Texas Regional Entity
An Independent Division of ERCOT

Denton Municipal Electric

Final Audit Report
For Compliance with NERC Reliability Standards

Audit Date: July 10, 2007

Executive Summary

Denton Municipal Electric (Denton) is registered as a Distribution Provider (DP) within the Texas Regional Entity (Texas RE). Only one 2007 Actively Monitored NERC Standard is applicable to Denton because Denton has no transmission voltages higher that 69 kV and has no Undervoltage Load Shedding. Denton was found non-compliant with NERC Reliability Standard PRC-008-0, Requirement 1 and Requirement 2.

The possible compliance violation will be processed through the Texas RE's NERC Compliance Monitoring and Enforcement Program. Any further actions related to possible compliance violations will be through that process.

The NERC Notice of Penalty (NOP) is posted on the NERC website at the following URL: http://www.nerc.com/filez/enforcement/Filed-Final-NOC-01.pdf.

Audit Process (NERC)

The compliance audit process steps are detailed in the NERC CMEP.

Audit Objectives

The criteria for this audit is based on the premise that a three year (minimum) compliance audit be conducted The audit is designed to verify that all NERC Criteria are met and documented as appropriate for the entities registration.

Scope

The scope of this compliance audit is inclusive of all requirements of the NERC Standards that are actively monitored for 2007 that apply to this entity. The audit was performed by members of the Texas RE.

Methodology

The list of actively monitored NERC Standards for 2007 was sent to Denton Municipal Electric in advance. There were also Reliability Standards Audit Worksheets (RSAW) documents sent to help provide a structure of what the audit team would be looking for during the site audit. During the on site audit, management personnel were interviewed to answer or clarify questions that the audit team had regarding the responses to the questionnaire. The Texas RE audit team interviewed additional appropriate personnel to substantiate that operations personnel are trained and capable of following the criteria to ensure reliable operations from the entity.

An exit briefing was conducted as a forum for the audit team to offer informational recommendations for consideration in future audits. These recommendations are not included in this audit report. The audit team shared its preliminary results verbally with the entity during the exit briefing.

Company Profile

Denton Municipal Electric is a customer owned electric utility, providing full electrical service to more than 43,247 electric meters through over 324 miles of overhead power lines, 340 miles of underground cables, and over 8,100 transformers. Seven citizens make up the public utility board that sets policies for operation of the City's electric utility.

The majority of Denton's energy comes from the Texas Municipal Power Agency (TMPA) near Bryan, Texas. The City has a contractual partnership in TMPA along with the cities of Garland, Greenville and Bryan.

In June 2001, Denton sold its obsolete generating assets and replaced the energy to serve their customers with capacity and energy through a power supply and management contract. The agreement, being served by Constellation Energy Commodities Group, will provide a stable, cost effective source of energy for customers.

Denton Municipal Electric has no transmission voltage greater than 69 kV. The City of Garland acts as a dispatcher for some of Denton's transmission duties. This is covered under the authority of the ERCOT ISO as the NERC Transmission Operator.

Audit Specifics

The audit was conducted on **July 10, 2007** at the Denton Municipal Electric operations office in Denton, Texas. The attendance list was as follows:

Audit Team:

Audit Team Role	Title	Company
Lead	Sr. Reliability Analyst	Texas RE
Member	Reliability Analyst	Texas RE
Member	Compliance Engr./Analyst	Texas RE

Denton Municipal Electric Audit Participants:

Title
Meter Superintendent
Dispatch Superintendent
Operations Division Manager

Audit Results

Findings

The Compliance Audit Team found that Denton was not compliant with one of the following 2007 actively monitored NERC Standard at the time of the audit.

Reliability Standard	Finding
PRC-004-1	N/A
PRC-005-1	N/A
PRC-008-0	Possible Violation
PRC-010-0	N/A
PRC-011-0	N/A
PRC-016-0	N/A
PRC-017-0	N/A
PRC-021-1	N/A

Conclusions

The audit team found a possible violation with two requirements found in one standard. A penalty determination will be provided separately.

The possible compliance violation will be processed through the Texas RE's NERC Compliance Monitoring and Enforcement Program. Any further actions related to possible compliance violations will be through that process.

Summary of Response to the Audit Findings

Denton Municipal Electric submitted a written response that did not contest the violations discovered during the audit.

