Auditing Standards and other generally accepted audit practices.

Objectives

All registered entities are subject to compliance assessments with all Reliability Standards applicable to the functions for which the registered entity is registered² in the Region(s) performing the assessment. The Compliance Audit objectives are to:

- Provide reasonable assurance of compliance to the identified applicable Reliability Standards;
- Review compliance with applicable NERC Reliability Standards identified for the 2017 ERO Enterprise CMEP;
- Review NYISO's internal compliance program and controls.

Scope

The scope of this Compliance Audit considered the NERC Reliability Standards from 2017 ERO Enterprise CMEP Implementation Plan, Inherent Risk Assessment (IRA) and Internal Control Evaluation (ICE) of NYISO completed by Northeast Power Coordinating Council, Inc. (NPCC). This Audit did not include a review of mitigation plans or remedial action directives as there were none open or pending during the Audit.

The Reliability Standards and Requirements in-scope for this Compliance Audit are illustrated in **Table 1** below:

Standards	Requirement(s)
COM-002-4	R1, R2, R3, R4, R5, R6, R7
EOP-001-2.1b	R1
EOP-003-2	R3
EOP-006-2	R9, R10
EOP-010-1	R2
FAC-014-2	R1
IRO-005-3.1a	R1, R10, R12
PER-005-2	R4
TOP-004-2	R1, R2
TOP-007-0	R2, R3

The team did not expand the scope of the Compliance Audit beyond what was stated in the notification package.

Internal Compliance Program

Within the scope of the Compliance Audit, NYISO's compliance program was reviewed during the audit.

²NERC Rules of Procedure, Appendix 4C, Section 3.1, Compliance Audits.

Controls

As part of the audit activities, the Audit Team reviewed NYISO's related internal controls associated with NERC Reliability Standards in scope.

Confidentiality and Conflict of Interest

Confidentiality and conflict of interest of the team are governed under the Regional Delegation Agreements with NERC and Section 1500 of the NERC Rules of Procedure. NYISO was informed of Northeast Power Coordinating Council, Inc. (NPCC)'s obligations and responsibilities under the agreement and procedures. The work history for each team member was provided to NYISO, which was given an opportunity to object to a team member's participation on the basis of a possible conflict of interest or the existence of other circumstances that could interfere with a team member's impartial performance of duties. NYISO had not submitted any objections by the stated objection due date based on the ROP and accepted the team member participants without objection. There were no denials or access limitations placed upon this team by NYISO.

Methodology

The ERO Compliance Monitoring and Enforcement Manual (Manual)³ documents the ERO Enterprise's current approaches used to assess a registered entity's compliance with the NERC Reliability Standards. The ERO Enterprise uses, "to the extent possible, the Generally Accepted Auditing Standards (GAAS), the Generally Accepted Government Auditing Standards (GAGAS), and standards sanctioned by the Institute of Internal Auditors, as guidance for performing activities under the Compliance Monitoring and Enforcement Program (CMEP)."⁴ While the ERO Enterprise does not necessarily perform audit activities that must be in accordance with these standards recognized in the United States, the ERO Enterprise uses these standards as framework to conduct compliance monitoring activities under the CMEP, and recognizes that these standards provide information used in oversight, accountability, transparency, and improvements in ERO Enterprise operations.

The Northeast Power Coordinating Council, Inc. (NPCC) provided NYISO with a Compliance Audit notification package to commence the Compliance Audit. NYISO provided evidence at the time requested, or as agreed upon, by Northeast Power Coordinating Council, Inc. (NPCC). The team reviewed the evidence submitted by NYISO and assessed compliance with the requirements of the applicable Reliability Standards. Additional evidence could be submitted until the agreed-upon deadline prior to the exit briefing. After that date, only data or information that was relevant to the content of the report or its finding could be submitted with the agreement of the team lead.

The team reviewed documentation provided by NYISO and requested additional evidence and sought clarification from subject matter experts during the Compliance Audit. The evidence submitted in the form of policies, procedures, emails, logs, studies, data sheets, etc. was validated, substantiated, and cross-checked for accuracy as appropriate. Where sampling was applicable to a requirement, the sample set was determined by a statistical methodology, along with professional judgment as mentioned in the Manual.

The findings were based on the facts and documentation reviewed, the team's knowledge of the Bulk Electric System (BES), the NERC Reliability Standards, and professional judgment. All findings were developed based upon the consensus of the team.

