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Compliance Audit Report Public Version

Taunton Municipal Lighting Plant

April 8 to April 10, 2008

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

April 18/08

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Executive Summary

This final compliance audit report is the public version. Confidential information has been redacted from this report. The full final compliance audit report was submitted to the audited entity and NERC.

The onsite compliance audit of Taunton Municipal Lighting Plant (TMLP) was conducted between April 8 and April 10, 2008. The audit was completed using data submitted by TMLP prior to the audit team arriving at the site, material provided at both the TMPL offices and power plant and data provided as a result of questions raised during the audit.

The audit team evaluated TMLP's compliance with twenty five reliability standards identified in the NERC 2008 Implementation Plan for the period of the last twelve months or monitoring timeframes specified in each, reliability standard. Of the twenty five standards audited, 15 were judged to be compliant and 10 were judged to be not applicable. TMLP provided subject matter experts for each standard resulting in a more clear understanding of the TMLP business model and accelerated the audit process. The evidence provided to demonstrate compliance was complete and well organized. The audit team would like to thank the TMLP audit preparation team for the support offered through the audit.

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.¹ The audit objectives are:

- Independently review TMLP compliance with the requirements of the reliability standards that are applicable to TMLP based on the TMLP registered functions.
- Validate compliance with applicable reliability standards from the NERC 2008 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.
- Document the TMLP compliance culture.

¹ North American Electric Reliability Corporation CMEP, paragraph 3.1, Compliance Audits

Scope

The audit included all 2008 monitored standards identified in the January 17, 2008 audit letter dating back to the previous year. The audit was a regularly scheduled audit and no self reported violations or compliance investigations were involved.

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

TMLP was provided with a pre-audit request letter identifying the standards and requirements subject to audit. The audit letter was sent to TMLP more than 60 days in advance of the scheduled audit. This is an on-site audit conducted every three years or as determined to be necessary by the region. As a result of changes to TMLP registration that removed the TOP function the next audit will be on an off-site six year cycle. TMLP had not self reported any violations

The audit team leader requested interviews with TMLP employees representing subject matter expertise regarding all of registered functions of TMLP. These interviews in conjunction with evidence provide the audit team with a basis for professional judgment when validating compliance with reliability standards.

Methodology

The audit team prepared reliability standards auditor worksheets (RSAWs) to evaluate each standard. The RSAW's 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 RSAW's.

Audit Overview

The audit overview was conducted at 9:00 AM April 8, 2008 at the TMLP offices. The audit team reviewed the proposed audit schedule to insure appropriate TMLP staff was available to resolve questions as they arose. There were no changes to the schedule. Each audit team member reviewed his or her career and noted they had signed confidentiality agreements. A brief

explanation of the audit process was given and the timelines were discussed. TMLP was given the opportunity to reject any auditor should they feel that there was a possible conflict of interest or they thought the auditor would not be impartial. TMLP accepted the audit team.

Audit

Prior to arrival at the site Garth Arnott as the lead auditor, assigned standards to each of the audit team members. Each member, prior to arriving at the site, reviewed all data submitted for the standards assigned to them and produced a set of questions that required subject matter experts responses. That team member then lead the on-site questioning and produced the RSAW for the standard. All other team members participated in the question process. Some questions were resolved using the data provided and others were answered by follow up emails.

Exit Briefing

The exit briefing was conducted at the TMLP offices on April 10/08. The entire team of both the NPCC auditors and TMLP staff attended. An audit presentation summarized the results of the audit, TMLP was given an opportunity to provide feedback on the audit and commented it was a positive experience. The results of the audit were not complete at the time of the briefing as some further evidence was being retrieved. TMLP had two key employees who had lead protection systems responsibilities unavailable due to illness so document turnaround was slowed.

Company Profile

The Taunton Municipal Lighting Plant ("TMLP") is a Massachusetts municipal electric utility owned by the City of Taunton. The TMLP is governed under the Massachusetts General Laws and an elected board of three Commissioners.

TMLP is staffed by 165 employees working in the Customer Care, Transmission & Distribution Department (Line, Metering, Vehicle Maintenance, Storeroom, and Engineering), Production Department (Engineering, Operations, Electrical, Mechanical and I&C Maintenance, and the Lab), Energy Supply and Planning Department, and the Main Office (Accounting, Purchasing, Accounts Payable, Human Resources, and Public Relations).

The TMLP serves the 35,000 electric customers in the city of Taunton, the towns of Raynham and Berkley, and a portion of the towns of North Dighton and Lakeville, in Bristol County, Massachusetts. TMLP's service territory is 100 square miles. TMLP's peak load of 174.36 MW occurred Wednesday August 2, 2006 at 2:00 PM. The system peak for 2007 was 158.01 MW and occurred on Wednesday June 27, 2007 at 3:00 PM. TMLP normally experiences its peak load during the summer.

TMLP owns and operates a two-unit generating station located in Taunton, the Cleary-Flood Station. One unit is a 26 MW oil-fired steam generator ("Unit No. 8"). The second unit is a 110 MW dual-fueled (oil and natural gas) combined cycle unit ("Unit No. 9"). Both units are under

the dispatch of ISO New England. Additionally TMLP is a joint-owner in the Seabrook Station located in Seabrook, New Hampshire. Seabrook is a nuclear generator of which TMLP owns 0.10034% approximately 1.17MW.

