

May 30, 2013

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: NERC Full Notice of Penalty regarding American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma, FERC Docket No. NP13-_-000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma (AEP), NERC Registry ID# NCR04006,² in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC's Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).³

AEP is engaged in the generation and transmission of electricity throughout the United States. AEP is one of the nation's largest generators of electricity, and owns nearly 38,000 MW of generating capacity in the U.S. AEP also owns the nation's largest electricity transmission system, a nearly 39,000-mile

¹ *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards* (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); *Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation*, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2013). *Mandatory Reliability Standards for the Bulk-Power System*, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), *reh'g denied*, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

² Texas Reliability Entity, Inc. (Texas RE) confirmed that AEP was included on the NERC Compliance Registry as a Distribution Provider (DP), Generator Owner (GO), Generator Operator (GOP), Transmission Owner (TO), and Transmission Planner (TP) on June 28, 2007; as a Load Serving Entity (LSE) on February 9, 2010; as a Purchasing-Selling Entity (PSE) on November 29, 2007; and as a Transmission Operator (TOP) on May 4, 2010. As a DP, LSE, TO, and TOP, AEP is subject to the requirements of NERC Reliability Standard PRC-010-0. As a DP and TO, AEP is subject to the requirements of NERC Reliability Standard PRC-004-1 and PRC-005-1. As a TOP, AEP is subject to the requirements of NERC Reliability Standards EOP-003-1 and PER-003-0.

³ See 18 C.F.R § 39.7(c)(2).

3353 Peachtree Road NE
Suite 600, North Tower
Atlanta, GA 30326
404-446-2560 | www.nerc.com

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 2

network that includes more 765 kV extra-high voltage transmission lines than all other United States transmission systems combined. AEP's transmission system directly or indirectly serves about 10 percent of the electricity demand in the Eastern Interconnection, the interconnected transmission system that covers 38 eastern and central U.S. states and eastern Canada, and approximately 11 percent of the electricity demand in the Electric Reliability Council of Texas (ERCOT) area, the transmission system that covers much of Texas.

AEP's utility units operate as Appalachian Power Company, AEP Ohio, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, and Wheeling Power Company (collectively, the AEP East Companies); Public Service Company of Oklahoma, and Southwestern Electric Power Company (collectively, the AEP West Companies); and AEP Texas Central Company and AEP Texas North Company (collectively, AEP Texas).

This Notice of Penalty is being filed with the Commission because Texas Reliability Entity, Inc. (Texas RE) and AEP have entered into a Settlement Agreement to resolve all outstanding issues arising from Texas RE's determination and findings of the violations⁴ of PRC-010-0, PRC-004-1, PRC-005-1, PER-003-0, and EOP-003-1. According to the Settlement Agreement, AEP neither admits nor denies the violations, but has agreed to the assessed penalty of two hundred thousand dollars (\$200,000), in addition to other remedies and actions to mitigate the instant violations and facilitate future compliance under the terms and conditions of the Settlement Agreement. Accordingly, the violations identified as NERC Violation Tracking Identification Numbers TRE201100206, TRE201100243, TRE201100244, TRE201100246, TRE201100560, and TRE2012010887 are being filed in accordance with the NERC Rules of Procedure and the CMEP.

Statement of Findings Underlying the Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on May 21, 2013, by and between Texas RE and AEP, which is included as Attachment a. The details of the findings and basis for the penalty are set forth in the Settlement Agreement and herein. This Notice of Penalty filing contains the basis for approval of the Settlement Agreement by the NERC Board of Trustees Compliance Committee (NERC BOTCC). In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2013), NERC provides the following

⁴ For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 3

summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement, as discussed in greater detail below.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty
Texas Reliability Entity, Inc.	American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma	NOC-1873	TRE201100206	PRC-010-0	R1.1.1	Medium	\$200,000
			TRE201100243	PRC-004-1	R1	High	
			TRE201100244	PRC-004-1	R3	Lower	
			TRE201100246	PRC-005-1	R2	High ⁵	
			TRE201100560	PER-003-0	R1	High	
			TRE2012010887	EOP-003-1	R8	High	

PRC-010-0 R1

The purpose statement of Reliability Standard PRC-010-0 provides: “Provide System preservation measures in an attempt to prevent system voltage collapse or voltage instability by implementing an Undervoltage Load Shedding (UVLS) program.”

PRC-010-0 R1 provides in pertinent part:

The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall periodically (at least every five years or as required by changes in system conditions) conduct and document an assessment of the effectiveness of the UVLS program. This assessment shall be conducted with the associated Transmission Planner(s) and Planning Authority(ies).

⁵ PRC-005-1 R2 has a “Lower” Violation Risk Factor (VRF); R2.1 and R2.2 each have a “High” VRF. During a final review of the Standards subsequent to the March 23, 2007 filing of the Version 1 VRFs, NERC identified that some Standard Requirements were missing VRFs; one of these include PRC-005-1 R2.1 and R2.2. On May 4, 2007, NERC assigned PRC-005-1 R2.1 and R2.2 “High” VRFs. In the Commission’s June 26, 2007 Order on Violation Risk Factors, the Commission approved the PRC-005-1 R2.1 and R2.2 “High” VRFs as filed. Therefore, the “High” VRF was in effect from June 26, 2007. In the context of this case, Texas RE determined that the violation related to R2.1 and R2.2, and therefore a “High” VRF is appropriate.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 4

R1.1. This assessment shall include, but is not limited to:

R1.1.1. Coordination of the UVLS programs with other protection and control systems in the Region and with other Regional Reliability Organizations,^[6] as appropriate.

[Footnote added.]

PRC-010-0 R1 has a “Medium” Violation Risk Factor (VRF) and a “Moderate” Violation Severity Level (VSL). The subject violation applies to AEP’s DP, LSE, TO, and TOP functions.

On August 12, 2008, a fault of a Laredo Plant Substation capacitor bank resulted in several events adverse to system reliability. Approximately 2.4 seconds following a phase-to-phase fault after capacitor cans failed, roughly 238 MW of Laredo area load was removed by UVLS relays⁷ out of the approximate 415 MW total Laredo area load. The Laredo Area UVLS relays have two settings: a 75% voltage setting with two-second delay, and a 90% voltage setting with a three-, five-, or eight-second delay. The 75% setting was the one activated during this event. Voltage gradually and fully recovered approximately 15 seconds after UVLS activation. The UVLS program successfully performed in accordance with the engineering design in spite of the reclosing of 8 of 24 relays. Based on a prior UVLS study of the Laredo Area, actual load that should have been interrupted was approximately 167 MW.⁸ The actual load interrupted, 238 MW, was well over this amount.

On February 10, 2011, Texas RE conducted an event review and Spot Check of AEP. Texas RE determined that the coordination of the UVLS programs, specifically the internal review of relay reclosing function and coordination of load restoration with the Reliability Coordinator (RC) and Balancing Authority (BA), was not evident in any assessment provided by AEP, in violation of PRC-010-0 R1.

Texas RE determined the duration of the violation to be from June 28, 2007, the date of AEP’s earliest registration for applicable functions, through January 3, 2012, when AEP completed its Mitigation Plan.

⁶ Consistent with applicable FERC precedent, the term “Regional Reliability Organization” in this context refers to Texas RE.

⁷ Net load interrupted after the inappropriate reclosing of 8 out of 24 UVLS relays.

⁸ This number was approximated in conditions different from conditions during the event, but it is the best information available.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 5

Texas RE determined that this violation posed a moderate risk to the reliability of the bulk power system (BPS), but did not pose a serious or substantial risk. Specifically, the potential risk to the BPS was increased due to a breakdown in AEP's UVLS assessment process and the control coordination process for verifying the reclosing control function. Potentially, the UVLS and Under Frequency Load Shedding (UFLS) relays that did not have reclosing verified could have reclosed inappropriately, reducing the effectiveness of intended operations. This violation did not pose a serious or substantial risk to the BPS because the UVLS program did successfully perform in accordance with the engineering design and the actual load interrupted was well over the 167 MW determined to be necessary in a prior UVLS study of the Laredo Area. Finally, voltage recovered in 15 seconds.

PRC-004-1 R1, R3, and PRC-005-1 R2

From January 1, 2008 through April 30, 2010, Texas RE conducted a review of AEP Protection System Misoperations in response to a review of annually required Misoperation submittals and certain system events, including Protection System Misoperations on August 18, 2008 and May 9, 2009. Texas RE determined that there appeared to be several recurring Misoperations over an extended period of time that warranted further investigation. Texas RE initiated a Spot Check and on January 12, 2011, issued a Spot Check report identifying violations of PRC-004-1 and PRC-005-1.

PRC-004-1 R1 and R3

The purpose statement of Reliability Standard PRC-004-1 provides: "Ensure all transmission and generation Protection System Misoperations affecting the reliability of the Bulk Electric System (BES) are analyzed and mitigated."

PRC-004-1 R1 provides:

R1. The Transmission Owner and any Distribution Provider that owns a transmission Protection System shall each analyze its transmission Protection System Misoperations and shall develop and implement a Corrective Action Plan to avoid future Misoperations of a similar nature according to the Regional Reliability Organization's procedures developed for Reliability Standard PRC-003 Requirement 1.

PRC-004-1 R3 provides:

R3. The Transmission Owner, any Distribution Provider that owns a transmission Protection System, and the Generator Owner shall each provide to its Regional Reliability Organization, documentation of its Misoperations analyses and Corrective

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 6

Action Plans according to the Regional Reliability Organization's procedures developed for PRC-003 R1.

PRC-004-1 R1 has a "High" VRF and a "Lower" VSL. PRC-004-1 R3 has a "Lower" VRF and a "Severe" VSL. The subject violation applies to AEP's DP and TO functions.

PRC-004-1 R1

Texas RE identified five instances where AEP failed to develop and implement a Corrective Action Plan (CAP) to avoid future Misoperations of a similar nature. These instances are as follows:

1. *Carbide-PUB Loma Alta M210/M220 line*: Texas RE determined that a capacitance coupled voltage transformer (CCVT) utilized in the protection scheme had been replaced in late June 2008 or July 2008,⁹ but was incorrectly wired, causing approximately 20 Misoperations from August 2008 until it was repaired in May 2009. AEP indicated that its relay group was unaware of the CCVT replacement, and AEP had no records it could provide, which Texas RE has determined was a contributing factor to the multiple Misoperations. AEP indicated that conflicts with other issues of high priority were the cause of the delay in investigation of these Misoperations, and the Carbide-PUB Loma Alta circuit did not have the appropriate priority level assigned. A suitable CAP was completed in May 2009, nine months after the initial Misoperation, thus a CAP was not implemented in time to avoid future Misoperations of a similar nature, a violation of PRC-004-1 R1;
2. *Bluff Creek and Airline Substations*: At the Bluff Creek Substation, there were five overtrips¹⁰ between January 2008 and April 2008 caused by incorrect settings and relay mis-wiring compounded by contractor or consultant design errors and inadequate design review by AEP. At the Airline Substation, a circuit breaker Misoperation was caused by contractor or consultant design errors and inadequate design review by AEP. Texas RE determined that a CAP was not implemented before a future Misoperation of a similar nature occurred;
3. *Laredo PS-Zacate-Heights and Laredo PS-Anna St-Heights 138 kV lines*: An unnecessary trip during a fault (UTDF) occurred May 5, 2008 (in the case of the first line, Laredo PS-Zacate-Heights, the Misoperation re-occurred September 14, 2008). The issues causing the Misoperations, relay settings, were corrected approximately one year later on April 23, 2009.

