

Confidential Information (including Privileged and Critical Energy Infrastructure Information)  
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NORTHEAST POWER COORDINATING COUNCIL, INC.  
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# **Compliance Audit Report Public Version**

Public Service Company of New Hampshire  
(PSNH)  
NERC ID# NCR07203

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**Date of Audit: March 15-19, 2010**

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## Executive Summary

An on-site compliance audit of the Public Service Company of New Hampshire (PSNH), NERC ID # NCR07203 was conducted from March 15 to March 19, 2010. At the time of the audit, PSNH was registered for the DP, GO, GOP, LSE, TO, and TOP functions.

The audit team evaluated PSNH for compliance with thirty-three standards and their two hundred twenty requirements and sub-requirements in the 2010 NERC Compliance Monitoring and Enforcement Program (CMEP). The audit team reviewed the NERC Reliability Standards for the period from their previous audit date of June 26-27, 2007 to March 19, 2010. PSNH submitted information and documentation for the audit team's evaluation of compliance with the requirements. The audit team reviewed and evaluated all information provided by PSNH to assess compliance with standards applicable to PSNH at this time.

Based on the information and documentation provided by PSNH, the audit team found PSNH to be compliant with thirty-three standards and their two hundred eighteen applicable requirements and sub-requirements. The audit team determined that two requirements were not applicable to PSNH. The audit team identified zero Possible Alleged Violation(s).

Any Possible Alleged Violations will be processed through the NERC and NPCC CMEP.

There was one ongoing mitigation plan, and it will be reviewed by NPCC Compliance Enforcement staff. It was not reviewed by the audit team.

## Audit Process

The compliance audit process steps are detailed in the NPCC CMEP. The NPCC CMEP generally conforms to the United States Government Accountability Office Government Auditing Standards and other generally accepted audit practices.

### *Objectives*

All Registered Entities are subject to an audit for compliance with all reliability standards applicable to the functions for which the Registered Entity is registered.\* The audit objectives are to:

- Review compliance with the requirements of reliability standards that are applicable to PSNH, based on the functions that PSNH is registered to perform;

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\* North American Electric Reliability Corporation CMEP, paragraph 3.1, Compliance Audits

- Validate compliance with applicable reliability standards from the NERC 2010 Implementation Plan list of actively monitored standards and additional NERC Reliability Standards selected by NPCC;
- Validate compliance with applicable regional standards from the NPCC 2010 Implementation Plan list of actively monitored standards;
- Validate evidence of self-reported violations and previous self-certifications;
- Observe and document PSNH's compliance program and culture;
- Review the status of mitigation plans.

### ***Scope***

The scope of this on-site compliance audit included the NERC Reliability Standards from the NPCC 2010 Implementation Plan. In addition, this audit included any self-reports, self-certifications, outstanding mitigation plans or remedial action directives which have been completed or pending in the year of the compliance audit.

At the time of the audit, PSNH was registered for the DP, GO, GOP, LSE, TO, and TOP functions. The audit team evaluated PSNH for compliance during the period from June 27, 2007 to March 19, 2010.

### **Confidentiality and Conflict of Interest**

Confidentiality and conflict of interest of the audit team are governed under the NPCC Delegation Agreement with NERC and Section 1500 of the NERC Rules of Procedure. PSNH was informed of NPCC's obligations and responsibilities under the agreement and procedures. The work history for each audit team member was provided to PSNH. PSNH was given an opportunity to object to an audit team member's participation on the basis of a possible conflict of interest or the existence of other circumstances that could interfere with an audit team member's impartial performance of duties. PSNH had not submitted any objections by the stated fifteen day objection due date and accepted the audit team member participants without objection. There have been no denials of or access limitations placed upon this audit team by PSNH.

### ***Methodology***

The audit team reviewed the information, data, and evidence submitted by PSNH and assessed compliance with requirements of the applicable reliability standards. Submittal of information and data were sent to NPCC thirty days before the scheduled date of the entity review. Additional information relevant to the audit could be submitted until the conclusion of the exit briefing. After that date, only data or information which was relevant to the content of the report or its finding can be submitted upon agreement by the audit team lead.

