



# **Compliance Audit Report Public Version**

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

**Missouri River Energy Services  
(MRES)  
NCR 01014  
September 2-18, 2008**

**September 22, 2008**

---

# TABLE OF CONTENTS

Executive Summary..... 2

Audit Process ..... 3

Objectives..... 3

Scope..... 3

Confidentiality and Conflict of Interest..... 3

Methodology..... 4

Audit Overview..... 4

Audit ..... 4

Audit Proceedings..... 5

Exit Briefing..... 5

Company Profile..... 5

Audit Specifics..... 7

Audit Results ..... 8

Findings ..... 9

Compliance Culture..... 10

## Executive Summary

The Midwest Reliability Organization (MRO) conducted a compliance audit of Missouri River Energy Services (MRES) as a part of its normal six year cycle. Review of documentation submitted by MRES took place at the MRO offices on September 2-5, 2008. The audit team consisted of four MRO staff members. Two members of the audit team conducted an on-site visit on September 8-9, 2008 at the MRES office. The audit team extended the deadline for supporting documentation until September 19, 2008 in order for MRES to obtain the necessary documentation from Otter Tail Power who conducts protection system testing and maintenance and vegetation management activities for MRES.

The North American Electric Reliability Corporation (NERC) has designated a subset of Reliability Standards for active compliance monitoring and reporting by the Regional Entities in their 2008 Implementation Plan. NERC has identified 62 standards as “actively monitored” which contain 294 requirements. These compliance audits focus on the period from June 18, 2007 to the audit date.

MRES is registered with the MRO as responsible for five functions – Transmission Owner (TO), Generator Owner (GO), Generator Operator (GOP), Resource Planner (RP), and Purchasing Selling Entity (PSE). As a result of this registration and for this audit, MRES is responsible for meeting compliance with 25 Reliability Standards which contain 57 requirements. In addition, MRES has registered as a JRO with eight of their members as being responsible for nine Reliability Standards regarding the Load Serving Entity (LSE) function. The JRO registration adds one additional NERC Reliability Standard with one requirement to the list of auditable standards. MRES is found to be in full compliance with all requirements.

An additional eight standards and their requirements were monitored as a part of the 2007 Critical Infrastructure Protection (CIP) survey. In July 2008, a special CIP self-certification was conducted for all Registrants. No alleged violations of requirements were identified during the course of the 2008 Compliance Audit.

As a part of the audit process, MRES completed an Audit Questionnaire and provided the MRO with supporting documentation for its audit. Upon completion of the initial review of evidence, the audit team requested additional documentation. MRES submitted additional evidence and was found to be compliant in all audited requirements. The audit team then contacted MRES and identified the subject matter experts to be interviewed.

During the audit, the MRES staff was found to be cordial, willing to clarify any answers and, when needed, directed the audit team to the correct supporting documentation. The subject matter experts were open with their responses and were cooperative throughout the process.

## Audit Process

The MRES Compliance Audit was conducted as a part of its normal six year cycle. The 2008 Compliance Program consists of 54 actively monitored Standards. Twenty eight of these Standards were deemed not applicable since they are related to functions other than those for which MRES is registered. Documentation reviewed was dated from June 18, 2007 to the date of the audit.

The compliance audit process steps are detailed in the NERC Compliance Monitoring and Enforcement Program (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 MRES's compliance with the requirements of the reliability standards that are applicable to MRES based on the MRES's registered function(s).
- 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 standards, and review the status of associated mitigation plans.

### *Scope*

The MRES Compliance Audit was conducted as a part of its normal six year cycle. The audit was conducted under the guidelines of the 2008 CMEP. All applicable Regulatory Approved and MRO Regional Standards were reviewed during this audit. The audit team reviewed supporting documentation dated June 18<sup>th</sup>, 2007 through September 18, 2008.