⁹ Precise timing is unknown due to AEP not having records.

¹⁰ Bluff Creek-Red Creek 345 kV line three separate times, Bluff Creek 345-138 kV Auto #1, and Bluff Creek 345-138 kV Auto #2.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 7

Texas RE determined that a CAP was not implemented before a future Misoperation of a similar nature occurred;

4. *Hamilton Road-Uvalde 138 kV line*: A UTDF occurred May 14, 2008, and again on August 22, 2008. The issue was corrected approximately five months after the initial Misoperation on October 29, 2008. The root cause was incorrect relay settings. Texas RE determined that a CAP was not implemented before a future Misoperation of a similar nature occurred; and
5. *Oklahoma-Southwest Vernon 138 kV line*: A UTDF occurred November 23, 2008, and again on January 28, 2009. The issue, relay settings, was eventually corrected March 5, 2009. Texas RE determined that a CAP was not implemented before a future Misoperation of a similar nature occurred.

PRC-004-1 R3

In the ERCOT Region, applicable procedures are found in the *Zonal Operating Guide for Oct 2008*, Section 7.2.3 Paragraph 1 - ERCOT Misoperation Analysis Requirements. AEP supplied ERCOT Independent System Operator (ISO) with annual report forms for Misoperations occurring from 2008 through 2010. Upon a review of all available evidence, it was determined that three misoperation reporting forms were submitted with blank CAP sections:

1. *Bluff Creek Substations*: Misoperations occurred January 28, 2009 with a target corrective action implementation date of June 30, 2009 in connection with CBs 4395 and 3665. AEP provided two misoperation reports to ERCOT ISO that contained blank CAP sections;
2. *Dilley SS-San Miguel 138kV line*: A UTDF occurred February 14, 2009 with a target corrective action implementation date of September 30, 2009. The Misoperation report filed with ERCOT ISO contained a blank CAP section; and
3. *Harlingen-Rio Hondo 138 kV line*: A UTDF occurred March 22, 2009 with a target corrective action completion date of June 30, 2009. The Misoperation report filed with ERCOT ISO contained a blank CAP section.

Texas RE determined the duration of the PRC-004-1 R1 violation to be from February 19, 2008, when the first Misoperation occurred, until December 8, 2011, when AEP completed its Mitigation Plan.

Texas RE determined the duration of the PRC-004-1 R3 violation to be from June 1, 2009, when Misoperation analysis and CAPs were due to the Regional Reliability Organization but not provided, until December 8, 2011, when AEP completed the associated Mitigation Plans.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 8

Texas RE determined that these violations posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, these violations are indicative of program oversights related to the timeliness of the development and execution of CAPs. Texas RE determined that although there are no time requirements specified in PRC-004-1, AEP is responsible for a comparatively large portion of facilities and there were several occurrences of implementing CAPs that were not executed in time to avoid future Misoperations of a similar nature. Most of the facilities involved in the relevant instances operate at 138 kV, while some of them operate at 345 kV.¹¹ In addition, some of the facilities serve the Laredo Area, a sensitive, transmission-constrained portion of the ERCOT grid at the time of the occurrences. The implication of the possible broader issues related to the timeliness of implementing corrective actions in a manner that avoided future Misoperations of a similar nature is that operational assessment tools such as real-time contingency analysis (RTCA), an operations timeframe model, could be adversely affected. Misoperations could result in operating in unknown states in a more sensitive area of the grid, thus increasing reliability risk. Such a risk is dynamic, varying with then-current system conditions. The ERCOT region experienced a total of 225 misoperations in the 2008-2009 timeframe and the Spot Check identified 30 misoperations or 13.3% of the total number of misoperations; none of the 30 misoperations resulted in any serious system disturbances or cascading failures, thereby mitigating the risk from the failure to develop CAPs in a timely manner.

PRC-005-1 R2

The purpose statement of Reliability Standard PRC-005-1 provides: “To ensure all transmission and generation Protection Systems^[12] affecting the reliability of the Bulk Electric System (BES) are maintained and tested.”

[Footnote added.]

PRC-005-1 R2 provides:

R2. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization

¹¹ The Bluff Creek overtrips were 345 kV issues.

¹² The NERC Glossary of Terms Used in Reliability Standards defines Protection System as “Protective relays, associated communication systems, voltage and current sensing devices, station batteries and DC control circuitry.”

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 9

on request (within 30 calendar days). The documentation of the program implementation shall include:

R2.1. Evidence Protection System devices were maintained and tested within the defined intervals.

R2.2. Date each Protection System device was last tested/maintained.

PRC-005-1 R2 has a “High” VRF and “Lower” VSL. The subject violation applies to AEP’s DP and TO functions.

AEP Protection System changes that warranted testing or maintenance, per AEP maintenance and testing procedures, but for which AEP was unable to furnish documentation to demonstrate that Protection System devices were maintained and tested, are as follows:

1. *Carbide-PUB Loma Alta M210/M220 line*: for the CCVT that was replaced in June 2008 and described above, AEP failed to follow its commissioning verification procedures found in its maintenance and testing program when the CCVT was replaced by not conducting adequate commissioning testing, a violation of PRC-005-1 R2;¹³ and
2. *Airline Substation CB 7370 relays*: regarding the incorrect installation and subsequent Misoperations on January 1, 2007, AEP failed to follow its initial commissioning verification procedures of its maintenance and testing program, which calls for end-to-end testing of the trip output logic, wiring, and trip testing, in violation of PRC-005-1 R2. In addition, there is no evidence of verification testing.

Texas RE determined the duration of the PRC-005-1 R2 violation to be from June 18, 2007, the date the Standard became mandatory and enforceable, through October 28, 2011, when AEP completed its Mitigation Plan.

Texas RE determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, equipment was installed and in-service without being duly tested. In addition, the violation reflects broader problems related to AEP’s failure to test and the inadequacy of its Misoperation program. By failing to conduct commissioning verification testing in

¹³ Additionally, there was no evidence submitted indicating that the correction of the CCVT wiring initiated commission testing as required by AEP’s maintenance and testing program.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 10

certain cases, AEP experienced multiple Misoperations that compromised BPS reliability. The failure to conduct commissioning testing can be attributed to an absence of an adequate maintenance and testing program, most notably, AEP's new equipment documentation procedures. Texas RE considered that out of AEP's 3,854 miles of 138 kV transmission and 842 miles of 345 kV transmission, the total number of Protection System elements in violation of PRC-005-1 R2 was 25 elements out of a total of 24,864 elements (0.1%) covered by AEP's PRC-005-1 program. Once wiring issues were corrected, all tested equipment was found to have been within tolerance and otherwise functional.

PER-003-0 R1

The purpose statement of Reliability Standard PER-003-0 provides: "Certification of operating personnel is necessary to ensure minimum competencies for operating a reliable Bulk Electric System."

PER-003-0 R1 provides:

R1. Each Transmission Operator, Balancing Authority, and Reliability Coordinator shall staff all operating positions that meet both of the following criteria with personnel that are NERC-certified for the applicable functions:

R1.1. Positions that have the primary responsibility, either directly or through communications with others, for the real-time operation of the interconnected Bulk Electric System.

R1.2. Positions directly responsible for complying with NERC standards.

PER-003-0 R1 has a "High" VRF and a "Severe" VSL. The subject violation applies to AEP's TOP function.

On December 9, 2011, Texas RE conducted a Spot Check of AEP concerning a Texas February 2, 2011 winter event (Event). Texas RE determined that AEP's manager of transmission dispatching has primary responsibility, either directly or through communications with others, for the real-time operation of the interconnected BPS, but at the time was not NERC-certified as required by the Standard. Primary responsibility is documented in the manager's position description, which includes the phrase "responsible for the safe, reliable and cost-effective coordination, dispatching and restoration of assigned transmission facilities and the overall moment-to-moment operation of a portion of the AEP transmission system." Additionally, the manager's actions during the Event demonstrated primary responsibility for the real-time operation of the BPS. Such actions included

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 11

participating in phone conversations about real-time operations matters, directing actions specific to real-time operations, and coordinating with other entities regarding real-time operations issues.

Texas RE determined the duration of the violation to be from May 4, 2010, the date AEP registered as a TOP, through December 10, 2012, when AEP completed its Mitigation Plan.

Texas RE determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. An individual who was not NERC-certified actively participated in real-time system operations. Persons who are not NERC-certified, and thus of uncertain qualifications, could potentially initiate real-time operating actions that could adversely affect on BPS reliability. The individual involved in this noncompliance has been with AEP for approximately twenty years and is considered a knowledgeable, experienced staff member. Texas RE reviewed the voice logs of the employee's actions taken during the event and determined that his responses and actions were correct and demonstrated his knowledge and experience.

EOP-003-1 R8

The purpose statement of Reliability Standard EOP-003-1 provides: "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."

EOP-003-1 R8 provides: "Each Transmission Operator or Balancing Authority shall have plans for operator-controlled manual load shedding to respond to real-time emergencies. The Transmission Operator or Balancing Authority shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency."

EOP-003-1 R8 has a "High" VRF and a "High" VSL. The subject violation applies to AEP's TOP function.

From July 30, 2012 through August 10, 2012, Texas RE conducted a Compliance Audit of AEP. Texas RE determined that AEP failed to implement timely and sufficiently maintain its load shedding obligation as directed by ERCOT in a timeframe adequate for responding to the Event.

Operating Guide §4.5.3.3 contains the ERCOT Load Shed Table, and by extension, AEP's prorated load shed obligation. At the time of the Event, AEP's share was 9.33 MW per 100 MW of total ERCOT firm load shed. Consistent with AEP's load shedding plan and the Operating Guide, AEP is expected to respond to ERCOT load shed directives within 30 minutes of being called. Per the *Joint Registration*

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 12

Organization Matrix (dated November 2010), “[e]ach Local Control Center and ERCOT shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.”¹⁴

During the Event, ERCOT declared an Energy Emergency Alert (EEA) 3 at 5:43 a.m. on February 2, 2011 and subsequently issued certain directives to AEP (186.6 MW total at 6:04 a.m. and 373.2 MW total at 6:23 a.m.) to implement load shedding in steps established to minimize the risk of further uncontrolled separation, loss of generation, or system shutdown.