TMLP owns over 530 miles of distribution lines, 55 miles of underground distribution lines, 6,500 transformers, 4 – 115-13.8/7.97 kV substations, 7,000 street & floodlights, 11- 13.8-4.16kv substations, 7.23 circuit miles of 115kV transmission lines and 115 miles of fiber optic cable. The TMLP has two 115KV interconnections with National Grid (New England Power Company); the Berkley Street Switching Station and also on South Street West at Substation #20. TMLP is not connected to the Bulk Power System. The TMLP owns a six bay ring bus operated at 115KV at our Cleary-Flood Station. TMLP owns two 115KV lines serving TMLP load that go to Substation #16 and Substation #18.

Audit Specifics

The compliance audit was conducted on April 8 to April, 2008 at TMLP’s offices in Taunton Massachusetts.

Audit Team Role	Name	Title	Company
Lead	Garth Arnott	Contracted Consultant	NPCC-Compliance Audit Program
Member	Sal Buffamante	Manager Compliance Audit Program	NPCC-Compliance Audit Program
Auditor	Kim Pitchell	Contracted Consultant	NPCC-Compliance Audit Program
Auditor	John Brannan	Contracted Consultant	NPCC-Compliance Audit Program
Observer	Rosanna Jimenez	Regional Representative	NERC

TMLP

Name	Title	Company
Kim Meulenaere	Compliance Manager	TMLP
Tom Zagorski	Distribution Manager	TMLP
Bill Nickerson	Operations Manager	TMLP
Mike Horrigan	General Manager	TMLP
Dave Cordeiro	Chief Engineer	TMLP
Chester Stankirwicz	Electric Station Operator	TMLP
Brian Evans-Mongeon	Consultant	Utility Services

Audit Results

Prior to arrival at the site Garth Arnott as the lead auditor, assigned standards to each of the audit team members. Each member, prior to arriving at the site, reviewed all data submitted for the standards assigned to them and produced a set of questions that required subject matter experts responses. That team member then lead the on-site questioning and produced the RSAW for the standard. All other team members participated in the question process. At times the documentation initially provided did not provide sufficient detail and some additional evidence was requested. Evidence was provided using the data provided and others were answered by follow up emails.

All procedures and documentation was reviewed, when current procedures had been revised during the term of the audit, previous versions were used to consider compliance. The Electric System Operators control room was visited and the operator was interviewed to insure procedures and training was reaching the control room.

After reviewing all the data TMLP was judged to be compliant with fifteen standards and ten were judged to be not applicable.

Findings

The following table details the summarized auditor notes relating to evidence reviewed for compliance with the reliability standards listed in the NERC 2008 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.

Reliability Standard	Requirement	Finding
BAL-005-0	R1.	Compliant
CIP-001-1	R1.	Compliant
CIP-001-1	R2.	Compliant
CIP-001-1	R3.	Compliant
CIP-001-1	R4.	Compliant
COM-002-2	R1.	Compliant
EOP-002-2	R9.	N/A
EOP-004-1	R2.	Compliant
EOP-004-1	R3.	Compliant
EOP-009-0	R1.	Compliant
EOP-009-0	R2.	Compliant
FAC-003-1	R1.	N/A
FAC-003-1	R2.	N/A
FAC-003-1	R3.	N/A
FAC-008-1	R1.	N/A
FAC-008-1	R2.	N/A
FAC-008-1	R3.	N/A
FAC-009-1	R1.	N/A

FAC-009-1	R2.	N/A
INT-001-2	R1.	Compliant
INT-004-1	R1.	N/A
INT-004-1	R2.	N/A
IRO-001-1	R8.	Compliant
IRO-004-1	R4.	Compliant
PRC-004-1	R1.	N/A
PRC-004-1	R2.	Compliant
PRC-004-1	R3.	N/A
PRC-005-1	R1.	Compliant
PRC-005-1	R2.	N/A
PRC-008-0	R1.	Compliant
PRC-008-0	R2.	Compliant
PRC-010-0	R1.	N/A
PRC-010-0	R2.	N/A
PRC-011-0	R1.	N/A
PRC-011-0	R2.	N/A
PRC-016-0	R1.	N/A
PRC-016-0	R2.	N/A
PRC-016-0	R3.	N/A
PRC-017-0	R1.	N/A
PRC-017-0	R2.	N/A
PRC-021-1	R1.	N/A
PRC-021-1	R2.	N/A
TOP-002-2	R3.	Compliant
TOP-002-2	R13.	Compliant
TOP-002-2	R14.	Compliant
TOP-002-2	R15.	Compliant
TOP-002-2	R18.	Compliant
TOP-003-0	R1.	Compliant
TOP-003-0	R2.	N/A
TOP-003-0	R3.	N/A
VAR-001-1	R5.	Compliant
VAR-002-1	R1.	N/A
VAR-002-1	R2.	Compliant
VAR-002-1	R3.	N/A
VAR-002-1	R4.	N/A
VAR-002-1	R5.	N/A

Compliance Culture

The audit team reviewed TMLP's compliance culture. The regional entity compliance staff may review additional aspects of TMLP's compliance culture. During all contacts TMLP staff was professional in their approach to compliance and understood the importance of the compliance and its role in maintaining reliability.