### *Confidentiality and Conflict of Interest*

Confidentiality agreements and code of conduct documentation for the regional entity staff were available to the audited entity in advance of the audit. Work history and conflict of interest forms submitted by each audit team member were available to the audited entity if requested. 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

---

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

audit team member's impartial performance of duties. The audited entity accepted the audit team participants with no objections.

### ***Methodology***

Audit criteria included standards, measures, and expectations based on best practices. The criteria were objective, measurable, complete, and relevant to the objectives. The audit team accepted and was not limited to policies, procedures, screen-prints of EMS, copies of scheduler logs, and correspondence. If needed, additional supporting documentation or clarification was requested.

The Audit team used the Reliability Standards Auditor Worksheets (RSAW) to review each reliability standard during the compliance audit. This ensures consistency and fairness during each compliance audit.

### ***Audit Overview***

The MRO scheduled MRES to receive a compliance audit August 27-28, 2008 as a part of its normal six year cycle. On May 27, 2008 the MRO sent MRES the audit package which included *the On-Site Notification, Pre-Audit Survey, Procedures for Conducting an Audit, Subject Matter Experts Spreadsheet, Preparing for Compliance and Compliance Audit* and the *2008 MRO Audit Questionnaire*.

Upon completion of the document review, the MRO requested an on-site meeting with MRES. The meeting was scheduled for September 8-9 at the MRES offices in Sioux Falls, SD.

### ***Audit***

Two weeks prior to the audit, MRES supplied MRO with approximately 60% of supporting documentation needed to demonstrate compliance. MRO staff reviewed this documentation. The compliance staff utilized the Regulatory Approved Standards and the RSAWs while reviewing the supporting documents and the Audit Questionnaire response provided by MRES.

After evaluation of the supporting documentation, a set of questions was developed to be posed to MRES subject matter experts and missing supporting evidence was identified. The audit team prepared a list of questions and requests for additional supporting documentation. These requests were provided to MRES prior to the on-site audit. Once on-site, the subject matter experts were available for interview. These interviews, in conjunction with supporting evidence, provided the audit team with a basis for professional judgment when validating compliance with reliability standards.

Subject matter experts for the following standards were requested to be available: BAL-005, CIP-001, COM-002, EOP-004, FAC-003, FAC-008, FAC-009, IRO-001, IRO-004, IRO-005, PRC-004, PRC-005, TOP-002 TOP-003, and VAR-002.

### ***Audit Proceedings***

The MRO presented a high-level overview of the compliance audit process.

The auditor code of conduct was reviewed. MRO staff must adhere to confidentiality as required through the NERC Delegation Agreement.

### ***Exit Briefing***

The audit team presented MRES with an exit briefing prior to leaving the on-site visit. The team identified one possible violation of FAC-003-1, R1. Sub-requirements 1.3 and 1.5, (further review of the supporting documentation found MRES to be compliant). Two items remained open at the exit briefing:

1. The audit team requested MRES provide protections system testing and maintenance records for the Audubon Substation for PRC-005-1 R2.
2. The audit team requested MRES to present the annual Transmission Vegetation Management Plan (TVMP).

Both requests required response from Otter Tail Power. Therefore the audit team set a due date of September 19, 2008 for all documentation to be submitted to the MRO.

All documentation is stored at the MRO office in a fire-proof locked cabinet.

### ***Company Profile***

Missouri Basin Municipal Power Agency (MBMP), doing business as Missouri River Energy Services (MRES), provides wholesale electric power and related services to 58 member cities in the states of Iowa, Minnesota, North Dakota, and South Dakota. These cities obtain power allocations from the Western Area Power Administration, and have all additional needs met by MRES (one city also receives an allocation of power from Heartland Consumers Power District). MRES has not historically been a FERC-regulated utility. MRES has a contractual relationship with the Western Minnesota Municipal Power Agency (WMMPA) whereby WMMPA owns some generation and transmission resources, the output of which are all wholly dedicated to MRES. In return MRES is responsible for all WMMPA expenses and compliance responsibilities.