The audit team requested and received additional information and sought clarification from subject matter experts during the audit.

The audit team reviewed documentation provided by PSNH. Data, information and evidence submitted in the form of policies, procedures, e-mails, logs, studies, data sheets, etc. which were

validated, substantiated and cross-checked for accuracy as appropriate. Requirements which required a sampling to be conducted were developed based upon the significance of the sampling to the reliability of the Bulk Electric System (BES).

Findings were based on the audit team's knowledge of the BES, the NERC Reliability Standards and their professional judgment. All findings were developed based upon the consensus of the audit team.

### ***Company Profile***

Northeast Utilities (NU) is the owner of Transmission and Distribution electric systems within the three-state region of Connecticut, New Hampshire and Western Massachusetts. Northeast Utilities is a Fortune 500 energy company, which operates New England's largest energy distribution system, serving more than 2 million electricity and natural gas customers. NU owns and operates one natural gas and three electric utility companies, the Connecticut Light and Power Company (CL&P), Western Massachusetts Electric Company (WMECO) and Public Service Company of New Hampshire (PSNH). Each electric utility owns transmission and distribution facilities in their respective states, and PSNH owns and operates regulated electric generating facilities in New Hampshire.

Northeast Utilities Services Company (NUSCO) is a subsidiary of Northeast Utilities that provides services to its operating companies, CL&P, WMECO, and PSNH.

PSNH normally peaks in the summer period.

PSNH's peak loads for 2006 – 2009 are:

2006	1,952	MW	08/02/06	HE	1300
2007	1,842	MW	08/03/07	HE	1500
2008	1,842	MW	6/10/08	HE	1600
2009	1,764	MW	8/18/09	HE	1400

PSNH as a Distribution Provider owns assets that are used for the delivery of energy which connect at 100 KV and above. The extent of ownership for assets connected at or above 100kv includes the step down transformer and the associated high voltage disconnect switch. At some locations where high voltage service is from a radial transmission line, high voltage line terminal equipment would also be owned by the Distribution Provider. At locations where both Transmission and Distribution assets reside, common facilities are owned by the Distribution Provider such as the yard, control house and batteries.

### ***Audit Participants***

The following is a listing of all personnel from the Audit Team and PSNH who were present during the meetings or interviews.

**Audit Team Participants**

<b>Title</b>	<b>Entity</b>
LEAD COMPLIANCE AUDITOR	NPCC
MANAGER - COMPLIANCE AUDITS	NPCC
COMPLIANCE AUDITOR	NPCC
COMPLIANCE AUDITOR	NPCC
COMPLIANCE AUDITOR	NPCC
COMPLIANCE AUDITOR	NPCC
COMPLIANCE AUDITOR	NPCC

**PSNH Audit Participants**

SENIOR COMPLIANCE SPECIALIST	NUSCO
MANAGER, RELIABILITY COMPLIANCE	NUSCO
MANAGER-TRANSMISSION CONSTRUCTION AND MAINTENANCE	PSNH
COMMUNICATIONS/CONTROL DEPT SUPERINTENDENT	PSNH
SYSTEM OPERATIONS SUPERVISOR-LEVEL 2	PSNH
MANAGER-TRANSMISSION ENGINEERING PSNH	PSNH
SUPERVISOR-TRANSMISSION VEGETATION MANAGEMENT	PSNH
SUPPLEMENTAL ENERGY SOURCES MANAGER	PSNH
SENIOR ADMINISTRATOR-OPERATING POLICIES & PROCS	PSNH
SUPERVISOR-ESCC OPERATIONS	PSNH
SYSTEM OPERATIONS MANAGER	PSNH
SUPERVISOR-ENGINEERING SERVICES	PSNH
SYSTEM OPERATIONS SUPERVISOR-LEVEL 2	PSNH
SENIOR ADMINISTRATOR-OPERATING POLICIES & PROCS	PSNH
SUPERVISOR-TRANSMISSION PROTECTION & CONTROLS (IO)	PSNH
SUPERVISOR-DISTRIBUTION PROTECTION & CONT ENGINEER	PSNH
SUPERVISOR-TRANSMISSION COMMUNICATION & CNTRL PSNH	PSNH

## Audit Results

The audit team evaluated PSNH for compliance with thirty-three standards and their two hundred twenty requirements and sub-requirements in the 2010 NERC Compliance Monitoring and Enforcement Program (CMEP). The audit reviewed NERC Reliability Standards for the period from June 27, 2007 to March 19, 2010. PSNH submitted information and documentation for the audit team's evaluation of compliance with requirements. The audit team reviewed and evaluated all information provided by PSNH to assess compliance with standards applicable to PSNH at this time.