Sincerely,

Robert Potts
Texas Regional Entity
7620 Metro Center Drive
Austin, Texas 78744

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Appendix 1 — 2007 Actively Monitored Applicable Reliability Standards

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
BAL-001-0	All	**Real Power Balancing Control Performance**	BA	To maintain Interconnection steady-state frequency within defined limits by balancing real power demand and supply in real-time.	The data that supports the calculation of CPS1 and CPS2 (Attachment 1-BAL-001-0) are to be retained in electronic form for at least a one-year period. If the CPS1 and CPS2 data for a Balancing Authority Area are undergoing a review to address a question that has been raised regarding the data, the data are to be saved beyond the normal retention period until the question is formally resolved. Each Balancing Authority shall retain for a rolling 12-month period the values of: one-minute average ACE (ACEi), one-minute average Frequency Error, and, if using variable bias, one-minute average Frequency Bias.	N
BAL-002-0	All	**Disturbance Control Performance**	BA, RSG, RRO	To ensure the Balancing Authority is able to utilize its Contingency Reserve to balance resources and demand and return Interconnection frequency within defined limits.	Compliance for DCS will be evaluated for each reporting period. Reset is one calendar quarter without a violation. The data that support the calculation of DCS are to be retained in electronic form for at least a one-year period.	N
BAL-003-0	All	**Frequency Response and Bias**	BA	This standard provides a consistent method for calculating the Frequency Bias component of ACE.	Yearly or by request.	N

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
CIP-001-1	All	**Sabotage Reporting**	RC, BA, TOP, GOP, LSE	Disturbances or unusual occurrences, suspected or determined to be caused by sabotage, shall be reported to the appropriate systems, governmental agencies, and regulatory bodies.	By request and any events in the last year.	N
CIP-002-1 through CIP-009-1	All	**Critical Infrastructure Protection Standards**	BA, GO, GOP, IA, LSE, NERC, RC, RRO, TO, TOP, TSP	Cyber Security Standards- Follow revised Implementation Plan for Cyber Security Standards CIP-002-1 through CIP-009-1	By request.	N
COM-001-1	R2 and R5	**Telecommunications**	TO, BA, RC, NERCNet User Organizations.	Each Reliability Coordinator, Transmission Operator and Balancing Authority needs adequate and reliable telecommunications facilities internally and with others for the exchange of Interconnection and operating information necessary to maintain reliability.	By request.	N
EOP-001-0	All	**Emergency Operations Planning**	BA, TOP	Each Transmission Operator and Balancing Authority needs to develop, maintain, and implement a set of plans to mitigate operating emergencies. These plans need to be coordinated with other Transmission Operators and Balancing Authorities, and the Reliability Coordinator.	By request.	N
EOP-003-1	All	**Load Shedding Plans**	BA, TOP	A Balancing Authority and Transmission Operator operating with insufficient generation or transmission capacity must have the capability and authority to shed load rather than risk an uncontrolled failure of the Interconnection.	R1, R5, R6 - Event Driven. Has an event occurred in the past year? R2, R3, R4, R7, R8 – By request	N

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
EOP-005-1	All	**System Restoration Plans**	BA, TOP	To ensure plans, procedures, and resources are available to restore the electric system to a normal condition in the event of a partial or total shut down of the system	By request. Note: entity must follow the timelines specified in the standard: show that the plan is reviewed annually; simulation or testing must be done every 5 years.	N
EOP-006-1	All	**Reliability Coordination – System Restoration**	RC	The Reliability Coordinator must have a coordinating role in system restoration to ensure reliability is maintained during restoration and priority is placed on restoring the Interconnection.	By request.	N
EOP-008-0	All	**Plans for Loss of Control Center Functionality**	BA, RC, TOP	Each reliability entity must have a plan to continue reliability operations in the event its control center becomes inoperable.	By request.	N
EOP-009-0	All	**Documentation of Blackstart Generating Unit Test Results**	GO, GOP	To ensure that the quantity and location of system blackstart generators are sufficient and that they can perform their expected functions.	By request. Note entity must meet testing frequency specified in EOP-007-0.	N
FAC-003-1	All	**Vegetation Management**	RRO, TO	To improve the reliability of the electric transmission systems by preventing outages from vegetation located on transmission rights-of-way (ROW) and minimizing outages from vegetation located adjacent to ROW, maintaining clearances between transmission lines	By request – program documentation and last 4 quarterly outage reports.	N
FAC-008-1	All	**Facility Ratings Methodology**	GO, TO	To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology	By request the current methodology and any superseded portions of the methodology within the past 12 months.	N

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
FAC-009-1	All	**Establish and Communicate Facility Ratings**	GO, TO	To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.	By request.	N
IRO-001-1	All	**Reliability Coordination – Responsibilities and Authorities**	BA, GOP, LSE, PSE, RC, RRO, TOP, TSP	Reliability Coordinators must have the authority, plans, and agreements in place to immediately direct reliability entities within their Reliability Coordinator Areas to re-dispatch generation, reconfigure transmission, or reduce load to mitigate critical conditions to return the system to a reliable state. If a Reliability Coordinator delegates tasks to others, the Reliability Coordinator retains its responsibilities for complying with NERC and regional standards. Standards of conduct are necessary to ensure the Reliability Coordinator does not act in a manner that favors one market participant over another.	By request.	N
IRO-004-1	All	**Reliability Coordination — Operations Planning**	BA, GO, GOP, LSE, RC, TO, TOP, TSP	Each Reliability Coordinator must conduct next-day reliability analyses for its Reliability Coordinator Area to ensure the Bulk Electric System can be operated reliably in anticipated normal and Contingency conditions.	By request.	N