30 minutes later, AEP responded as follows:

Time	MW Load Shed Obligation	MW Actually Shed	MW Under Obligation
6:34 a.m.	186.6	141.5	45.1
6:53 a.m.	373.2	209.4	163.8

AEP was expected to shed firm load a total of 483 minutes. AEP did not shed adequate firm load a total of 82 minutes, or 17% of the time. AEP’s maximum MW under-obligation occurred at 7:20 a.m., when AEP was expected to shed 373.2 MW and actually shed 171.3 MW, a 54% shortfall.

Texas RE determined the duration of the violation to be February 2, 2011, during the Event when AEP did not shed adequate firm load.

Texas RE determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, AEP’s failure to contribute its full obligated load reduction compromised ERCOT ISO’s ability to mitigate the system emergency. Furthermore, ERCOT ISO counted on a certain amount of load shed capability, yet such capability did not deliver when called upon. ERCOT ISO experienced a situation where it did not have an accurate count of its operating reserves, so such reserves were overstated both in absolute terms and in response characteristics. At the time of AEP’s maximum shortfall, AEP’s insufficiency was 163.8 MW. This amount comprised 4.1% of the total of 4000 MW of firm load shed called upon by ERCOT ISO. AEP’s load ratio share comprised 9.33% of the ERCOT region total obligation. Offsetting actual risk, other entities over-performed load shed reductions during the event on the order of 900 MW, which overcompensated for AEP’s shortfall by a margin of 736 MW.

¹⁴ AEP and ERCOT registered for the TOP function via a Coordinated Functional Registration (CFR), effective April 1, 2010. The CFR includes a Responsibility Matrix that specifies the entities’ respective compliance responsibilities. In the Responsibility Matrix, AEP is designated as a Local Control Center, or “LCC.”

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 13

Regional Entity's Basis for Penalty

According to the Settlement Agreement, Texas RE has assessed a penalty of two hundred thousand dollars (\$200,000) for the referenced violations. In reaching this determination, Texas RE considered the following factors:

1. AEP's prior violations of the subject NERC Reliability Standards were not considered aggravating for penalty purposes;¹⁵
2. AEP was cooperative throughout the compliance enforcement process;
3. AEP had a compliance program at the time of the violations which Texas RE considered a mitigating factor;¹⁶

¹⁵ AEP is also registered in ReliabilityFirst Corporation (ReliabilityFirst) region as American Electric Power Service Corporation as agent for Appalachian Power Company, Columbus Southern Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, and Wheeling Power Company (NCR00682); and is registered in Southern Power Pool Regional Entity (SPP RE) region as American Electric Power Service Corporation as agent for Public Svc. Co. of Oklahoma & SW Ele Pwr Co. (NCR01056). Texas RE considered AEP's compliance history across the three regions in which its various related entities operate. AEP has prior violations of different Standards and Requirements which Texas RE did not consider as aggravating for penalty purposes because there were no indications of broader corporate issues. Only those violations of the same Standards as the instant violations are discussed below. See Addendum A to the Settlement Agreement for a full listing of AEP's violation history.

A Settlement Agreement covering a violation of EOP-003-1 R1 is being concurrently filed with FERC. The violation was in the ReliabilityFirst region. Texas RE did not consider this violation to be aggravating for penalty purposes because the facts and circumstances of the violation were distinct and related to a different requirement of the Standard than the instant violation.

A joint Settlement Agreement covering four violations of PRC-005-1 R2 was filed with FERC under NP12-30-000 on May 30, 2012. The violations were in the ReliabilityFirst, SPP RE, and Texas RE regions. On June 29, 2012, FERC issued an order stating it would not engage in further review of the Notice of Penalty. Texas RE did not consider this violation to be aggravating for penalty purposes.

A Settlement Agreement covering one violation of PRC-005-1 R2 was filed with FERC under NP11-164-000 on April 29, 2011. The violations were in the ReliabilityFirst region. On May 27, 2011, FERC issued an order stating it would not engage in further review of the Notice of Penalty. Texas RE did not consider this violation to be aggravating for penalty purposes.

The facts and circumstances involved with the preceding instances of PRC-005-1 R2 violations dealt with existing in-service assets with missing or late maintenance and testing. However, the circumstances in this case deal with not following commissioning verification testing procedures on new assets. Texas RE concluded that the two processes are sufficiently dissimilar not to warrant aggravation of the penalty.

¹⁶ See Addendum A to the Settlement Agreement for a detailed discussion of AEP's compliance program.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 14

4. There was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
5. The violations posed a moderate risk but did not pose a serious or substantial risk to the reliability of the BPS, as discussed above; and
6. There were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

After consideration of the above factors, Texas RE determined that, in this instance, the penalty amount of two hundred thousand dollars (\$200,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violations.

Status of Mitigation Plans¹⁷**PRC-010-0 R1**

AEP's Mitigation Plan to address its violation of PRC-010-0 R1 was submitted to Texas RE on August 9, 2011 with a proposed completion date of January 31, 2012. The Mitigation Plan was accepted by Texas RE on August 17, 2011 and approved by NERC on March 15, 2012. The Mitigation Plan for this violation is designated as TREMIT005667 and was submitted as non-public information to FERC on March 16, 2012 in accordance with FERC orders.

AEP's Mitigation Plan required AEP to:

1. Issue a UFLS and UVLS program methodology document that included information regarding automatic load restoration after an event;
2. Distribute an AEP authority to act document which defines responsibilities surrounding load-shedding and restoration;
3. Develop a new document that addresses what criteria would trigger a UVLS assessment outside of the maximum five-year interval; and
4. Develop and distribute a discussion guide on disabling reclosing on UVLS relays.

AEP certified on February 1, 2012 that the above Mitigation Plan requirements were completed on January 3, 2012. As evidence of completion of its Mitigation Plan, AEP submitted the following:

1. AEP's UFLS/UVLS program methodology, dated July 2011;

¹⁷ See 18 C.F.R § 39.7(d)(7).

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 15

2. An email reflecting distribution of the UFLS/UVLS program methodology to staff, dated August 31, 2011;
3. AEP's *Authority to Act*, dated April 21, 2011;
4. AEP's *Authority to Act* sign-up sheet, signed by several persons in June of 2011;
5. A Word document that is a transmittal letter distributing the *Authority to Act* to AEP dispatchers, dated June 8, 2011;
6. A field guide discussing disabling reclosing on UVLS relays; and
7. An email showing distribution of the field guide, dated January 3, 2012.

On July 9, 2012, after reviewing AEP's submitted evidence, Texas RE verified that AEP's Mitigation Plan was completed on January 3, 2012.

PRC-004-1 R1 and R3

AEP's Mitigation Plans to address its violations of PRC-004-1 R1 and R3 are identical. The Mitigation Plans were submitted to Texas RE on December 13, 2011 with a proposed completion date of December 31, 2011. The Mitigation Plans were accepted by Texas RE on December 13, 2011 and approved by NERC on July 18, 2012. The Mitigation Plans for these violations are designated as TREMIT005691 for PRC-004-1 R1 and as TREMIT005692 for PRC-004-1 R3. The Mitigation Plans were submitted as non-public information to FERC on July 19, 2012 in accordance with FERC orders.

AEP's Mitigation Plan required AEP to:

1. Institute a monthly misoperation tracking report. This report identifies open, unmitigated misoperation reports so that the personnel that have responsibilities for mitigation are kept aware of the reports status, aiding in the timely mitigation of misoperations;
2. Submit periodic misoperation data, per Texas RE and ERCOT's re-defined misoperation reporting format and accompanying definitions for consistency in data;
3. Enact a reorganization of its Station Engineering Department that separated the protection and control engineering functions. This provides better direction, focus, and attention to issues pertaining to the design and implementation of Protection and Control schemes; and
4. Develop a high-level policy document that outlines prioritization of activities pertaining to the investigation, analysis, and mitigation of Misoperations.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 16

AEP certified on January 9, 2012 that the above Mitigation Plan requirements were completed on December 8, 2011. As evidence of completion of its Mitigation Plan, AEP submitted the following:

1. Email from AEP employee to the relay operations center providing the status of Misoperation events. The email reflected an acceptable high-level summary of the status of all Misoperations;
2. A detailed report indicating open Misoperation statuses and the reason the Misoperations were still open;
3. The new Misoperation reporting format dated August 31, 2011;
4. Several organizational charts indicating that Protection & Control (P&C) is a separate branch in the AEP organization;
5. A *Protection System Misoperation Investigation and Reporting Guide*, dated November 21, 2011; and
6. An email with the *A Protection System Misoperation Investigation and Reporting Guide* as an attachment which was distributed to AEP personnel, dated December 8, 2011.

On April 24, 2012, after reviewing AEP's submitted evidence, Texas RE verified that AEP's Mitigation Plan was completed on December 8, 2011.

PRC-005-1 R2

AEP's Mitigation Plan to address its violation of PRC-005-1 R2 was submitted to Texas RE on August 11, 2011 with a proposed completion date of November 1, 2011. The Mitigation Plan was accepted by Texas RE on December 16, 2011 and approved by NERC on July 18, 2012. The Mitigation Plan for this violation is designated as TREMIT005693 and was submitted as non-public information to FERC on July 19, 2012 in accordance with FERC orders.

AEP's Mitigation Plan required AEP to issue guidance that corrective maintenance activities that equate to activities outlined in AEP's preventative maintenance and testing program shall be documented in AEP's maintenance and testing database.

AEP certified on December 16, 2011 that the above Mitigation Plan requirements were completed on October 28, 2011. As evidence of completion of its Mitigation Plan, AEP submitted:

1. *Guidance on Documenting P&C Corrective Maintenance Work*; and

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 17

2. An email documenting the distribution of the *Guidance on Documenting P&C Corrective Maintenance Work* to affected personnel, dated October 28, 2011.

On December 16, 2011, after reviewing AEP's submitted evidence, Texas RE verified that AEP's Mitigation Plan was completed on October 28, 2011.

PER-003-0 R1

AEP's Mitigation Plan to address its violation of PER-003-0 R1 was submitted to Texas RE on October 19, 2012 with a proposed completion date of February 28, 2013. The Mitigation Plan was accepted by Texas RE on October 22, 2012 and approved by NERC on November 22, 2012. The Mitigation Plan for this violation is designated as TREMIT008285 and was submitted as non-public information to FERC on January 22, 2013 in accordance with FERC orders.