Based on the information and documentation provided by PSNH, the audit team found PSNH to be compliant with thirty-three standards and their two hundred eighteen applicable requirements and sub-requirements. The audit team determined that two requirements were not applicable to PSNH. The audit team identified zero Possible Alleged Violation(s).

## Findings

The following table details the findings for compliance for the scope identified for this audit.

<b>Reliability Std</b>	<b>Req.</b>	<b>Finding</b>
COM-001-1.1	R1.	Compliant
COM-001-1.1	R1.1.	Compliant
COM-001-1.1	R1.2.	Compliant
COM-001-1.1	R1.3.	Compliant
COM-001-1.1	R1.4.	Compliant
COM-001-1.1	R5.	Compliant
COM-002-2	R1.	Compliant
COM-002-2	R1.1.	Compliant
COM-002-2	R2.	Compliant
CIP-001-1	R1.	Compliant
CIP-001-1	R2.	Compliant
CIP-001-1	R3.	Compliant
CIP-001-1	R4.	Compliant
EOP-002-2.1	R9.	Not Applicable
EOP-002-2.1	R9.1.	Compliant
EOP-003-1	R1.	Compliant
EOP-003-1	R2.	Compliant
EOP-003-1	R3.	Compliant
EOP-003-1	R4.	Compliant
EOP-003-1	R5.	Compliant
EOP-003-1	R6.	Compliant
EOP-003-1	R7.	Compliant
EOP-003-1	R8.	Compliant
EOP-005-1	R1.	Compliant
EOP-005-1	R2.	Compliant
EOP-005-1	R3.	Compliant

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EOP-005-1	R4.	Compliant
EOP-005-1	R5.	Compliant
EOP-005-1	R6.	Compliant
EOP-005-1	R7.	Compliant
EOP-005-1	R9.	Compliant
EOP-005-1	R11.	Compliant
EOP-005-1	R11.2.	Compliant
EOP-005-1	R11.4.	Compliant
EOP-005-1	R11.5.1.	Compliant
EOP-005-1	R11.5.2.	Compliant
EOP-005-1	R11.5.4.	Compliant
EOP-008-0	R1.	Compliant
EOP-008-0	R1.1.	Compliant
EOP-008-0	R1.2.	Compliant
EOP-008-0	R1.3.	Compliant
EOP-008-0	R1.4.	Compliant
EOP-008-0	R1.5.	Compliant
EOP-008-0	R1.6.	Compliant
EOP-008-0	R1.7.	Compliant
EOP-008-0	R1.8.	Compliant
FAC-001-0	R1.	Compliant
FAC-001-0	R1.1.	Compliant
FAC-001-0	R1.2.	Compliant
FAC-001-0	R1.3.	Compliant
FAC-001-0	R2.	Compliant
FAC-001-0	R2.1.	Compliant
FAC-001-0	R2.1.1.	Compliant
FAC-001-0	R2.1.2.	Compliant
FAC-001-0	R2.1.3.	Compliant
FAC-001-0	R2.1.4.	Compliant
FAC-001-0	R2.1.5.	Compliant
FAC-001-0	R2.1.6.	Compliant
FAC-001-0	R2.1.7.	Compliant
FAC-001-0	R2.1.8.	Compliant
FAC-001-0	R2.1.9.	Compliant
FAC-001-0	R2.1.10.	Compliant
FAC-001-0	R2.1.11.	Compliant
FAC-001-0	R2.1.12.	Compliant
FAC-001-0	R2.1.13.	Compliant
FAC-001-0	R2.1.14.	Compliant
FAC-001-0	R2.1.15.	Compliant
FAC-001-0	R2.1.16.	Compliant
FAC-001-0	R3.	Compliant
FAC-002-0	R1.4.	Compliant
FAC-002-0	R1.5.	Compliant
FAC-003-1	R1.	Compliant
FAC-003-1	R1.1.	Compliant
FAC-003-1	R1.2.	Compliant

