Southwest Power Pool
Regional Entity

Compliance Audit Report

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

City Utilities of Springfield, Missouri

Audit
May 13-15, 2008

May 23, 2008

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Executive Summary

This report will be sent to the City Utilities, Springfield, Missouri (SPRM) and to NERC after any Possible Alleged Violations have been processed through the Southwest Power Pool Regional Entity's (SPP RE) 2008 Compliance Monitoring and Enforcement Program.

SPRM was scheduled for an on-site audit in 2008 as part of the NERC Compliance Monitoring and Enforcement Program (CMEP). The CMEP requires all Balancing Authorities (BAs) and Transmission Operators (TOPs) to be audited on-site every three years. SPP RE audit team arrived and reviewed 34 NERC Standards with the SPRM staff. The audit team reviewed the company evidence for each requirement in the standards with SPRM subject matter experts. SPRM provided evidence to support their compliance with the standards. SPP RE staff also reviewed 5 standards at the SPP RE office. These 5 standards concern information that was collected at Southwest Power Pool (SPP) or performed by SPP staff for the Region (Control Performance Standard, Disturbance Control Standard, Data submission, Transmission planning, etc.).

After reviewing all of the evidence presented, SPRM was found to be compliant with all 39 of the NERC standards reviewed.

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 the company's compliance with the requirements of the NERC and regional reliability standards that are applicable to the company based on the company's registered functions.
- Validate compliance with applicable reliability standards from the NERC 2008 Implementation Plan list of actively monitored standards.
- Review self-reported violations and previous self-certifications, confirm compliance with other requirements of the reliability standard, and review the status of associated mitigation plans.

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

- Validate coordination with neighboring BAs, TOPs, and the Reliability Coordinator.
- Document the company's compliance culture.

Scope

The compliance on-site audit includes all reliability standards applicable to the Registered Entity monitored in the NERC Implementation Plans in the current and two previous years, and may include other reliability standards applicable to the Registered Entity. Some periodically monitored standards were reviewed at the SPP RE office. The results of the off-site reviews are included in the audit report.

There are 62 NERC standards in the 2008 Monitored Compliance Program. The audit team reviewed 34 standards on site along with SPP RE staff reviewing 5 standards at their office before the audit. There were 15 standards covering functions not performed by SPRM that were not applicable to the company. Eight CIP standards will be reviewed by NERC self certification this summer.

The audit included questionnaires from the neighboring Balancing Authorities, Transmission Operators, and the Reliability Coordinator. Any indentified issues found in the neighboring and Reliability Coordinator questionnaires were addressed during the audit.

If a company has an outstanding mitigation plan or has just completed a mitigation plan, the progress or completion of the plan was validated on–site by the audit team. SPRM did not have any outstanding mitigations plans.

This audit report includes the findings from the on-site and off-site review of the company's evidence.

Confidentiality and Conflict of Interest

Confidentiality agreements executed by the independent contractors and code of conduct documentation for the NERC representative and SPP Regional Entity staff were provided to the SPP RE and the audited entity in advance of the audit. The work history of each audit team member was provided to SPP RE and the company. The company 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. SPRM accepted the final audit team member participants with no objections. SPP RE found no conflict of interest for any of the audit team members.

On-site Audit

The on-site audit is part of the NERC Compliance Monitoring and Enforcement Program (CMEP). Every Transmission Operator (TOP) and Balancing Authority (BA) registered in the NERC Functional Registration Data Base is required to have an on-site audit once every three years. The on-site audit covers the 2008 NERC monitored standards, any Regional standards identified and possible other NERC standards listed in the pre-audit information. Companies on the 2008 on-site audit list were notified in the fall of 2007 about their upcoming audit and scheduled for the audit. Sixty days in advance, a letter explaining the audit was sent to the company. SPP RE sent the company a request for data and documents to complete. The pre-audit material included the audit team members, audit agenda, standards to be reviewed on-site, a pre-audit survey, the standards questionnaires, and the option to reject any audit team member. The pre-audit material received from the company provided the audit team an explanation of how the company operates for the functions they are registered.

The standards and supporting evidence to show compliance with the standards were reviewed with the company. The audit team received evidence supporting compliance with each requirement of the audited standards. Evidence included summary reports, company procedures, processes, work schedules, training schedules, on-line tools, data bases, and other sources. Information gathered from neighboring Balancing Authorities, Transmission Operators, and the Reliability Coordinator was considered during the review of evidence. The audit team reviewed the evidence for each standard and requirement with the company's subject matter experts. This process enabled the team to get immediate answers to questions that arose. This process also exposed other company staff to the audit process which helped solidify why a company follows certain procedures and processes. Any self-reported violations or open mitigation plans were reviewed by the audit team. The audit team used the evidence, the discussions with the company subject matter experts along with their professional judgment to decide on the recommended findings for the report.