³http://www.nerc.com/pa/comp/ERO%20Enterprise%20Compliance%20Auditor%20Manual%20DL/NERC_Compliance_Monitoring_and_Enforcement_Manual_v3_0.pdf

⁴NERC Rules of Procedure, Section 1207 and 126 FERC 61,038, Paragraph 3

Company Profile

The New York Independent System Operator, Inc. (NYISO) was formed in 1997, and commenced operations in 1999 as a not-for-profit corporation regulated by the Federal Energy Regulatory Commission (FERC) and governed by a 10-member Board of Directors.

The NYISO has three areas associated with its NERC roles and responsibilities:

- (1) Operations, and Market Operations
- (2) Information Technology
- (3) System Resource and Planning

The NYISO operates the bulk power system contiguous with the New York State geographic boundary. Its Power Control Center (PCC) and administrative building is located at the Krey Corporate Center (KCC) in Rensselaer, N.Y.; its Alternate Control Center (ACC) is located in Schenectady, N.Y.

The NYISO's various authorities are expressly detailed in two Federal Energy Regulatory Commission approved tariffs, commonly called the Open Access Transmission Tariff and the Market Services Tariff. These tariffs are further supported by the Transmission Owner – NYISO Agreement and The NYISO Agreement.

The NYISO directs all bulk power transmission system activities relative to operations including continuous reliability analysis, resource commitment, real-time dispatch and voltage control. Some physical functions such as the adjustment of phase angle regulators or voltage control devices are carried out under direction of the NYISO by the eight transmission owner control rooms. The NYISO administers all electricity markets in New York, including Real time and Day-Ahead energy, six ancillary services, and provides auctions for financial transmission rights. The NYISO also provides short and long term comprehensive planning functions.

III. Compliance Audit Findings

Based on the results of this Compliance Audit, no findings of non-compliance were noted for the Reliability Standards and applicable Requirements in scope for this engagement.

IV. Recommendations and Positive Observations

Recommendations

The team identified and informed NYISO of two (2) recommendations. The specific details of each recommendation are described below.

1. General
To ensure that IROLs that depend on AVR status are correct, develop a process to verify status of critical AVRs.
2. COM-002-4
Modify the Communications Assessment process to ensure and document that Operating Instructions are assessed. Require a periodic management review and verification of shift supervisor assessments of operator communications.

V. Compliance Culture

The team performed an assessment of NYISO’s compliance culture in conjunction with the Compliance Audit process. The assessment was accomplished through a review of responses to the Internal Compliance Survey questionnaire and additional information that was gathered during interviews and observations. This included an assessment of factors that characterize vigorous and effective compliance programs including:

- Active engagement and leadership by senior management;
- Expedient turnaround of all audit material and data requests;
- Excellent preparation and cooperation by the NYISO Compliance Team, SMEs and Operators were exhibited both during the off-site audit documentation review process where there were multiple requests for additional information as well as during the on-site interviews and control center tours;
- Participation in Inherent Risk Assessments/Internal Control Evaluations;
- Overall, an excellent culture of compliance was observed.

Northeast Power Coordinating Council, Inc. (NPCC) Contact Information

Any questions regarding this Compliance Audit report can be directed to:

Northeast Power Coordinating Council, Inc. (NPCC)
1040 Avenue of the Americas
10th Floor
New York, NY 10018-3703

On behalf of Northeast Power Coordinating Council, Inc. (NPCC), this report was prepared and reviewed by:

Compliance Audit Team Lead	Date
Scott Nied	5/10/17
Management Representative	Date
John Muir	5/10/2017

Appendix 1

Compliance Audit Participants

Following is a list of all personnel from the team and NYISO who were directly involved during the meetings and interviews.

Role	Title	Entity
Compliance Audit Team Lead	Manager – Compliance Audits O&P	NPCC
Team Member	Manager – Compliance Audits	NPCC
Team Member	Auditor	NPCC
Team Member	Auditor	NPCC
Team Member	Auditor	NPCC
Team Member	Auditor in training	NPCC
Observer	Associate Compliance Engineer	NPCC
Observer	Compliance Assurance Manager	NERC

Title	Entity
Manager Reliability Compliance and Industry Affairs	NYISO
Reliability Senior Analyst	NYISO
Reliability Senior Engineer	NYISO
Director Grid Operations	NYISO
Chief System Operator	NYISO
Shift Supervisor	NYISO
System Operator	NYISO
System Operator	NYISO
Interchange/RTC/generation Operator	NYISO
Supervisor Grid Operations System Operator Training	NYISO
Manager Operations Engineering	NYISO
Supervisor Network Telecomm & Telemetry Services	NYISO