



NORTHEAST POWER COORDINATING COUNCIL, INC.  
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# **Compliance Audit Report Public Version**

## **Central Maine Power Company CMP**

### **September 14 to September 17, 2009**

**Confidential Information (including Privileged and  
Critical Energy Infrastructure Information)  
Has Been Removed**

### **September 23, 2009**

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## Executive Summary

This final compliance audit report is the public version. Confidential information (including privileged and critical energy infrastructure information) has been redacted from this report. The full final compliance audit report was submitted to the audited entity and NERC.

The on-site compliance audit of Central Maine Power Company (CMP) NCR# 07029 was conducted between September 14 and September 17, 2009. The audit was completed using data submitted by CMP prior to the offsite audit being started, and data provided by way of follow-up emails and phone calls and as a result of questions raised during the interviews of their subject matter experts on-site. All evidence requested by the audit team was supplied before leaving the site.

The auditors evaluated CMP's compliance with twenty-nine reliability standards and one hundred thirty-two requirements and sub-requirements identified in the NERC 2009 Implementation Plan for the period of the last twelve months or monitoring timeframes specified in each, reliability standard. A sampling of past revisions of the current in force documents was done on-site to verify that appropriate documentation was in place for the entire audit period. If any anomalies are discovered in the samples then a full review would have been initiated.

The results of the audit were that of the twenty-nine standards and one hundred thirty-two requirements and sub-requirements audited for the functions CMP is registered for, all twenty-nine standards and one hundred twenty-four and sub-requirements were judged to be compliant. Eight requirements and sub-requirements were judged to be not applicable. The review of the sample of past revisions concluded that appropriate and adequate documentation existed for the entire audit period.

CMP staff provided an overview resulting in a more clear understanding of their business model and accelerated the audit process. The evidence provided to demonstrate compliance was extremely well presented and well organized. The auditors would like to thank the CMP audit preparation team for the support offered throughout the audit.

This audit report depicts all activities performed by the auditors during the audit. Some information discussed during the course of the audit is non-public. Any non-public information included in this report is listed in the Findings section, specifically in the Auditors Notes Summary in the table. This portion of the table will be redacted from the public posting version of this report.

### Audit Process

The compliance audit process steps are detailed in the NERC CMEP. The NERC 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 audit for compliance with all reliability standards applicable to the functions for which the registered entity is registered.<sup>1</sup> The audit objectives are:

- Independently review CMP compliance with the requirements of the reliability standards that are applicable to CMP based on the DP, TOP and TP functions CMP is registered for. Their other registered functions were audited off-site in 2007.
- Validate compliance with applicable reliability standards from the NERC 2009 Implementation Plan list of actively monitored standards.
- Validate evidence of self-reported violations and previous self-certifications, confirm compliance with other requirements of the reliability standard, and review the status of associated mitigation plans.
- Validate compliance with applicable Regional Standards from the NPCC 2009 Implementation Plan list of actively monitored standards.
- Document the CMP compliance culture.

## Scope

The audit included all standards identified in the June 10, 2009 audit letter. The audit was a regularly scheduled audit and no self reported violations and a compliance investigation was in the process of being finalized by NPCC Compliance and Enforcement staff.

## Confidentiality and Conflict of Interest

The audited entity was informed in advance of the audit that the independent contractors executed confidentiality agreements and code of conduct documentation was in place for the NERC representative and regional entity staff. Work history and conflict of interest forms submitted by each audit team member are on file in the NPCC corporate offices. The audited entity was given an opportunity to object to an audit team member on the basis of a possible conflict of interest or the existence of other circumstances that could interfere with the audit team member's impartial performance of duties. The audited entity accepted the audit team member participants with no objections.

## On-site Audit

CMP was provided with a pre-audit request letter identifying the standards and requirements subject to audit. The audit letter was sent to CMP more than 60 days in advance of the scheduled

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<sup>1</sup> North American Electric Reliability Corporation CMEP, paragraph 3.1, Compliance Audits

audit. This is an on-site audit conducted every three years or as determined to be necessary by the region. CMP had not self reported any violations.