The MRES members are located in the MRO region, and are within the WAPA, OTP, Xcel, ALTW, MP and MEC balancing areas. While most MRES resources are located in the WAPA BA, almost half of the MRES load is located in the MISO footprint. MRES, or its members, rely primarily on contracts with the owners and operators of transmission systems to provide delivery of power from MRES resources to the member systems. The particular transmission that is owned by MRES is operated by other companies (this is described in more detail below).

---

Combined, the MRES members serve about 275,000 people, with communities ranging in size from 100 to 32,000. The MRES portion of the load is summer peaking, with last year's coincident peak of 389.4 MW at 7/25/07 HE 17 CDT. The communities are responsible for providing all distribution services within their own territories; several of them are separately registered for NERC Compliance. MRES has established a Joint Registration Organization and filed the agreement with the MRO which delineates the division of compliance responsibilities between itself and its registered members.

In terms of transmission, WMMPA owns 115, 230 and 345kV transmission facilities. The transmission facilities are operated and maintained through three agreements. The transmission facilities are located in the OTP balancing authority and the WAPA Integrated System in South Dakota, Minnesota, Wyoming and Nebraska. This table shows the number of miles at each transmission voltage level:

Voltage	Miles
345kV	WMMPA owns 16.47% undivided ownership of 256 miles of 345kV transmission as part of the Missouri Basin Power Project
230kV	10.97
115kV	183.45

WMMPA transmission facilities are interconnected with OTP, WAPA, TSG&T, BEPC, LES, HCPD, NPPD, and GRE.

The following is a summary of the current MRES Generation Resources, owned by WMMPA and contracted to MRES:

- LRS (Wyoming Coal), 276 MW share from Unit 1, BEPC operates
- LRS peaking capacity (supplemental fuel oil firing), 5 MW
- Exira Station (Natural Gas/Fuel Oil dual fuel), 140 MW
- Watertown Peaking Plant (Fuel Oil), 60 MW
- Worthington Wind (unaccredited wind), 3.7 MW intermittent

The remaining resources are owned by others but are under long-term contract to MRES:

- Municipal Capacity (mostly fuel oil), 114 MW from 19 locations (the largest unit is 15.5 MW at Marshall MN)
- Marshall Wind (unaccredited wind), 18.7 MW intermittent
- Odin Wind (unaccredited wind), 20 MW intermittent

MRES currently has no other firm purchase agreements. MRES is a MISO Market Participant, and provides demand bids and meter data to MISO as well as processing invoices and settlement statements on a weekly basis.

MRES does not operate any transmission. Its Scheduling staff provides next-day and next-hour schedules to WAPA and OTP, and is responsible for obtaining transmission reservations and tags. The Scheduling staff is cross-trained as generation operators for the Exira and Watertown

---

peaking units, which have remote operations terminals at the MRES headquarters. Those units also have on-site operator staff during business hours.

### ***Audit Specifics***

The compliance audit document review was conducted in the MRO offices in Roseville, MN on August 26-27, 2008 which was followed by an on-site visit September 8-9, 2008. The final exit briefing was held on September 18, 2008.

### **Audit Team**

<b>Audit Team Role</b>	<b>Title</b>	<b>Company</b>
Lead	Compliance Audit Manager	MRO
Member	Compliance Audit Manager	MRO
Member	Engineer	MRO
Member	Principal Compliance Associate	MRO

### **MRES Audit Participants**

<b>Title</b>	<b>MRES Organization</b>
Sr. Transmission Engineer	PS & O
Director, Power Supply & Operations	PS & O
Manager, Generation	PS & O
Manager, Transmission Service	PS & O
Transmission Engineer II	PS & O
Operations Manager	PS & O