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FAC-003-1	R1.2.1.	Compliant
FAC-003-1	R1.2.2.	Compliant
FAC-003-1	R1.2.2.1.	Compliant
FAC-003-1	R1.2.2.2.	Compliant
FAC-003-1	R1.3.	Compliant
FAC-003-1	R1.4.	Compliant
FAC-003-1	R1.5.	Compliant
FAC-003-1	R2.	Compliant
FAC-008-1	R1.	Compliant
FAC-008-1	R1.1.	Compliant
FAC-008-1	R1.2.	Compliant
FAC-008-1	R1.2.1.	Compliant
FAC-008-1	R1.2.2.	Compliant
FAC-008-1	R1.3.	Compliant
FAC-008-1	R1.3.1.	Compliant
FAC-008-1	R1.3.2.	Compliant
FAC-008-1	R1.3.3.	Compliant
FAC-008-1	R1.3.4.	Compliant
FAC-008-1	R1.3.5.	Compliant
FAC-008-1	R2.	Compliant
FAC-008-1	R3.	Compliant
FAC-009-1	R1.	Compliant
FAC-009-1	R2.	Compliant
IRO-001-1.1	R8.	Compliant
IRO-004-1	R3.	Compliant
IRO-004-1	R4.	Compliant
IRO-004-1	R7.	Compliant
IRO-005-2	R8.	Compliant
IRO-005-2	R12.	Compliant
IRO-005-2	R13.	Compliant
PER-001-0	R1.	Compliant
PER-002-0	R1.	Compliant
PER-002-0	R2.	Compliant
PER-002-0	R2.1.	Compliant
PER-002-0	R2.2.	Compliant
PER-002-0	R3.	Compliant
PER-002-0	R3.1.	Compliant
PER-002-0	R3.2.	Compliant
PER-002-0	R3.3.	Compliant
PER-002-0	R3.4.	Compliant
PER-002-0	R4.	Compliant
PER-003-0	R1.	Compliant
PER-003-0	R1.1.	Compliant
PER-003-0	R1.2.	Compliant
PRC-001-1	R1.	Compliant
PRC-001-1	R2.	Compliant
PRC-001-1	R2.1.	Compliant
PRC-001-1	R2.2.	Compliant

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PRC-001-1	R3.1.	Compliant
PRC-001-1	R3.2.	Compliant
PRC-001-1	R4.	Compliant
PRC-001-1	R5.	Compliant
PRC-001-1	R5.1.	Compliant
PRC-001-1	R5.2.	Compliant
PRC-001-1	R6.	Compliant
PRC-004-1	R1.	Compliant
PRC-004-1	R2.	Compliant
PRC-005-1	R1.	Compliant
PRC-005-1	R1.1.	Compliant
PRC-005-1	R1.2.	Compliant
PRC-005-1	R2.	Compliant
PRC-005-1	R2.1.	Compliant
PRC-005-1	R2.2.	Compliant
PRC-008-0	R1.	Compliant
PRC-008-0	R2.	Compliant
PRC-017-0	R1.	Compliant
PRC-017-0	R1.1.	Compliant
PRC-017-0	R1.1.1.	Compliant
PRC-017-0	R1.1.2.	Compliant
PRC-017-0	R1.1.3.	Compliant
PRC-017-0	R1.1.4.	Compliant
PRC-017-0	R1.2.	Compliant
PRC-017-0	R1.3.	Compliant
PRC-017-0	R1.4.	Compliant
PRC-017-0	R1.5.	Compliant
TOP-001-1	R1.	Compliant
TOP-001-1	R2.	Compliant
TOP-001-1	R3.	Compliant
TOP-001-1	R4.	Compliant
TOP-001-1	R5.	Compliant
TOP-001-1	R6.	Compliant
TOP-001-1	R7.	Compliant
TOP-001-1	R7.1.	Compliant
TOP-001-1	R7.2.	Compliant
TOP-001-1	R7.3.	Compliant
TOP-001-1	R8.	Compliant
TOP-002-2	R1.	Compliant
TOP-002-2	R2.	Compliant
TOP-002-2	R3.	Compliant
TOP-002-2	R4.	Compliant
TOP-002-2	R5.	Compliant
TOP-002-2	R6.	Compliant
TOP-002-2	R11.	Compliant
TOP-002-2	R13.	Compliant
TOP-002-2	R14.	Compliant
TOP-002-2	R14.1.	Compliant