CMP is registered for DP, TO, TOP, TP and TSP functions in NPCC.

The auditors requested interviews with CMP employees representing subject matter expertise regarding DP, TOP, and TP registered functions of CMP. These interviews in conjunction with the evidence submitted, provided the auditors with a basis for professional judgment when validating compliance with reliability standards.

## Methodology

The auditors prepared reliability standards auditor worksheets (QRSAs) to evaluate each standard. The QRSAs are used to ensure consistency and to document evidence of compliance or non-compliance with the standards. All relevant documents are considered and to the extent they form portion of the audit trail are included in the QRSAs.

## Audit Overview

The initial audit overview was conducted on September 14, 2009. The presentation was led by Sal Buffamante with the NPCC Audit Team and CMP staff in attendance. An explanation of the audit process was given and the timelines were discussed. CMP was given an opportunity to reject the auditors but accepted the auditors and their credentials for this audit.

## Audit

The audit was performed on-site by the NPCC audit team consisting of Kim Pitchell - Lead with Garth Arnott, John Brannan, Mike Calimano and Sal Buffamante assisting. Additional questions were provided to CMP by way of emails and phone calls prior to the audit and the CMP staff then took the time necessary to develop the answers and submitted them by way of email and phone calls to the auditors. On site interviews were conducted with subject matter experts and additional evidence was requested and was provided to the NPCC Audit team before leaving the site.

## Exit Presentation

The exit presentation was led by Sal Buffamante on September 17, 2009 and was attended by the NPCC Audit team and CMP staff. Sal Buffamante reviewed the audit process and summarized the preliminary findings of the audit.

The results of the audit were that of the twenty-nine standards and one hundred thirty-two requirements and sub-requirements audited for the functions CMP is registered for, all twenty-nine standards and one hundred twenty-four requirements and sub-requirements were judged to be compliant. Eight requirements and sub-requirements were judged to be not applicable. The

review of the sample of past revisions concluded that appropriate and adequate documentation existed for the entire audit period.

The Exit Presentation is also a forum for the audit team to offer informal suggestions for process improvement. The suggestions to CMP staff are included at the Exit Presentation.

### Company Profile

Central Maine Power Company (CMP) is a Local Control Center (LCC) in the ISO New England control area, which is part of the NPCC region.

In New England, the Independent System Operator of New England (ISO-NE) and the Local Control Centers, including CMP are registered as Transmission Operators (TOP). In addition, ISO-NE and the transmission owners in New England are both registered as Transmission Planners (TP) and Transmission Service Providers (TSP) for their respective areas. For TOP functions, the ISO-NE and LCCs have Master/Local Control Center (MLCC) Procedure #12 that identifies the responsible entity for the applicable NERC requirement for TP requirements, the ISO-NE and the New England transmission planners maintain the "ISO-TO Transmission Planning Coordination" document for coordinating TP requirements, and for TSP functions, the ISO-NE and the New England transmission service providers maintain the "TSP Requirements April 1-2009" document.

Central Maine Power Company is an investor-owned electric utility with an 11,000 square mile service territory in southern and central Maine. CMP provides electric energy to over 600,000 customers and operates a transmission grid with over 1,600 miles of 345 kV and 115 kV transmission lines.

The CMP transmission system interconnects with Bangor Hydroelectric Company through 1-345 kV line and 2-115 kV lines. The CMP transmission system also interconnects with the Public Service Company of New Hampshire (PSNH) through 2-345 kV lines and 3-115 kV lines.

The Maine Local Control Center interconnects with New Hampshire with three 115kV ties and two 345kV ties (as noted above). The Maine LCC interconnects with New Brunswick with two 345kV ties via Bangor Hydroelectric Company (BHE) and Maine Electric Power Company (MEPCO) facilities

CMP's peak load is 1,682 MW. CMP's load normally peaks in the summer.