AEP's Mitigation Plan required AEP to:

1. Review *Authority to Act* with operators and the transmission dispatch manager;
2. Update the *Authority to Act* document to clarify the role of transmission system control center operators and transmission dispatchers with respect to real-time operations;
3. Update the manager of transmission dispatching job description to clarify that job position with respect to real-time operations; and
4. Attain NERC RC certification of the current manager of transmission dispatching.

AEP certified on January 18, 2013 that the above Mitigation Plan requirements were completed on December 10, 2012. As evidence of completion of its Mitigation Plan, AEP submitted the following:

1. The *Authority to Act* document;
2. The job description for manager of transmission dispatching; and
3. The manager's NERC RC certificate.

On February 22, 2013, after reviewing AEP's submitted evidence, Texas RE verified that AEP's Mitigation Plan was completed on December 10, 2012.

EOP-003-1 R8

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 18

AEP's Mitigation Plan to address its violation of EOP-003-1 R8 was submitted to Texas RE on January 11, 2013 with a proposed completion date of December 31, 2012.¹⁸ The Mitigation Plan was accepted by Texas RE on January 16, 2013 and approved by NERC on January 18, 2013. The Mitigation Plan for this violation is designated as TREMIT008318-1 and was submitted as non-public information to FERC on January 18, 2013 in accordance with FERC orders.

AEP's Mitigation Plan required AEP to:

1. Program the two AEP transmission dispatch center (TDC) and AEP Texas distribution dispatch center (DDC) telephone systems to include an "Emergency Button." The use of the "Emergency Button" helps to filter out normal calls from an immediate response call. Guidelines for proper use of this feature were created in October 2011;
2. Hold two joint drills in 2011 and 2012 respectively between AEP Texas TDC and DDC;
3. Ensure DDC dispatchers have reviewed and acknowledged receiving AEP's policy on operator responsibility and *Authority to Act*;
4. Ensure DDC dispatchers have received instructions that if a load shed directive is received during the daily change in crew shift, the load shed will be completed prior to the shift change. It is of paramount importance and a priority to achieve the requested load shed amount as opposed to taking time for a crew to complete a proper "pass down" of information to another crew and to log off and then log on to the same supervisory control and data acquisition (SCADA) work station;
5. Develop a new multi-feeder load shedding application. This new application allows for the interruption by inputting the MW amount to shed by district. A user can hit the enter-key to allow the program to total the amount of load that has been shed and then execute the action on the feeders to reach the desired MW amount. The program will keep running totals by district and for the company (i.e., AEP Texas) to ensure load shedding happens much more quickly as compared to the manual process used during the Event. Since the program automatically keeps track of the numbers, this also helps to ensure a rotation does not reduce the load shed amount during the rotation period and before restoration is begun;
6. Conduct training for DDC and TDC dispatchers to use the new load shed application; and
7. Implement the production SCADA host load shedding application by distribution dispatch.

¹⁸ On December 20, 2012, Texas RE rejected the initial Mitigation Plan submitted for this violation and requested AEP include additional information.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 19

AEP initially certified the Mitigation Plan was completed December 7, 2012. Texas RE subsequently determined that the level of completion of AEP's new multi-feeder load shedding application was partial¹⁹ and would not prevent recurrence of the issues that precipitated the violation. Texas RE rejected the initial certification of completion on February 22, 2013 and granted an extension on March 20, 2013. The extension extends the estimated Mitigation Plan completion date until May 31, 2013. AEP has submitted the following evidence:

1. A picture of the emergency button and an attestation indicating the button was implemented in October of 2011;
2. Documentation of drill participants, the date drills were held, and detailed descriptions of the drill process. In addition, the documentation contained lessons learned and for some drills, training suggestions;
3. The *Authority to Act* document, as well as signatures indicating when the document was read by each operator;
4. Attestations stating that on February 24, 2013, the supervisor of distribution dispatching talked to the dispatch leads regarding the load shed event and the dispatch leads were to pass down the information to other dispatchers. The supervisor subsequently reinforced the message by discussing the load shed issues with dispatchers during the March safety meeting and the night meetings with every crew. The supervisor completed the crew night meetings on April 18, 2012, the date noted on his attestation; and
5. A "refresher" email dated February 19, 2013 reminding operators to complete load sheds prior to shift change.

Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed²⁰

Basis for Determination

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008, October 26, 2009 and August 27, 2010 Guidance Orders,²¹ the

¹⁹ The application could conclude a first call for firm load shed, but could not accommodate subsequent additional calls.

²⁰ See 18 C.F.R. § 39.7(d)(4).

²¹ *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); *North American Electric Reliability Corporation*, "Further Guidance Order on Reliability Notices of Penalty," 129 FERC

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 20

NERC BOTCC reviewed the Settlement Agreement and supporting documentation on May 7, 2013. The NERC BOTCC approved the Settlement Agreement, including Texas RE's assessment of a two hundred thousand dollar (\$200,000) financial penalty against AEP and other actions to facilitate future compliance required under the terms and conditions of the Settlement Agreement. In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violations at issue.

In reaching this determination, the NERC BOTCC considered the following factors:

1. AEP's compliance history, as discussed above and in more detail in Addendum A to the Settlement Agreement;
2. Texas RE reported that AEP was cooperative throughout the compliance enforcement process;
3. AEP had a compliance program at the time of the violations which Texas RE considered a mitigating factor;
4. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
5. Texas RE determined that the violations posed a moderate risk but did not pose a serious or substantial risk to the reliability of the BPS, as discussed above; and
6. Texas RE reported that there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

For the foregoing reasons, the NERC BOTCC approved the Settlement Agreement and believes that the assessed penalty of two hundred thousand dollars (\$200,000) is appropriate for the violations and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

Pursuant to 18 C.F.R. § 39.7(e), the penalty will be effective upon expiration of the 30 day period following the filing of this Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

¶ 61,069 (2009); *North American Electric Reliability Corporation*, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 21

Attachments to be Included as Part of this Notice of Penalty

The attachments to be included as part of this Notice of Penalty are the following documents:

- a) Settlement Agreement by and between Texas RE and AEP executed May 21, 2013, included as Attachment a;
 - a. Common Disposition Document, included as Addendum A to the Settlement Agreement;
 - b. PRC-010-0 R1 Disposition Document, included as Addendum B to the Settlement Agreement;
 - c. PRC-004-1 R1, R3, and PRC-005-1 R2 Disposition Document, included as Addendum C to the Settlement Agreement;
 - d. PER-003-0 R1 Disposition Document, included as Addendum D to the Settlement Agreement; and
 - e. EOP-003-1 R8 Disposition Document, included as Addendum E to the Settlement Agreement.
- b) Record documents for the violation of PRC-010-0 R1, included as Attachment b:
 1. AEP's Source Document submitted February 10, 2011;
 2. AEP's Mitigation Plan designated as TREMIT005667 submitted August 9, 2011;
 3. AEP's Certification of Mitigation Plan Completion dated February 1, 2012;
 4. Texas RE's Verification of Mitigation Plan Completion dated July 9, 2012;
- c) Record documents for the violation of PRC-004-1 R1, included as Attachment c:
 5. AEP's Source Document submitted January 12, 2011;
 6. AEP's Mitigation Plan designated as TREMIT005691 submitted December 13, 2011;
 7. AEP's Certification of Mitigation Plan Completion dated January 9, 2012;
 8. Texas RE's Verification of Mitigation Plan Completion dated April 24, 2012;
- d) Record documents for the violation of PRC-004-1 R3, included as Attachment d:
 9. AEP's Source Document submitted January 12, 2011;
 10. AEP's Mitigation Plan designated as TREMIT005692 submitted December 13, 2011;

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 22

11. AEP's Certification of Mitigation Plan Completion dated January 9, 2012;
12. Texas RE's Verification of Mitigation Plan Completion dated April 24, 2012;
- e) Record documents for the violation of PRC-005-1 R2, included as Attachment e:
 13. AEP's Source Document submitted January 12, 2011;
 14. AEP's Mitigation Plan designated as TREMIT005693 submitted August 11, 2011;
 15. AEP's Certification of Mitigation Plan Completion dated December 16, 2011;
 16. Texas RE's Verification of Mitigation Plan Completion dated December 16, 2011;
- f) Record documents for the violation of PER-003-0 R1, included as Attachment f:
 17. AEP's Source Document submitted December 9, 2011;
 18. AEP's Mitigation Plan designated as TREMIT008285 submitted October 19, 2012;
 19. AEP's Certification of Mitigation Plan Completion dated January 22, 2013;
 20. Texas RE's Verification of Mitigation Plan Completion dated February 22, 2013;
- g) Record documents for the violation of EOP-003-1 R8, included as Attachment g:
 21. AEP's Source Document dated August 13, 2012; and
 22. AEP's Mitigation Plan designated as TREMIT008318-1 submitted January 11, 2013.

A Form of Notice Suitable for Publication²²

A copy of a notice suitable for publication is included in Attachment h.

²² See 18 C.F.R § 39.7(d)(6).

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

May 30, 2013

Page 23

Notices and Communications: Notices and communications with respect to this filing may be addressed to the following:

<p>Gerald W. Cauley President and Chief Executive Officer North American Electric Reliability Corporation 3353 Peachtree Road NE Suite 600, North Tower Atlanta, GA 30326 (404) 446-2560</p>	<p>Sonia C. Mendonça* Assistant General Counsel and Director of Enforcement North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile sonia.mendonca@nerc.net</p>
<p>Charles A. Berardesco* Senior Vice President and General Counsel North American Electric Reliability Corporation 1325 G Street N.W., Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile charles.berardesco@nerc.net</p>	<p>Edwin G. Kichline* North American Electric Reliability Corporation Senior Counsel and Associate Director of Enforcement Processing 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile edwin.kichline@nerc.net</p>
<p>Derrick Davis* Senior Corporate Counsel Texas Reliability Entity, Inc. 805 Las Cimas Parkway Suite 200 Austin, TX 78746 (512) 583-4923 (512) 233-2233 – facsimile derrick.davis@texasre.org</p>	<p>Thad K. Ness* Reliability Standards Compliance Manager American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma 1 Riverside Plaza Columbus, Ohio 43215 tkness@aep.com</p>

NERC Notice of Penalty
American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
Public Service of Oklahoma
May 30, 2013
Page 24

Rashida Caraway*
Manager, Compliance Enforcement
Texas Reliability Entity, Inc.
805 Las Cimas Parkway
Suite 200
Austin, TX 78746
(512) 583-4977
(512) 233-2233 – facsimile
rashida.caraway@texasre.org

Jerry Huerta*
Senior Counsel
American Electric Power
400 W 15 Street
Suite 1500
Austin, TX 78701
512-481-3323
jnhuerta@aep.com

Julie Rutter*
Senior Counsel
American Electric Power
1 Riverside Plaza
Columbus, Ohio 43215
(614) 716-2229
jarutter@aep.com

*Persons to be included on the Commission’s service list are indicated with an asterisk. NERC requests waiver of the Commission’s rules and regulations to permit the inclusion of more than two people on the service list.