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
IRO-014-1	All	**Procedures, Processes, or Plans to Support Coordination Between Reliability Coordinators**	RC	To ensure that each Reliability Coordinator's operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas and to preserve the reliability benefits of interconnected operations.	By request.	N
IRO-015-1	All	**Notifications and Information Exchange Between Reliability Coordinators**	RC	To ensure that each Reliability Coordinator's operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas and to preserve the reliability benefits of interconnected operations.	Rolling 12 months of information provided on request.	N
IRO-016-1	All	**Coordination of Real-time Activities Between Reliability Coordinators**	RC	that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas	Rolling 12 months of information provided on request.	N
PER-002-0	All	**Operating Personnel Training**	BA, TOP	Each Transmission Operator and Balancing Authority must provide their personnel with a coordinated training program that will ensure reliable system operation.	By request training program and training records.	N
PER-003-0	All	**Operating Personnel Credentials**	BA, RC, TOP	Certification of operating personnel is necessary to ensure minimum competencies for operating a reliable Bulk Electric System.	By request latest certification information and present calendar year plus previous calendar year staffing plan.	N
PER-004-1	All	**Reliability Coordination — Staffing**	RC	Reliability Coordinators must have sufficient, competent staff to perform the Reliability Coordinator functions.	By request - Each Reliability Coordinator shall keep evidence of compliance for the previous two calendar years plus the current year.	N

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
PRC-004-1	All	**Analysis and Mitigation of Transmission and Generation Protection System Misoperations**	DP*, GO, TO	Provide trip operation / misoperation information per regional process.	By request – last 12 months of protection system Misoperation analysis.	N
PRC-005-1	All	**Transmission and Generation Protection System Maintenance and Testing**	DP*, GO, TO	Document/implement transmission protection system maintenance/testing/monitoring PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	N
PRC-008-0	All	**Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Program**	DP, TO	Document/implement UFLS maintenance/testing PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	Y
PRC-010-0	All	**Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program.**	DP, LSE, TO, TOP	ASSESS design and effectiveness of UVLS programs	By request – current assessment.	N
PRC-011-0	All	**UVLS System Maintenance and Testing**	DP, TO	Document/implement UVLS maintenance/testing PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	N
PRC-016-0	All	**Special Protection System Misoperations**	DP, GO, TO	DOCUMENT/analyze misoperations	By request – last 12 months of special protection system Misoperation analysis.	N
PRC-017-0	All	**Special Protection System Maintenance and Testing**	DP, GO, TO	Document/implement SPS maintenance/testing PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	N
PRC-021-1	All	**Under-Voltage Load Shedding Program Data**	DP, TO	DOCUMENTATION of undervoltage load shedding program	By request – latest UVLS data.	N

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
TOP-003-0	All	**Planned Outage Coordination**	BA, GOP, RC, TOP	Scheduled generator and transmission outages that may affect the reliability of interconnected operations must be planned and coordinated among Balancing Authorities, Transmission Operators, and Reliability Coordinators.	By request.	N
TOP-004-1	R6	**Transmission Operations**	TOP	To ensure that the transmission system is operated so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single Contingency and specified multiple Contingencies.	By request - Each Transmission Operator shall keep 90 days of historical data for Measure 1. Each Transmission Operator shall have current, in-force policies and procedures, as evidence of compliance to Measure 2.	N
TOP-005-1	All	**Operational Reliability Information**	BA, PSE, RC, TOP	To ensure reliability entities have the operating data needed to monitor system conditions within their areas.	By request.	N
TOP-007-0	All	**Reporting System Operating Limit (SOL) and Interconnection Reliability**	RC, TOP	Ensure SOL and IROL violations are being reported to the Reliability Coordinator so that the Reliability Coordinator may evaluate actions being taken and direct additional corrective actions as needed.	Event driven.	N
TPL-001-0	All	**System Performance Under Normal (No Contingency) Conditions**	PA, TPL	System performance under normal conditions	By request – latest annual assessment.	N
TPL-002-0	All	**System Performance Following Loss of a Single Bulk Electric System Element**	PA, TPL	System performance under single contingency	By request – latest annual assessment.	N
TPL-003-0	All	**System Performance Following Loss of Two or More Bulk Electric System Elements**	PA, TPL	System performance under multiple contingencies	By request – latest annual assessment.	N

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to Denton? Yes or No
TPL-004-0	All	**System Performance Following Extreme Events Resulting in the Loss of Two or More Bulk Electric System Elements**	PA, TPL	System performance under extreme contingencies	By request – latest annual assessment.	N
VAR-001-1	All	**Voltage and Reactive Control**	PSE, TOP	To ensure voltage levels, reactive flows, and reactive resources are monitored, controlled, and maintained within limits in real time to protect equipment and the reliable operation of the Interconnection.	By request – last 12 months of data.	N

Appendix 2 — Confidential: Security Sensitive Information

No confidential security sensitive information is included with this report.