On the final day, the lead auditor presented the findings of the audit to the company staff. SPRM brought in several staff members for the presentation. The presentation covered the findings for the standards reviewed on on-site and off-site. The final report process was explained along with the security of the audit information. SPRM was informed that the public report will be posted on the NERC and SPP RE websites after all due processes are complete. SPRM was also notified that a post-audit questionnaire will be provided for them to make any comments about the audit or audit team. There was a question and answer session after the presentation. The lead auditor answered all the questions and thanked SPRM for their hospitality.

Methodology

The audit team reviewed the evidence supplied by the company for each requirement of all NERC standards that apply to the functions performed by the company to determine if the company complied with that requirement. The company would be found to be noncompliant with requirements where compliance cannot be confirmed.

SPRM provided the board room for the audit. The audit team members completed individual assignments during the audit process. SPRM brought in its subject matter experts as the team worked through the standards. The subject matter experts explained the evidence and answered all questions the team asked. SPRM presented most of their evidence on an overhead projection screen. They also provided additional hard copies of the material for the team to review. The overhead presentation was very useful for all of the team to review the evidence at one time.

The audit team toured the control room and verified the information that was presented as evidence in the preceding days. The team was able to see live screens and ask several questions about SPRM processes and procedures. The tour confirmed the information learned during the audit.

The audit team met privately after being presented the evidence from the company. The team reviewed each requirement and discussed the levels of compliance and addressed each team member's notes from the audit. The audit team decided on the findings to present to the company and the SPP RE. The audit team developed the closing presentation of audit findings. The lead auditor gave the presentation to the SPRM staff and answered all their questions.

Audit Overview

The audit team met with the SPRM representative on the first morning of the audit. The audit process was discussed to verify if any changes to the agenda were warranted. There were no changes identified by either party.

Audit

The SPRM audit was performed as planned. The agenda was followed with only minor staff adjustments.

Exit Briefing

The audit team gave an exit presentation for the SPRM staff. The team lead auditor explained the findings from the audit. The presentation was attended by SPRM staff that participated in the audit and other staff. The presentation was open for comments and discussion about the findings. The exit presentation also covered any possible violations and mitigation requirements. SPRM was informed that they will receive an audit evaluation to complete and return to NERC.

The audit team used the exit presentation to help verify that the information presented is correct.

Company Profile

SPRM performs the following NERC functions and is registered with NERC/SPP RE for these functions:

- Transmission Operator
- Transmission Owner
- Transmission Planner
- Generator Operator
- Generator Owner
- Resource Planner
- Load Serving Entity
- Distribution Provider

SPRM is a municipally-owned provider of electric, natural gas, water, telecommunications, and transit services to a 320 square mile area in and around Springfield, Missouri. City Utilities is responsible for the generation, transmission and distribution of electric power.

City Utilities has two interconnection points on the 345 kV line from Morgan—Brookline—Flint Creek—both at Brookline Substation. City Utilities is a joint owner in this transmission line. City Utilities owns and maintains 44.2 miles of this 345 kV transmission line. Associated Electric Cooperative, Inc. (AECI) is the operating agent for this line.

City Utilities owns and operates a 161 kV transmission network, which forms a loop around its service territory. The 161 kV transmission system is composed of 74 miles of overhead lines and 12 substations. The 161 kV transmission network has six interconnection points; three with Southwestern Power Administration (SWPA), one with AECI, one with Sho-Me Power Electric Cooperative, and one with KAMO Electric Cooperative.

A network of 69 kV transmission lines connect to 26 distribution substations, which step down the voltage to 13.2 kV from which our customers are served. The 69 kV transmission system consists of 90 miles of overhead conductors. SPRM has four interconnection points on the 69 kV system; three with SWPA, and one with Empire District Electric Company.

SPRM's is a summer peaking system with a peak of 802 MW. SPRM has a total generation capacity of 824 MW. It has 450 MW of coal, 359 MW of gas, 12 MW of fuel oil, and 3 MW of landfill gas generation. It also has 101 MW of long term purchased power.

SPP is the Reliability Coordinator for SPRM. Southwest Power Administration participates in the SPP reserve sharing group on the behalf of SPRM. SPRM uses SPP as the transmission provider for its transmission system.