NERC Notice of Penalty

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
Public Service of Oklahoma

May 30, 2013

Page 25

Conclusion

NERC respectfully requests that the Commission accept this Notice of Penalty as compliant with its rules, regulations and orders.

Respectfully submitted,

/s/ Sonia Mendonça

Sonia C. Mendonça
Assistant General Counsel and Director of
Enforcement
North American Electric Reliability
Corporation
1325 G Street N.W. Suite 600
Washington, DC 20005
(202) 400-3000
(202) 644-8099 – facsimile
sonia.mendonca@nerc.net

Gerald W. Cauley
President and Chief Executive Officer
North American Electric Reliability Corporation
3353 Peachtree Road NE
Suite 600, North Tower
Atlanta, GA 30326
(404) 446-2560

Charles A. Berardesco
Senior Vice President and General Counsel
North American Electric Reliability Corporation
1325 G Street N.W., Suite 600
Washington, DC 20005
(202) 400-3000
(202) 644-8099 – facsimile
charles.berardesco@nerc.net

Edwin G. Kichline
North American Electric Reliability
Corporation
Senior Counsel and Associate Director of
Enforcement Processing
1325 G Street N.W. Suite 600
Washington, DC 20005
(202) 400-3000
(202) 644-8099 – facsimile
edwin.kichline@nerc.net

cc: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co,
and Public Service of Oklahoma
Texas Reliability Entity, Inc.

Attachments

Attachment a

**Settlement Agreement by and between Texas
RE and AEP executed May 8, 2013**



SETTLEMENT AGREEMENT

OF

TEXAS RELIABILITY ENTITY, INC.

AND

AMERICAN ELECTRIC POWER SERVICE CORPORATION AS AGENT FOR AEP TEXAS
NORTH COMPANY, AEP TEXAS CENTRAL COMPANY, AND PUBLIC SERVICE COMPANY
OF OKLAHOMA

I. INTRODUCTION

1. North American Electric Reliability Corporation ("NERC") delegated authority to Texas Reliability Entity, Inc. to become the regional entity for the ERCOT region effective July 1, 2010, pursuant to Section 215(e)(4) of the Federal Power Act. NERC also delegated to Texas Reliability Entity, Inc. the authority and responsibility for the continuation of all compliance monitoring and enforcement activities that it had previously delegated to Texas Regional Entity (a division of Electric Reliability Council of Texas, Inc.). The term "Texas RE" is used herein to refer to both Texas Regional Entity and Texas Reliability Entity, Inc.
2. Texas RE and American Electric Power Service Corporation, as agent for AEP Texas North Company, AEP Texas Central Company, and Public Service Company of Oklahoma (collectively, "AEP") enter into this Settlement Agreement ("Settlement Agreement") to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in Texas RE's determination and findings, pursuant to the NERC Rules of Procedure, of five alleged violations by AEP of NERC Reliability Standards PRC-010-0 R1 (TRE201100206), PRC-004-1 R1 (TRE201100243), PRC-004-1 R3 (TRE201100244), PRC-005-1 R2 (TRE201100246), PER-003-0 R1 (TRE201100560), and EOP-003-1 R8 (TRE2012010887).
3. AEP neither admits nor denies the violations of NERC Reliability Standards PRC-010-0 R1, PRC-004-1 R1, PRC-004-1 R3, PRC-005-1 R2, PER-003-0 R1, and EOP-003-1 R8, and has agreed to the proposed penalty of two hundred thousand dollars (\$ 200,000) to be assessed to AEP, in addition to other remedies and mitigation actions to mitigate the instant alleged violations and facilitate future compliance under the terms and conditions of the Settlement Agreement.

II. STIPULATION

4. The facts stipulated herein are stipulated solely for the purpose of resolving, between AEP and Texas RE, the matters discussed herein and do not constitute stipulations or admissions for any other purpose. The attached Disposition Document is incorporated herein in its entirety. AEP and Texas RE hereby stipulate and agree to the following:

Background

5. See Addendum A of the Disposition Document for a description of AEP.

Violations of NERC Reliability Standards

6. See Disposition Document Addendums B, C, D, and E for the descriptions of the violations.

III. PARTIES' SEPARATE REPRESENTATIONS**STATEMENT OF TEXAS RE AND SUMMARY OF FINDINGS**

7. On August 12, 2008, a fault of a Laredo Plant Substation Capacitor Bank resulted in several events adverse to system reliability. Thereafter, Texas RE initiated an event review and spot check and determined that the "coordination of the UVLS programs", specifically the internal review of relay reclosing function and coordination of load restoration with the Reliability Coordinator ("RC") and Balancing Authority ("BA"), was not evident in any assessment provided by AEP, a violation of PRC-010 R1.
8. In response to a review of annually required Misoperation submittals and certain system events including Protection System Misoperations on August 18, 2008 and May 9, 2009, Texas RE conducted a review of AEP protection system Misoperations that occurred from January 1, 2008 to April 30, 2010. The review prompted Texas RE to initiate a spot check. On January 12, 2011 Texas RE issued a report noting that in several instances, AEP did not implement corrective action plans in time to avoid misoperations of a similar nature, which Texas RE determined as a violation of PRC-004-1 R1. Texas RE also determined that three misoperation reporting forms were submitted with blank Corrective Action Plans sections, which Texas RE determined is a violation of PRC-004-1 R3. Finally, Texas RE determined that AEP was unable to furnish documentation to demonstrate that certain Protection System devices were maintained and tested, which constitutes a violation of PRC-005-1 R2.
9. Subsequent to the February 2 Winter Event, Texas RE conducted a spot check of AEP. On December 6, 2011, Texas RE determined that AEP's Manager of Transmission Dispatching has primary responsibility for the real-time operation of the interconnected bulk electric system, and actively participated in real-time operations on February 3, 2011, but was not NERC-certified which is a violation of PER-003-0 R1. Moreover, primary responsibility is documented in the manager's position description, which includes the phrase "responsible for the safe, reliable and cost-effective coordination, dispatching and restoration of assigned transmission facilities and the overall moment-to-moment operation of a portion of the AEP transmission system." Additionally, the manager's actions on February 3, 2011 demonstrate primary responsibility for the real-time operation of the BES. Such actions included participating in phone conversations about real-time operations matters, directing actions specific to real-time operations and coordinating with other entities regarding real-time operations issues.

10. Texas RE audited AEP from July 30 – August 10, 2012 and determined that AEP, as Transmission Operator, failed to timely implement and sufficiently maintain its load shedding obligation as directed by the Electric Reliability Council of Texas, Inc. (ERCOT) in a timeframe adequate for responding to an emergency on February 2, 2011, a violation of EOP-003-1, R8. Specifically, AEP failed to fully contribute their obligated load reduction when the ERCOT system experienced an Energy Emergency Alert Level. This insufficiency compromised ERCOT ISOs ability to mitigate the system emergency.
11. Texas RE agrees that this agreement is in the best interest of the parties and in the best interest of bulk power system reliability.

STATEMENT OF AEP

12. AEP neither admits nor denies that the facts set forth by the parties for purposes of this Agreement constitute violations of PRC-010-0 R1, PRC-004-1 R1, PRC-004-1 R3, PRC-005-1 R2, EOP-003-1 R3, and PER-003-0 R1.

- i. PRC-010-0 R1 (Tracking # TRE201100206)

AEP maintains that it provided a UVLS assessment to ERCOT in 2006 as well as another assessment performed after the subject event in 2008. The reliability standard requirement does not specify the breadth of coordination required. The automatic reclosing was not an intended event; therefore, there would not have been a need to coordinate the load restoration within the assessment. The error in reclosing upon its discovery was corrected, restoring the UVLS plan to its intended state. The manual restoration would need to be performed in 'real-time' using conditions present at that time and thus could not be prescribed within the assessment. AEP understands this standard to be clearly based on a "planning" time horizon and does not address activities in a "real-time" time horizon.

- ii. PER-003-0 R1 (Tracking # TRE201100560)

The cited violation posed minimal risk to the bulk power system because the Transmission Dispatch Manager involved in this event is a knowledgeable and experienced staff member. In addition, this individual's actions on February 3, 2011 were appropriate, as determined by Texas RE, even though he was not NERC certified. This Transmission Dispatch Manager is NERC RC certified as of December 10, 2012.

- iii. PRC-004-1 R1 (Tracking # TRE201100243)

AEP acknowledges that an extended Corrective Action Plan duration could potentially have an adverse effect on the reliability of the BES and has taken steps to make improvements such as monthly status reports to provide management awareness and oversight. Other changes have been made that apply focus on human performance surrounding protection and control activities.

iv. PRC-004-1 R3 (Tracking # TRE201100244)

AEP maintains that data related to ongoing investigation and mitigation activities surrounding these misoperations was submitted according to AEP's understanding of the reporting procedures documented in the ERCOT Zonal Operating Guide. However, AEP recognizes that a data entry error occurred causing ongoing activities to be documented in the wrong field. AEP believes that these data entry errors posed no risk to the Bulk Power System because they do not represent an ongoing failure to take action to mitigate protection system misoperations.

v. EOP-003-1 R8 (Tracking # TRE2012010887)

While AEP acknowledges that it took longer time than required to implement and meet its obligation to shed its requisite amount of load on February 2, 2011, AEP believes, given the circumstances surrounding the three ERCOT load shed directives, that AEP effectively met its load shed obligations pursuant to the intent of the Operating Guides – to shed load without delay. AEP received three ERCOT directives to shed AEP's share of 373.2 MW of an ERCOT-wide total of 4,000 MW load within a period of 40 minutes. AEP fully completed its 93.3 MW share (1,000 MW total) of the first ERCOT-directed load shed in 32 minutes, or two minutes beyond the "initial clock" period of 30 minutes per Operating Guide 4.5.3(7)(a). AEP fully completed its 93.3 MW share (1,000 MW total) of the second ERCOT-directed load shed in 40 minutes, or ten minutes beyond the additional amount of load shed directed, per 4.5.3(7)(d). AEP fully completed its 186.6 MW share (2,000 MW total) of the third ERCOT-directed load shed in 1 hour and 37 minutes. Per 4.5.3(7)(c) and (d), when ERCOT directs an additional load shed that exceeds 1,000 MW, the "load shed amount requests exceeding 1000 MW on the initial clock may take longer to implement."