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TOP-002-2	R14.2.	Not Applicable
TOP-002-2	R15.	Compliant
TOP-002-2	R16.	Compliant
TOP-002-2	R16.1.	Compliant
TOP-002-2	R16.2.	Compliant
TOP-002-2	R17.	Compliant
TOP-002-2	R18.	Compliant
TOP-002-2	R19.	Compliant
TOP-003-0	R1.	Compliant
TOP-003-0	R1.1.	Compliant
TOP-003-0	R1.2	Compliant
TOP-003-0	R1.3	Compliant
TOP-003-0	R2.	Compliant
TOP-003-0	R3.	Compliant
TOP-004-2	R1.	Compliant
TOP-004-2	R2.	Compliant
TOP-004-2	R4.	Compliant
TOP-004-2	R5.	Compliant
TOP-006-1	R2.	Compliant
TOP-006-1	R6.	Compliant
TOP-006-1	R7.	Compliant
TOP-007-0	R1.	Compliant
TOP-007-0	R2.	Compliant
TOP-007-0	R3.	Compliant
TOP-008-1	R1.	Compliant
TOP-008-1	R2.	Compliant
TOP-008-1	R3.	Compliant
VAR-001-1	R1.	Compliant
VAR-001-1	R2.	Compliant
VAR-001-1	R7.	Compliant
VAR-001-1	R8.	Compliant
VAR-001-1	R9.	Compliant
VAR-001-1	R9.1.	Compliant
VAR-001-1	R10.	Compliant
VAR-001-1	R12.	Compliant
VAR-002-1a	R1.	Compliant
VAR-002-1a	R2.	Compliant
VAR-002-1a	R2.1.	Compliant
VAR-002-1a	R2.2.	Compliant
VAR-002-1a	R3.	Compliant
VAR-002-1a	R3.1.	Compliant
VAR-002-1a	R3.2.	Compliant
VAR-002-1a	R4.	Compliant
VAR-002-1a	R4.1.	Compliant
VAR-002-1a	R4.1.1.	Compliant
VAR-002-1a	R4.1.2.	Compliant
VAR-002-1a	R4.1.3.	Compliant
VAR-002-1a	R4.1.4.	Compliant

VAR-002-1a	R5.	Compliant
VAR-002-1a	R5.1.	Compliant

### ***Compliance Culture***

PSNH's compliance culture was reviewed by the audit team. The corporate Compliance and Ethics Committee (C&EC) is responsible for overseeing all compliance activities within the NU organization. The C&EC is an executive-level committee chaired by the Secretary Chief Compliance Officer & Deputy General Counsel, which reports to the Northeast Utilities Board of Trustees.

The Vice President-Transmission Strategy & Operations has overall responsibility within the Northeast Utilities organization for compliance with NERC standards and is a member of the NU Compliance and Ethics Committee (C&EC). Specifically, the Reliability Compliance department oversees organizational compliance with NERC Standards. The Reliability Compliance department is in the NU Transmission Organization and is composed of a combination of analysts and engineers. In the Lead Auditor's opinion, NU has created an excellent compliance program to specifically address the reliability standards as they pertain to the registered functions of PSNH. In addition, all contact with NU/PSNH was very timely and professional in manner, and their commitment to compliance was evident to the audit team.

Additional information pertaining to the compliance culture of PSNH can be found in the Internal Compliance Survey.