SPRM directly performs the other functions for which it is responsible.

Audit Specifics

The compliance audit was conducted on May 13-15, 2008 at the SPRM office in Springfield, Missouri.

Audit Team

Audit Team Role	Name	Title	Company
Lead	Kevin Goolsby, P.E.	SPP RE, Lead Engineer	SPP RE
Member	Shon Austin	SPP RE, Specialist II	SPP RE
Member	Paul Reber	SPP RE Contractor	SPP RE
Member	Brian Monger	SPP RE Contractor	SPP RE
Observer	Roger Lampila	Regional Coordinator	NERC
Observer	Mark Vastano	Regional Coordinator	NERC
Observer	James Williams	SPP RE, Lead Compliance Specialist	SPP RE

SPRM Audit Participants

Title	Organization
General Manager	SPRM
Associate General Manager – Administration	SPRM
Associate General Manager – Operations	SPRM
Associate General Manager – General Counsel	SPRM
Associate General Manager – Electric Supply	SPRM
Manager – Reliability Compliance	SPRM
Director-Power System Control	SPRM
Manager-Telecommunications	SPRM
Manager-Security	SPRM
Assistant Manager-T&D-Substations	SPRM
Supervisor-Substation Engineering	SPRM
General Supervisor-Substation Operations	SPRM

Title	Organization
Manager-Electric T&D	SPRM
Supervisor-Tree Management	SPRM
Assistant Manager-Electric T&D	SPRM
Manager-Power Station Operations	SPRM
Supervisor-Power Station Maintenance	SPRM
Supervisor-Power Station Operations	SPRM
Manager-Power Station Operations	SPRM
Supervisor-Power Station Operations	SPRM
Assistant Manager-IT Security	SPRM
Director-Transmission Planning	SPRM
Supervisor-Telecom Services	SPRM
Engineer-Electric Systems	SPRM

Audit Results

SPRM did not have any violations or mitigation plans open for review during this audit. After reviewing the evidence presented to the audit team, SPRM is found to be compliant with all applicable standards reviewed.

Senior management attended the opening presentation and the audit findings presentation. SPRM was prepared for the audit and presented its documentation in a complete and concise manner. SPRM expert personnel from each area of expertise presented the material supporting its compliance to the standard requirements for their area. They showed that they are in compliance with the NERC standards and are working to improve their processes and procedures to insure that they continue to remain compliant. SPRM staff is committed to compliance.

Findings

SPRM On-site Audit Findings

*N/A – Not Applicable
PAV – Possible Alleged Violation

Reliability Standard	Requirement	Finding
BAL-001-0	R1.	N/A
BAL-001-0	R2.	N/A
BAL-001-0	R3.	N/A
BAL-001-0	R4.	N/A
BAL-002-0	R1.	N/A
BAL-002-0	R2.	N/A
BAL-002-0	R3.	N/A
BAL-002-0	R4.	N/A
BAL-002-0	R5.	N/A
BAL-002-0	R6.	N/A
BAL-003-0	R1.	N/A
BAL-003-0	R2.	N/A
BAL-003-0	R3.	N/A
BAL-003-0	R4.	N/A
BAL-003-0	R5.	N/A
BAL-003-0	R6.	N/A
BAL-004-0	R1.	N/A
BAL-004-0	R2.	N/A
BAL-004-0	R3.	N/A
BAL-004-0	R4.	N/A
BAL-005-0	R1.	Compliant
BAL-005-0	R2.	N/A
BAL-005-0	R3.	N/A
BAL-005-0	R4.	N/A
BAL-005-0	R5.	N/A
BAL-005-0	R6.	N/A
BAL-005-0	R7.	N/A
BAL-005-0	R8.	N/A
BAL-005-0	R9.	N/A
BAL-005-0	R10.	N/A
BAL-005-0	R11.	N/A
BAL-005-0	R12.	N/A