The mitigation plan completion date to prepare for and execute future load shed directives has been extended until May 31, 2013. The mitigation plan includes a new multi-feeder load shedding application which automatically keeps track of the load shed numbers, helping to ensure a rotation does not reduce the load shed amount during the rotation period and before restoration is begun.

vi. PRC-005-1 R2 (Tracking # TRE201100246)

AEP acknowledges its inability to provide documentation for the Carbide-PUB Loma Alta M210/M220 line CCVT and the Airline Substation CB 7370 relays. However, in response to the commissioning of the Airline Substation CB 7370 relays, AEP provided a good faith estimate of the testing being completed by 1/1/2007 which was prior to the enforcement of PRC-005-1. It is AEP's opinion that this missing documentation posed minimal to no risk to the Bulk Electric System.

13. Although AEP does not admit to, nor does it deny, the alleged violations, AEP has agreed to enter into this Settlement Agreement with Texas RE to avoid extended litigation with respect to the matters described or referred to herein, to avoid

uncertainty, and to effectuate a complete and final resolution of the issues set forth herein.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

14. Texas RE and AEP agree that AEP has completed and Texas RE has verified completion of the mitigating actions set forth in Section III of each respective Disposition Document with the exception of EOP-003-1 R8 (see Addendum E). Further, Texas RE has verified that AEP has completed the additional actions addressed in Section III of the Disposition Documents (if any). The Mitigating Actions, Remedies and Sanctions are discussed in detail in the Disposition Documents.
15. For purposes of settling any and all disputes arising from Texas RE's investigation into the matters contained herein, Texas RE and AEP agree that prior to and after the effective date of this Agreement, AEP shall take the following actions:

Activity	Dates to be completed
i. AEP will implement an online dashboard to track the status of individual protection system misoperations and produce metrics on our program's performance.	1/30/2013
ii. AEP will implement a load shed application to automate many aspects of the load shed process.	5/31/2013
iii. AEP filed settlement with the PUCT on the related load shedding protocol issues.	6/12/2012
iv. AEP implement the first phase of a tool to track our NERC compliance activities and document our internal controls in preparation for NERC's Reliability Assurance Initiative (RAI)	12/31/2014

16. In order to facilitate Texas RE's need to communicate the status and provide accountability to the ERO (NERC), AEP will provide updates quarterly, or more frequently, upon request by Texas RE. AEP will submit these status updates to Texas RE in accordance with the confidentiality provisions of Section 1500 of the NERC Rules of Procedure.
17. It is understood that Texas RE staff shall audit the progress of mitigation plans and any other remedies of this Agreement, including, but not limited to site inspection, interviews, and request other documentation to validate progress and/or completion of the mitigation plans and any other remedies of this Agreement. Texas RE shall reasonably coordinate audits and information requests with AEP related to this Agreement.
18. Texas RE staff also consider the specific facts and circumstances of the violations and AEP's actions in response to the violations in determining a proposed penalty that meets the requirement in Section 215 of the Federal Power Act that "[a]ny penalty imposed under this section shall bear a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of such user, owner, or operator

to remedy the violation in a timely manner.”¹ The factors considered by Texas RE staff in the determination of the appropriate penalty are set forth in Disposition Documents A through E.

19. Based on the above factors, as well as the mitigation actions and preventative measures taken, AEP shall pay the monetary penalty of \$ 200,000 to Texas RE within thirty days after the Agreement is either approved by the Federal Energy Regulatory Commission or by operation of law, and Texas RE shall notify NERC if the payment is not received.
20. The estimated costs to AEP to implement the agreed to actions beyond those necessary to come into compliance with the Standard, as discussed above, are \$629,000. Texas RE may audit and inspect financial records to validate actual expenditures with estimates in this Settlement Agreement. Funding and programs associated with this Settlement Agreement will be above the original planned budget and programs for the 2013-2014 fiscal years.
21. Failure to make a timely penalty payment or to comply with any of the terms and conditions agreed to herein, or any other conditions of this Settlement Agreement, shall be deemed to be either the same alleged violations that initiated this Settlement and/or additional violation(s) and may subject AEP to new or additional enforcement, penalty or sanction actions in accordance with the NERC Rules of Procedure.
22. If AEP does not make the monetary penalty payment above at the times agreed by the parties, interest payable to Texas RE will begin to accrue pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii) from the date that payment is due, in addition to the penalty specified above. AEP shall retain all rights to defend against such additional enforcement actions in accordance with NERC Rules of Procedure.

V. ADDITIONAL TERMS

23. The signatories to the Settlement Agreement agree that they enter into the Settlement Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of Texas RE or AEP has been made to induce the signatories or any other party to enter into the Settlement Agreement.
24. Texas RE shall report the terms of all settlements of compliance matters to NERC. NERC will review the settlement for the purpose of evaluating its consistency with other settlements entered into for similar violations or under other, similar circumstances. Based on this review, NERC will either approve the settlement or reject the settlement and notify Texas RE and AEP of changes to the settlement that would result in approval. If NERC rejects the settlement, NERC will provide specific written reasons for such rejection and Texas RE will attempt to negotiate a revised

¹ 16 U.S.C. § 824o(e)(6).

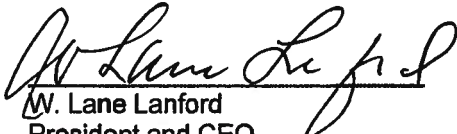
- settlement agreement with AEP including any changes to the settlement specified by NERC. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC approves the settlement, NERC will (i) report the approved settlement to the Commission for the Commission's review and approval by order or operation of law and (ii) publicly post this Settlement Agreement.
25. This Settlement Agreement shall become effective upon the Commission's approval of the Settlement Agreement by order or operation of law as submitted to it or as modified in a manner acceptable to the parties.
26. AEP agrees that this Settlement Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein and AEP waives its right to further hearings and appeal, unless and only to the extent that AEP contends that any NERC or Commission action on the Settlement Agreement contains one or more material modifications to the Settlement Agreement. Texas RE reserves all rights to initiate enforcement, penalty or sanction actions against AEP in accordance with the NERC Rules of Procedure in the event that AEP fails to comply with the Mitigation Plan and compliance program agreed to in this Settlement Agreement. In the event AEP fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this Settlement Agreement, Texas RE will initiate enforcement, penalty, or sanction actions against AEP to the maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. Except as otherwise specified in this Settlement Agreement, AEP shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.
27. AEP consents to the use of Texas RE's determinations, findings, and conclusions set forth in this Agreement for the purpose of assessing the factors, including the factor of determining the company's history of violations, in accordance with the NERC Sanction Guidelines and applicable Commission orders and policy statements. Such use may be in any enforcement action or compliance proceeding undertaken by NERC and/or any Regional Entity; provided, however, that AEP does not consent to the use of the specific acts set forth in this Settlement Agreement as the sole basis for any other action or proceeding brought by NERC and/or Texas RE, nor does AEP consent to the use of this Settlement Agreement by any other party in any other action or proceeding.
28. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity and accepts the Settlement Agreement on the entity's behalf.
29. The undersigned representative of each party affirms that he or she has read the Settlement Agreement, that all of the matters set forth in the Settlement Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the Settlement Agreement is entered into by such party in express reliance on those representations.,
30. The Settlement Agreement may be signed in counterparts.




American Electric Power Service Corp.

31. This Settlement Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

Agreed to and accepted:


W. Lane Lanford
President and CEO
Texas Reliability Entity, Inc.

5/21/13
Date


Richard Munczipski
Senior Vice President, Regulatory Services
American Electric Power Service Corp.

5/21/2013
Date

Common Disposition Document

Addendum A

DISPOSITION OF VIOLATION¹ INFORMATION COMMON TO INSTANT VIOLATIONS

NERC REGISTRY ID.
NCR04006

NOC#

REGISTERED ENTITY

American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma ("AEP")

REGIONAL ENTITY

Texas Reliability Entity, Inc. ("Texas RE")

I. REGISTRATION INFORMATION

ENTITY IS REGISTERED FOR THE FOLLOWING FUNCTIONS (BOTTOM ROW INDICATES REGISTRATION DATE):

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
	X	X	X		X		X				X	X	X	
	6/28/07	6/28/07	6/28/07		2/9/10		11/29/07				6/28/07	5/4/10	6/28/07	

DESCRIPTION OF THE REGISTERED ENTITY

AEP is engaged in the generation and transmission of electricity throughout the United States. AEP is one of the nation's largest generators of electricity, and owns nearly 38,000 megawatts of generating capacity in the United States. AEP also owns the nation's largest electricity transmission system, a nearly 39,000-mile network that includes more 765-kilovolt extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP's transmission system directly or indirectly serves about ten percent of the electricity demand in the Eastern Interconnection, the interconnected transmission system that covers 38 eastern and

¹ For purposes of this document and attachments hereto, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

central U.S. states and eastern Canada, and approximately 11 percent of the electricity demand in ERCOT, the transmission system that covers much of Texas.

AEP's utility units operate as Appalachian Power Company, AEP Ohio, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, and Wheeling Power Company (collectively, the "AEP East Companies"); Public Service Company of Oklahoma, and Southwestern Electric Power Company (collectively, the "AEP West Companies"); and AEP Texas Central Company and AEP Texas North Company (collectively, "AEP Texas").

IS THERE A SETTLEMENT AGREEMENTYes No **WITH RESPECT TO THE ALLEGED/CONFIRMED VIOLATION, REGISTERED ENTITY**Neither admits nor denies it (settlement only) Admits to it Does not contest it (Including within 30 days) **WITH RESPECT TO THE PROPOSED PENALTY OR SANCTION, REGISTERED ENTITY**Accepts it/Does not contest it **V. PENALTY INFORMATION****ASSESSED PENALTY OR SANCTION**

\$200,000

(1) Registered Entity's compliance history**Previous filed violations of any of the Reliability Standard(s) or Requirement(s) thereunder**Yes No **List violations and status**

Docket # NP12-30-000 was filed on May 30, 2012 as a multi-region settlement. On June 29, 2012 FERC issued an order stating it would not engage in further review of the Notice of Penalty.

- PRC-005-1 R2: SPP200900137, SPP201100449, RFC201000668, and TRE201100300
- PRC-008-0 R2: SPP200900150, SPP201100448, RFC201000331, and TRE201100301

ReliabilityFirst Corporation (ReliabilityFirst)

American Electric Power Service Corporation as agent for Appalachian Power Company, Columbus Southern Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, and Wheeling Power Company (AEP) - NCR00682

Docket # NP11-264-000 was filed on August 31, 2011. FERC issued notice on September 30, 2011 that the commission would not engage in further review of the Notice of Penalty.

- PRC-005-1 R2.1 RFC200900182
- PRC-015-0 R1 RFC200900258
- PRC-015-0 R2 RFC200900259
- PRC-016-0 R1 RFC200900260
- PRC-016-0 R3 RFC200900261
- PRC-017-0 R1 RFC200900262

Additional comments

Of the above violations, PRC-005-1 R2.1 could be considered relevant and possibly applicable to the compliance issues contained herein. After reviewing the specific compliance matters associated with violation ID RFC200900182, Texas RE concludes that it is not applicable.