CMP serves a customer load of 1,682 MW through 1,049 miles of 34kV sub-transmission lines and 23,585 miles of distribution lines

CMP does not own any generators.

Audit Specifics

The compliance audit was conducted on-site between September 14 and September 17, 2009.

NPCC Audit Team Role	Title	Company
Lead	Contracted Consultant	NPCC-Compliance Audit Program
Auditor	Contracted Consultant	NPCC-Compliance Audit Program
Auditor	Contracted Consultant	NPCC-Compliance Audit Program
Auditor	Contracted Consultant	NPCC-Compliance Audit Program
Regional staff	Manager Compliance	NPCC-Compliance Audit Program

CMP.

Name and Title	Audited Entity's Organization
President and CEO	CMP
Vice President - Operations	
Manager – Dispatch & Energy Control Center	
Supervisor - Dispatch & Energy Control Center	
Supervisor - Dispatch & Energy Control Center	
Analyst – System Dispatch	
Lead Analyst - Dispatch & Energy Control Center	
Lead Analyst - Dispatch & Energy Control Center	
Manager – Transmission Planning	
Engineer – System Planning	
Engineer – System Planning	
Manager – Electric System Engineering	
Associate Engineer – Electric Maintenance Engineering	
Associate Engineer – Electric Maintenance Engineering	
Supervisor - Dispatch & Energy Control Center	
Director – Property Management & Security	
Associate Advisor - Training	
Administrative Assistant	

Name and Title	Audited Entity's Organization

## Audit Results

The auditors evaluated CMP's compliance with twenty-nine reliability standards and one hundred thirty-two requirements and sub-requirements identified in the NERC 2009 Implementation Plan for the period of the last twelve months or monitoring timeframes specified in each, reliability standard. A sampling of past revisions of the current in force documents was done to verify that appropriate documentation was in place for the entire audit period.

The results of the audit were that of the twenty-nine standards and one hundred thirty-two requirements and sub-requirements audited for the functions CMP is registered for, all thirty standards and one hundred twenty-four requirements and sub-requirements were judged to be compliant. Eight requirements and sub-requirements were judged to be not applicable. The review of the sample of past revisions concluded that appropriate and adequate documentation existed for the entire audit period. The review of the sample of past revisions concluded that appropriate and adequate documentation existed for the entire audit period.

CMP provided an overview resulting in a more clear understanding of their business model and accelerated the audit process. The evidence provided to demonstrate compliance was extremely well presented and well organized. The auditors would like to thank the CMP audit preparation team for the support offered through the audit.

## Findings

The following table details the summarized auditor notes relating to evidence reviewed for compliance with the reliability standards listed in the NERC 2009 Implementation Plan. This table can also include details summarizing auditor notes relating to evidence reviewed for reliability standard requirements for self-reported violations, ongoing mitigation plans, and other discussions.

This audit report depicts all activities performed by the audit team during the audit. Some information discussed during the course of the audit is non-public. Any non-public information included in this report is listed in the Findings section, specifically in the Auditors Notes Summary in the table. This portion of the table will be redacted from the public posting version of this report.

CMP.

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<b>Reliability Standard</b>	<b>Requirement</b>	<b>Finding</b>
COM-001-1	R1	Compliant
COM-001-1	R1.1	Compliant
COM-001-1	R1.2	Compliant
COM-001-1	R1	Compliant
COM-002-2	R1	Compliant
CIP-001-1	R1	Compliant
CIP-001-1	R2	Compliant
CIP-001-1	R3	Compliant
CIP-001-1	R4	Compliant
EOP-001-0	R2	Compliant
EOP-001-0	R3	Compliant
EOP-001-0	R3.1	Compliant
EOP-001-0	R3.2	Compliant
EOP-001-0	R3.3	Compliant
EOP-001-0	R3.4	Compliant
EOP-001-0	R4	Compliant
EOP-001-0	R4.1	Compliant
EOP-001-0	R4.2	Compliant
EOP-001-0	R4.3	Compliant
EOP-001-0	R4.4	Compliant
EOP-001-0	R5	Compliant
EOP-001-0	R6	Compliant
EOP-001-0	R7	Compliant
EOP-001-0	R7.1	Compliant
EOP-001-0	R7.2	Not Applicable
EOP-001-0	R7.3	Not Applicable
EOP-001-0	R7.4	Not Applicable
EOP-003-1	R1	Compliant
EOP-003-1	R2	Compliant
EOP-003-1	R3	Not Applicable
EOP-003-1	R4	Not Applicable
EOP-003-1	R5	Compliant
EOP-003-1	R6	Compliant
EOP-003-1	R7	Not Applicable
EOP-003-1	R8	Compliant
EOP-005-1	R1	Compliant
EOP-005-1	R2	Compliant
EOP-005-1	R3	Compliant
EOP-005-1	R4	Not Applicable
EOP-005-1	R5	Compliant