Reliability Standard	Requirement	Finding
BAL-005-0	R13.	N/A
BAL-005-0	R14.	N/A
BAL-005-0	R15.	N/A
BAL-005-0	R16.	N/A
BAL-005-0	R17.	N/A
BAL-006-1	R1.	N/A
BAL-006-1	R2.	N/A
BAL-006-1	R3.	N/A
BAL-006-1	R4.	N/A
BAL-006-1	R5.	N/A
CIP-001-1	R1.	Compliant
CIP-001-1	R2.	Compliant
CIP-001-1	R3.	Compliant
CIP-001-1	R4.	Compliant
COM-001-1	R1.	Compliant
COM-001-1	R2.	Compliant
COM-001-1	R3.	Compliant
COM-001-1	R4.	Compliant
COM-001-1	R5.	Compliant
COM-001-1	R6.	N/A
COM-002-2	R1.	Compliant
COM-002-2	R2.	Compliant
EOP-001-0	R1.	N/A
EOP-001-0	R2.	Compliant
EOP-001-0	R3.	Compliant
EOP-001-0	R4.	Compliant
EOP-001-0	R5.	Compliant
EOP-001-0	R6.	Compliant
EOP-001-0	R7.	Compliant
EOP-002-2	R1.	N/A
EOP-002-2	R2.	N/A
EOP-002-2	R3.	N/A
EOP-002-2	R4.	N/A
EOP-002-2	R5.	N/A
EOP-002-2	R6.	N/A
EOP-002-2	R7.	N/A
EOP-002-2	R8.	N/A
EOP-002-2	R9.	N/A
EOP-003-1	R1.	Compliant
EOP-003-1	R2.	Compliant

Reliability Standard	Requirement	Finding
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-004-1	R1.	N/A
EOP-004-1	R2.	Compliant
EOP-004-1	R3.	Compliant
EOP-004-1	R4.	N/A
EOP-004-1	R5.	N/A
EOP-005-1	R1.	Compliant
EOP-005-1	R2.	Compliant
EOP-005-1	R3.	Compliant
EOP-005-1	R4.	Compliant
EOP-005-1	R5.	Compliant
EOP-005-1	R6.	Compliant
EOP-005-1	R7.	Compliant
EOP-005-1	R8.	Compliant
EOP-005-1	R9.	Compliant
EOP-005-1	R10.	Compliant
EOP-005-1	R11.	Compliant
EOP-006-1	R1.	N/A
EOP-006-1	R2.	N/A
EOP-006-1	R3.	N/A
EOP-006-1	R4.	N/A
EOP-006-1	R5.	N/A
EOP-006-1	R6.	N/A
EOP-008-0	R1.	Compliant
EOP-009-0	R1.	Compliant
EOP-009-0	R2.	Compliant
FAC-003-1	R1.	Compliant
FAC-003-1	R2.	Compliant
FAC-003-1	R3.	Compliant
FAC-003-1	R4.	N/A
FAC-008-1	R1.	Compliant
FAC-008-1	R2.	Compliant
FAC-008-1	R3.	Compliant
FAC-009-1	R1.	Compliant
FAC-009-1	R2.	Compliant
FAC-013-1	R1.	N/A

Reliability Standard	Requirement	Finding
FAC-013-1	R2.	N/A
INT-001-2	R1.	N/A
INT-001-2	R2.	N/A
INT-003-2	R1.	N/A
INT-004-1	R1.	Compliant
INT-004-1	R2.	N/A
IRO-001-1	R1.	N/A
IRO-001-1	R2.	N/A
IRO-001-1	R3.	N/A
IRO-001-1	R4.	N/A
IRO-001-1	R5.	N/A
IRO-001-1	R6.	N/A
IRO-001-1	R7.	N/A
IRO-001-1	R8.	Compliant
IRO-001-1	R9.	N/A
IRO-003-2	R1.	N/A
IRO-003-2	R2.	N/A
IRO-004-1	R1.	N/A
IRO-004-1	R2.	N/A
IRO-004-1	R3.	Compliant
IRO-004-1	R4.	Compliant
IRO-004-1	R5.	N/A
IRO-004-1	R6.	N/A
IRO-004-1	R7.	Compliant
IRO-005-1	R1.	N/A
IRO-005-1	R2.	N/A
IRO-005-1	R3.	N/A
IRO-005-1	R4.	N/A
IRO-005-1	R5.	N/A
IRO-005-1	R6.	N/A
IRO-005-1	R7.	N/A
IRO-005-1	R8.	Compliant
IRO-005-1	R9.	N/A
IRO-005-1	R10.	N/A
IRO-005-1	R11.	N/A
IRO-005-1	R12.	Compliant
IRO-005-1	R13.	Compliant
IRO-005-1	R14.	N/A
IRO-005-1	R15.	N/A
IRO-005-1	R16.	N/A
IRO-005-1	R17.	N/A