Previously filed violations of other Reliability Standard(s) or Requirement(s) thereunder

Yes No

List violations and status

Texas RE has reviewed the AEP violations listed below, and has determined that they are not applicable to the violation listed in this Settlement Agreement. These violations are regarding Reliability Standards that are not relevant to this matter.

[REDACTED]

■ [REDACTED] [REDACTED]

[REDACTED]

■ [REDACTED] [REDACTED]

Additional comments

Texas RE has also considered AEP's previous violations in the other Regions, and has determined that they are not applicable to this settlement. These violations are regarding Reliability Standards that are not relevant to this matter.

ReliabilityFirst Corporation (ReliabilityFirst)

American Electric Power Service Corporation as agent for Appalachian Power Company, Columbus Southern Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, and Wheeling Power Company (AEP) - NCR00682

Docket# NP12-27-000 was filed by NERC on May 30, 2012. FERC issued notice on June 29, 2012 that the commission would not engage in further review of the Notice of Penalty.

- FAC-009-1 R1 RFC2011001049
- PRC-023-1 R1 RFC2011001069
- VAR-002-1.1b R1 RFC2011001111
- VAR-002-1.1b R3 RFC2011001301

Southwest Power Pool Regional Entity (SPP RE)

American Electric Power Service Corporation as agent for Public Service Company of Oklahoma & SW Electric Power Company - NCR01056

Docket # RC12-13-000 for SPP201000431 – VAR-002-1.1a R1 was filed on June 29, 2012. The 60 day FERC informational filing date has passed without a FERC order. This FFT record is closed.

Docket # NP12-19-000 for SPP201000356 – FAC-003-1 R2 was filed on March 30, 2012. FERC issued notice on April 27, 2012 that the commission would not engage in further review of the Notice of Penalty.

ReliabilityFirst Corporation (ReliabilityFirst) and Southwest Power Pool Regional Entity (SPP RE)

American Electric Power Service Corporation as agent for Appalachian Power Company, Columbus Southern Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, and Wheeling Power Company; American Electric Power Service Corp. As Agent For Public Svc. Co. Of Oklahoma & SW Ele Pwr Co. (AEP) - NCR00682 and NCR01056

Docket # RC13-2-000 was filed on November 30, 2012. FERC has 60 days to respond. If FERC does not respond to the FERC information filings within that time period, the FFTs will be considered complete and closed on January 30, 2013.

- EOP-008-0 R1, R1.3, R1.6: RFC2012010608 and SPP2012010531

Docket # NP11-266-000 was filed on August 31, 2011. FERC issued notice on September 30, 2011 that the commission would not engage in further review of the Notice of Penalty.

- FAC-008-1 R1.2.1: RFC200900322 and SPP200900151

(2) The degree and quality of cooperation by the Registered Entity

Full cooperation Yes No

If no, explain

(3) The presence and quality of the Registered Entity's Compliance Program

Is there a documented compliance program
Yes No Undetermined

Explain

AEP established the Reliability Compliance Committee (RCC) as a cross-functional team of executives from business units within AEP. The RCC is responsible for ensuring the implementation and oversight of AEP's program to comply with the NERC standards designed to protect the integrity of the North American transmission grid system. The RCC oversees the development of comprehensive plans for compliance with the NERC and Regional Reliability Organization standards, as well as address other compliance related matters such as the approval of reliability compliance plans, policies and procedures.

The specific roles of the RCC include:

1. Responsibility for providing oversight and guidance to the implementation of the Reliability Compliance Program and for providing regular briefings to senior management that is not on the RCC.
2. Overseeing the development and on-going updating of a comprehensive Reliability Compliance Program to comply with electric reliability standards.
3. Providing guidance for improving the compliance program based on input from the above described compliance personnel, results of internal audits, as well as periodic compliance reports filed with Regional Entities.
4. Facilitating the development and implementation of consistent processes across all business units and support groups.
5. Increasing the depth of the reliability compliance culture across the company.
6. Promoting the sustainability of AEP's Compliance Program.

In June of 2010, RCC approved the formation of the NERC Compliance Steering Committee (NCSC) as a cross-functional steering committee of leaders directly involved in NERC reliability, standards and compliance matters.

The vision of the NCSC includes:

1. Commitment to outstanding system reliability, achieved in part by full compliance with NERC reliability standards across AEP, achieved in a manner that is transparent, consistent, sustainable, objective and efficient.
2. Sustained culture of compliance that ensures that everyone knows what is expected and holds each other accountable.
3. Reliability policies and procedures tightly integrated into the way AEP personnel get their work done on a daily basis with auditable evidence generated as a by-product.

The Office of the CEO includes the AEP CEO and his staff, audit services, legal, federal/external affairs, and corporate communication services. Within this office, legal service supports the business units in achieving full compliance of NERC and Texas RE reliability standards. Legal provides coordinated, centralized services system-wide that are essential to ensuring that AEP is compliant with all applicable federal and state laws, rules, and regulatory requirements. Audit services reports directly to the Chairman/CEO of AEP with a direct reporting responsibility to the Chairman of the Audit Committee of the Board of Directors. Audit services support the business units in achieving compliance to NERC and Texas RE reliability standards.

Explain Senior Management's Role and involvement with respect to the Registered Entity's Compliance Program, including whether senior management takes actions that support the compliance program, such as training, compliance as factor in employee evaluations, or otherwise.

(4) Any attempt by the Registered Entity to conceal the violation(s) or information needed to review, evaluate, or investigate the violation

Yes No

Explain if Yes

(5) Any evidence the violation(s) were intentional

Yes No

Explain if Yes

(6) Any other mitigating factors for consideration

Yes No

Explain if Yes

(7) Any other aggravating factors for consideration

Yes No

Explain if Yes

(8) Any other extenuating circumstances

 Yes No

Explain if Yes

OTHER RELEVANT INFORMATION
Notice of Alleged Violation

Date

Or N/A

Settlement discussions commenced date

Violation ID	Standard/Req	Date
TRE201100206	PRC-010-0 R1	08/05/2011
TRE201100243, TRE201100244, TRE201100246, TRE201100560, TRE2012010887	PRC-004-1 R1, PRC-004-1 R3, PRC-005-1 R2, PER-003-0 R1, EOP-003-1 R8	01/11/2013

Or N/A

Notice of Confirmed Violation issued

Date

Or N/A

Supplemental Record information

Date(s)

Or N/A

Registered Entity response contested

Findings

Penalty

Both

Did not contest

Hearing Requested

 Yes No

Date

Outcome

Appeal Requested

PRC-010-0 R1 Disposition Document

Addendum B

DISPOSITION OF VIOLATION¹

NERC TRACKING NO.

TRE201100206 (PRC-010-0 R1)

REGIONAL ENTITY TRACKING NO.

TRE201100206

I. VIOLATION INFORMATION

RELIABILITY STANDARD	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
PRC-010-0	R1	R1.1.1	Medium	Moderate

Violation applies to the following functions:

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
	X				X						X	X		

PRC-010-0 provides System preservation measures in an attempt to prevent system voltage collapse or voltage instability by implementing an Undervoltage Load Shedding (UVLS) program.

TEXT OF RELIABILITY STANDARD AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

Standard PRC-010-0 R1.1.1

R1. The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall periodically (at least every five years or as required by changes in system conditions) conduct and document an assessment of the effectiveness of the UVLS program. This assessment shall be conducted with the associated Transmission Planner(s) and Planning Authority(ies).

R1.1. This assessment shall include, but is not limited to:

R1.1.1. Coordination of the UVLS programs with other protection and control systems in the Region and with other Regional Reliability Organizations, as appropriate.

¹ For purposes of this document and attachments hereto, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

VIOLATION DESCRIPTION
PRC-010-0 R1

Texas RE reviewed AEP's assessment of the effectiveness of their UVLS program ("UVLS Assessment") dated March 1, 2006. The UVLS Assessment included simulations and a review of voltage set points and timing, but did not include any evidence of "coordination" with "control systems in the Region," specifically, an internal review of relay reclosing functionality as well as coordination of load restoration with the Reliability Coordinator ("RC")/Balancing Authority ("BA").

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

Regarding the August 12, 2008 event that precipitated this violation, Texas RE determined the violation did not pose a serious or substantial risk to the overall bulk power system, but did have a moderate impact because of the localized effect and because voltage quickly recovered.

Approximately 238 MW of Laredo Area load was removed by UVLS relays² out of the approximately 415 MW total Laredo area load at approximately 2.4 seconds following the phase-to-phase fault after the capacitor cans failed. The Laredo Area UVLS relays have two settings: a 75% voltage setting with 2 second delay, and a 90% voltage setting with either a 3, 5 or 8 second delay. The 75% setting was the one activated during this event. Voltage gradually and fully recovered approximately 15 seconds after UVLS activation. The UVLS program implemented the intent of the engineering design in spite of the reclosing of eight of 24 relays. Based on a prior UVLS study of the Laredo Area, actual load that should have been interrupted was approximately 167 MW³. The actual load interrupted was well over this amount, 238 MW.

From a broader perspective however, the potential risk to the bulk power system for violating PRC-010-1 R1 was increased due to a breakdown in AEP's UVLS Assessment process and the control coordination process for verifying reclosing control function. Potentially, UVLS and UFLS relays that did not have reclosing verified could reclose inappropriately, reducing the effectiveness of intended operations.

In light of the nature of the violation, offset by the aforementioned mitigating factors, Texas RE has determined that this violation posed a moderate risk to the bulk power system.

II. DISCOVERY INFORMATION
METHOD OF DISCOVERY

- | | |
|------------------------------------|-------------------------------------|
| Self-Report | <input type="checkbox"/> |
| Self-Certification | <input type="checkbox"/> |
| Compliance Audit | <input type="checkbox"/> |
| Compliance Violation Investigation | <input type="checkbox"/> |
| Spot Check | <input checked="" type="checkbox"/> |
| Complaint | <input type="checkbox"/> |

² Net load interrupted after the inappropriate reclosing of eight out of 24 UVLS relays.

³ Applicable to conditions different from conditions during the event, but the best information available.