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<b>Reliability Standard</b>	<b>Requirement</b>	<b>Finding</b>
EOP-005-1	R6	Compliant
EOP-005-1	R7	Compliant
EOP-005-1	R8	Not Applicable
EOP-005-1	R9	Compliant
EOP-005-1	R10	Not Applicable
EOP-005-1	R11	Compliant
EOP-005-1	R11.2	Compliant
EOP-005-1	R11.4	Not Applicable
EOP-005-1	R11.5.1	Not Applicable
EOP-005-1	R11.5.2	Not Applicable
EOP-005-1	R11.5.4	Not Applicable
EOP-008-0	R1	Compliant
EOP-008-0	R1.1	Compliant
EOP-008-0	R1.2	Not Applicable
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-014-1	R5	Compliant
IRO-001-1	R8.	Compliant
IRO-004-1	R3	Compliant
IRO-004-1	R4.	Compliant
IRO-004-1	R7.	Compliant
IRO-005-1	R8	Compliant
IRO-005-1	R13.	Compliant
PER-001-0	R1	Compliant
PER-002-0	R1	Compliant
PER-002-0	R2	Compliant
PER-002-0	R3	Compliant
PER-002-0	R4	Compliant
PER-003-0	R1	Compliant
PRC-001-1	R1	Compliant
PRC-001-1	R2	Compliant
PRC-001-1	R3	Compliant
PRC-001-1	R4	Compliant
PRC-001-1	R5	Compliant
PRC-001-1	R6	Compliant
PRC-004-1	R1.	Compliant

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<b>Reliability Standard</b>	<b>Requirement</b>	<b>Finding</b>
PRC-004-1	R3	Compliant
PRC-005-1	R1.	Compliant
PRC-005-1	R2.	Compliant
PRC-008-0	R1.	Compliant
PRC-008-0	R2.	Compliant
PRC-017-0	R1.	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	Not Applicable
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	R4	Compliant
TOP-002-2	R10	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-004-1	R1	Compliant
TOP-004-1	R2	Compliant
TOP-004-1	R3	Compliant
TOP-004-1	R4	Compliant
TOP-004-1	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-007-0	R4	Not Applicable
TOP-008-1	R1	Compliant
TOP-008-1	R2	Compliant

<b>Reliability Standard</b>	<b>Requirement</b>	<b>Finding</b>
TOP-008-1	R3	Compliant
TPL-001-0	R1	Compliant
TPL-002-0	R1	Compliant
TPL-003-0	R1	Compliant
VAR-001-1	R1	Compliant
VAR-001-1	R2	Not Applicable
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

### Compliance Culture

The audit team reviewed CMP's compliance culture. The regional entity compliance staff may review additional aspects of CMP's compliance culture. During all contact, CMP and the CMP staff were professional in their approach to compliance.

It is the NPCC audit team's opinion that CMP takes compliance very seriously and understands the overall goal of the compliance program; namely to strive for a more reliable interconnected bulk power system.

NPCC thanks the CMP audit preparation team for providing exceptional documentation, flexibility and cooperation throughout the audit process and to the subject matter experts present throughout the process for their time, openness and knowledge.