Reliability Standard	Requirement	Finding
IRO-006-3	R1.	N/A
IRO-006-3	R2.	N/A
IRO-006-3	R3.	Compliant
IRO-006-3	R4.	N/A
IRO-006-3	R5.	N/A
IRO-006-3	R6.	N/A
IRO-014-1	R1.	N/A
IRO-014-1	R2.	N/A
IRO-014-1	R3.	N/A
IRO-014-1	R4.	N/A
IRO-015-1	R1.	N/A
IRO-015-1	R2.	N/A
IRO-015-1	R3.	N/A
IRO-016-1	R1.	N/A
IRO-016-1	R2.	N/A
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
PER-004-1	R1.	N/A
PER-004-1	R2.	N/A
PER-004-1	R3.	N/A
PER-004-1	R4.	N/A
PER-004-1	R5.	N/A
PRC-004-1	R1.	Compliant
PRC-004-1	R2.	Compliant
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-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

Reliability Standard	Requirement	Finding
PRC-021-1	R1.	N/A
PRC-021-1	R2.	N/A
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	R7.	N/A
TOP-002-2	R8.	N/A
TOP-002-2	R9.	N/A
TOP-002-2	R10.	Compliant
TOP-002-2	R11.	Compliant
TOP-002-2	R12.	N/A
TOP-002-2	R13.	Compliant
TOP-002-2	R14.	Compliant
TOP-002-2	R15.	Compliant
TOP-002-2	R16.	Compliant
TOP-002-2	R17.	Compliant
TOP-002-2	R18.	Compliant
TOP-002-2	R19.	Compliant
TOP-003-0	R1.	Compliant
TOP-003-0	R2.	Compliant
TOP-003-0	R3.	Compliant
TOP-003-0	R4.	N/A
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-004-1	R6.	Compliant
TOP-005-1	R1.	Compliant
TOP-005-1	R2.	Compliant
TOP-005-1	R3.	Compliant
TOP-005-1	R4.	N/A
TOP-007-0	R1.	Compliant
TOP-007-0	R2.	Compliant
TOP-007-0	R3.	Compliant
TOP-007-0	R4.	N/A
TPL-001-0	R1.	Compliant
TPL-001-0	R2.	Compliant

Reliability Standard	Requirement	Finding
TPL-001-0	R3.	Compliant
TPL-002-0	R1.	Compliant
TPL-002-0	R2.	Compliant
TPL-002-0	R3.	Compliant
TPL-003-0	R1.	Compliant
TPL-003-0	R2.	Compliant
TPL-003-0	R3.	Compliant
TPL-004-0	R1.	Compliant
TPL-004-0	R2.	Compliant
VAR-001-1	R1.	Compliant
VAR-001-1	R2.	Compliant
VAR-001-1	R3.	Compliant
VAR-001-1	R4.	Compliant
VAR-001-1	R5.	N/A
VAR-001-1	R6.	Compliant
VAR-001-1	R7.	Compliant
VAR-001-1	R8.	Compliant
VAR-001-1	R9.	Compliant
VAR-001-1	R10.	Compliant
VAR-001-1	R11.	Compliant
VAR-001-1	R12.	Compliant
VAR-002-1	R1.	Compliant
VAR-002-1	R2.	Compliant
VAR-002-1	R3.	Compliant
VAR-002-1	R4.	Compliant
VAR-002-1	R5.	Compliant

Compliance Culture

SPRM completed a questionnaire prior to the compliance audit. SPRM stated that it has a formal internal compliance program and provided a description of the internal compliance monitoring to the audit team. The compliance program is new and SPRM is in the process of defining it. The Director – Transmission Planning has been designated as the compliance officer and is authorized to review and approve all compliance programs, and execute any documents or certifications necessary and related to compliance. As compliance officer, the Director – Transmission Planning has independent access to the General Manager. The responsibilities for administrating compliance have been assigned to the Manager – Reliability Compliance.

SPRM formed a compliance committee that consists of the Manager – Reliability Compliance and all functional area managers responsible for routine compliance. Compliance Committee members are expected to inform all personnel under their supervision who are involved in compliance activities. At least annually, all affected employees receive training with regard to reliability standards.

SPRM has participated in the regional compliance program since 2000. They have always had someone participating in the regional workshops, survey activities, self certification process, and spot checks. Compliance Officer and Manager – Reliability Compliance distribute compliance information to the departments responsible for compliance.

Overall, SPRM has a compliance program with staff involvement. The staff is aware of the importance of continual compliance. SPRM is refining a process to track and keep documentation up to date. They showed progress in making their compliance program stronger for the future.