## Audit Results

- MRES provided the audit team with supporting documentation for review prior to the conference call. The team received approximately 60% of the supporting documentation needed for evidence. The audit team spent two days prior to the on-site visit reviewing the supplied documentation. As a result of reviewing this evidence, the audit team developed questions for the subject matter experts and a list of additional required documentation.
- MRES personnel were allowed to speak freely without interruption from management during the subject matter expert interviews.
- MRES has partial ownership of a number of transmission and generation facilities that are held responsible to NERC compliance. MRES was able to provide Letters of Understanding (LOU) for two of the facilities in which the other entity acknowledges responsibility for meeting compliance with NERC Standards.
- These two LOUs did not specifically identify PRC-005-1. The audit team requested further verification from the other two entities. MRES received and provided verification from both entities stating they are responsible for meeting compliance with PRC-005-1.
- MRES has partial ownership in a third transmission facility. MRES owns 10.97 miles of a 230 kV transmission line. MRES does not perform any maintenance activities on this line, however, they do not have a LOU with the other TO / TOP regarding compliance with NERC Standards. MRES was required to provide documentation for FAC-003-1 and PRC-005-1 to verify compliance with these standards.
- The audit team recommends MRES pursue Joint Registration for all their facilities in which they have partial ownership. Joint Registration will provide clarity and efficiency regarding compliance with Regulatory Approved Standards.

The audit team utilized the Reliability Standard Auditor Worksheets (RSAW) to assess compliance of the Regulatory Approved reliability standards. The primary questions directed to the subject matters and all requests for additional evidence were documented.

*Findings*

## Compliance Audit

Conducted On: **Aug 29, 2008**

Entity: **Missouri River Energy Services (Missouri Basin Muni. Power Agency) (MBMP)**

Address: **3724 West Avera Drive, Sioux Falls, South Dakota 57109-8920, United States**

NERC Compliance Registry ID: **NCR01014**

<b>Standard Requirement</b>	<b>Compliant</b>
BAL-005-0 R1	Yes
CIP-001-1 R1	Yes
CIP-001-1 R2	Yes
CIP-001-1 R3	Yes
CIP-001-1 R4	Yes
COM-002-2 R1	Yes
EOP-002-2 R9	Yes
EOP-004-1 R2	Yes
EOP-004-1 R3	Yes
EOP-009-0 R1	Yes
EOP-009-0 R2	Yes
FAC-003-0 R1	Yes
FAC-003-0 R2	Yes
FAC-003-0 R3	Yes
FAC-008-1 R1	Yes
FAC-008-1 R2	Yes
FAC-008-1 R3	Yes
FAC-009-1 R1	Yes
FAC-009-1 R2	Yes
INT-001-2 R1	Yes
INT-004-1 R1	Yes
INT-004-1 R2	Yes
IRO-001-1 R8	Yes
IRO-004-1 R4	Yes
IRO-005-1 R13	Yes
PRC-004-1 R1	Yes
PRC-004-1 R2	Yes
PRC-004-1 R3	Yes
PRC-005-1 R1	Yes
PRC-005-1 R2	Yes
PRC-008-0 R1	Yes
PRC-008-0 R2	Yes
PRC-010-0 R1	Yes
PRC-010-0 R2	Yes
PRC-011-0 R1	Yes
PRC-011-0 R2	Yes
PRC-016-0 R1	Yes
PRC-016-0 R2	Yes
PRC-016-0 R3	Yes
PRC-017-0 R1	Yes

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

---

<b>Standard Requirement</b>	<b>Compliant</b>
PRC-017-0 R2	Yes
PRC-021-1 R1	Yes
PRC-021-1 R2	Yes
TOP-002-2 R13	Yes
TOP-002-2 R14	Yes
TOP-002-2 R15	Yes
TOP-002-2 R18	Yes
TOP-002-2 R3	Yes
TOP-003-0 R1	Yes
TOP-003-0 R2	Yes
TOP-003-0 R3	Yes
TOP-005-1 R4	Yes
VAR-001-1 R5	Yes
VAR-002-1 R1	Yes
VAR-002-1 R2	Yes
VAR-002-1 R3	Yes
VAR-002-1 R4	Yes
VAR-002-1 R5	Yes

### ***Compliance Culture***

The MRES compliance culture was not reviewed by the audit team.