Periodic Data Submittal
 Exception Reporting

DURATION DATE(S) 06/28/2007 (date of earliest applicable registration) until
 01/03/2012 (completion of mitigation activities)

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY
 02/10/2011

Is the violation still occurring Yes No

Explain if yes

Remedial Action Directive issued Yes No

III. MITIGATION INFORMATION

MITIGATION PLAN NO. TREMIT005667 PRC-010-0, R1

Date Submitted to Regional Entity 08/09/2011
Date Accepted by Regional Entity 08/17/2011
Date approved by NERC 03/15/2012
Date provided to FERC 03/16/2012

Identify and explain all prior versions that were accepted or rejected, if applicable

MITIGATION PLAN COMPLETED Yes No

Expected completion date 01/31/2012
Extensions granted
Date of Certification Letter 02/01/2012
Certified as complete by Registered Entity as of 01/03/2012
Date of Verification Letter 07/09/2012
Verified complete by Regional Entity as of 01/03/2012

Actions taken to mitigate the issue and prevent recurrence

1. Issue Under-Frequency and Under-Voltage Load Shedding Program Methodology document which will include information regarding automatic load restoration after an event.
2. Distribute AEP Authority to Act document which defines responsibilities surrounding load shedding and restoration.
3. Develop a new document that addresses what criteria would trigger a UVLS assessment outside of the maximum five year interval.
4. Develop and distribute a discussion guide on disabling reclosing on UVLS relays.

List of evidence reviewed by Regional Entity to evaluate completion of Mitigation Plan or Milestones (for cases in which mitigation is not yet completed, list evidence reviewed for completed milestones)

1. Issue Under-Frequency and Under-Voltage Load Shedding Program Methodology document
 - Reviewed UFLS/UVLS Load Shedding Program Methodology, dated July 2011. Approved 7/27/11.
 - Reviewed 8/31/2011 email reflecting distribution of UVLS Program Methodology to staff.
2. Distribute Authority to Act Document
 - Reviewed Authority to Act, dated 4/21/2011.
 - Reviewed Authority to Act Sign-up Sheet that was signed by several persons in June of 2011.
 - Reviewed 6/8/11 Word document that is a transmittal letter distributing the Authority to Act do AEP Dispatchers.
3. Develop documentation that addresses criteria to trigger a UVLS assessment
 - Reviewed 8/31/2011 email reflecting distribution of UVLS Program Methodology to staff.
 - Reviewed UFLS/UVLS Load Shedding Program Methodology, dated July 2011. Approved 7/27/11.
4. Develop and distribute a discussion guide on disabling reclosing on UVLS relays
 - Reviewed Field Guide which discusses disabling reclosing on UVLS relays.
 - Reviewed email dated 1/3/12 proving it was distributed.

EXHIBITS

- TRE201100206_Spot Check Discovery Record
- TRE201100206_Mitigation Plan
- TRE201100206_MitPlanCertOfCompletion
- TRE201100206_Verification of Mitigation Plan

**PRC-004-1 R1, R3, and PRC-005-1 R2
Disposition Document**

Addendum C

DISPOSITION OF VIOLATION¹

NERC TRACKING NO.

TRE201100243 (PRC-004-1 R1)

TRE201100244 (PRC-004-1 R3)

TRE201100246 (PRC-005-1 R2)

REGIONAL ENTITY TRACKING NO.

TRE201100243

TRE201100244

TRE201100246

I. VIOLATION INFORMATION

RELIABILITY STANDARD	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
PRC-004-1	R1		High	Lower
PRC-004-1	R3		Lower	Severe
PRC-005-1	R2		Lower	Lower

Violation applies to the following functions:

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
	X										X			

PRC-004-1 ensures that all transmission and generation Protection System Misoperations affecting the reliability of the Bulk Electric System (BES) are analyzed and mitigated.

PRC-005-1 ensures all transmission and generation Protection Systems affecting the reliability of the Bulk Electric System (BES) are maintained and tested.

TEXT OF RELIABILITY STANDARDS AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

Standard PRC-004-1 R1

The Transmission Owner and any Distribution Provider that owns a transmission Protection System shall each analyze its transmission Protection System Misoperations and shall develop and implement a Corrective Action Plan to avoid future Misoperations of a similar nature according to the Regional Reliability Organization's procedures developed for Reliability Standard PRC-003 Requirement 1.

¹ For purposes of this document and attachments hereto, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

Standard PRC-004-1 R3

The Transmission Owner and any Distribution Provider that owns a transmission Protection System, and the Generator Owner shall each provide to its Regional Reliability Organization, documentation of its Misoperations analyses and Corrective Action Plans according to the Regional Reliability Organization's procedures developed for PRC-003 R1.

Standard PRC-005-1 R2

Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program implementation shall include:

R2.1. Evidence Protection System devices were maintained and tested within the defined intervals.

R2.2. Date each Protection System device was last tested/maintained.

VIOLATION DESCRIPTIONS**Background Information**

In response to a review of annually required Misoperation submittals and certain system events including Protection System Misoperations on August 18, 2008 and May 9, 2009, Texas RE conducted a review of AEP protection system Misoperations from January 1, 2008 to April 30, 2010. Texas RE subsequently determined that there appeared to be several recurring Misoperations over an extended period of time that warranted further investigation. Accordingly, Texas RE initiated a spot check and on January 12, 2011 issued a spot check report noting possible violations of PRC-004-1 and PRC-005-1. Based on the information and documentation provided by AEP, the Spot Check Team identified three possible violations as follows:

Violation Descriptions***PRC-004-1 R1***

PRC-004, R1 requires AEP to analyze its Misoperations and develop and implement Corrective Action Plans to avoid future Misoperations of a similar nature. The instances evidencing a failure to develop and implement a Corrective Action Plan to avoid future Misoperations of a similar nature are as follows:

1. *Carbide-PUB Loma Alta M210/M220 line* Texas RE determined that a Capacitance Coupled Voltage Transformer (CCVT) utilized in the protection scheme had been replaced in late June or July of 2008², but was mis-wired, causing approximately 20 Misoperations from August 2008 until it was repaired in May of 2009. AEP indicated that its relay group was unaware of

² Precise timing unknown due to not having records.

the CCVT replacement, and AEP had no records they could provide, which Texas RE has determined was a contributing factor to the multiple Misoperations. AEP indicated that conflicts with other issues of high priority were the cause of the delay in investigation of these Misoperations and the Carbide-PUB Loma Alta circuit did not have the appropriate priority level assigned. A suitable Corrective Action Plan was completed in May 2009, nine months after the initial Misoperation, thus a Corrective Action Plan was not implemented in time to avoid future Misoperations of a similar nature, a violation of PRC-004-1 R1.

2. *Bluff Creek and Airline Substations* At the Bluff Creek substation, there were five overtrips³ between January and April of 2008 caused by incorrect settings and relay miswiring compounded by contractor or consultant design errors and inadequate design review by AEP. At the Airline substation, a circuit breaker Misoperation was caused by contractor or consultant design errors and inadequate design review by AEP. Texas RE determined that a Corrective Action Plan was not implemented before a future Misoperation of a similar nature occurred.
3. *Laredo PS-Zacate-Heights and Laredo PS-Anna St-Heights 138kV lines* An unnecessary trip during a fault (UTDF) occurred May 5, 2008 (in the case of the first line, Laredo PS-Zacate-Heights the Misoperation re-occurred September 14, 2008). The issues causing the Misoperations, relay settings, were corrected approximately one year later on April 23, 2009. Texas RE determined that a Corrective Action Plan was not implemented before a future Misoperation of a similar nature occurred.
4. *Hamilton Road-Uvalde 138kV line* An UTDF occurred May 14, 2008, and again on August 22, 2008. The issue was corrected approximately 5 months after the initial Misoperation on October 29, 2008. The root cause was incorrect relay settings. Texas RE determined that a Corrective Action Plan was not implemented before a future Misoperation of a similar nature occurred.
5. *Oklunion-Southwest Vernon 138kV line* An UTDF occurred November 23, 2008, then again on January 28, 2009. The issue, relay settings, was eventually corrected March 5, 2009. Texas RE determined that a Corrective Action Plan was not implemented before a future Misoperation of a similar nature occurred.

PRC-004-1 R3

PRC-004-1 R3 requires that a Transmission Owner provide to its Regional Reliability Organization, documentation of its Misoperations analyses and Corrective Action Plans according to the Regional Reliability Organization's procedures developed for PRC-003 R1.

In the ERCOT Region, applicable procedures are found in the Zonal Operating Guide for Oct 2008, Section 7.2.3 Para 1 - ERCOT Misoperation Analysis Requirements. AEP supplied ERCOT ISO with annual report forms for Misoperations occurring from 2008 to 2010. Upon a review of all available evidence, it was determined that three misoperation reporting forms were submitted with blank Corrective Action Plans sections.

³ Bluff Creek-Red Creek 345 kV line 3 separate times, Bluff Creek 345-138 kV Auto #1 and Bluff Creek 345-138 kV Auto #2.

1. *Bluff Creek Substations* Misoperations occurred January 28, 2009 with a target corrective action implementation date of June 30, 2009 in connection with CBs 4395 and 3665. AEP provided two misoperation reports to ERCOT ISO that contained blank Corrective Action Plan sections.
2. *Dilley SS-San Miguel 138kV line* An UDTF occurred February 14, 2009 with a target corrective action implementation date of September 30, 2009. The Misoperation report filed with ERCOT ISO contained a blank Corrective Action Plan section.
3. *Harlingen-Rio Hondo 138 kV line* An UDTF occurred March 22, 2009 with a target completion date of June 30, 2009. The Misoperation report filed with ERCOT ISO contained a blank Corrective Action Plan section.

PRC-005-1 R2

PRC-005-1 R2 requires that AEP have documentation of its Protection System maintenance and testing program and the implementation of that program. Below are examples of Protection System changes that warranted testing or maintenance per AEP maintenance and testing procedures, but AEP was unable to furnish documentation to demonstrate that Protection System devices were maintained and tested, which constitutes a violation of this requirement:

1. Regarding the Carbide-PUB Loma Alta M210/M220 line CCVT that was replaced in June of 2008 and described above, AEP failed to follow its commissioning verification procedures found in its maintenance and testing program when the CCVT was replaced by not conducting adequate commissioning testing, a violation of PRC-005-1 R2.⁴
2. Regarding the incorrect installation and subsequent Misoperations associated with the Airline Substation CB 7370 relays, on January 1, 2007, AEP failed to follow its initial commissioning verification procedures of its maintenance and testing program, which calls for end-to-end testing of the trip output logic, wiring, and trip testing, a violation of PRC-005-1 R2. In addition, there is no evidence of verification testing when relay logic outputs were corrected on June 18, 2009, a violation of PRC-005-1 R2.

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL***PRC-004-1 R1 and R3***

Texas RE determined this violation did not pose a serious or substantial risk to the bulk power system, but did have a moderate impact because it is indicative of program oversights related to the timeliness of the development and execution of Corrective Action Plans. Moreover, Texas RE determined that although there are no time requirements specified in PRC-004-1, and AEP is responsible for a comparatively large portion of facilities, there were several occurrences of implementing Corrective Action Plans that were not executed in time to avoid future Misoperations of a similar nature.

⁴ Additionally, there was no evidence submitted indicating that the correction of the CCVT wiring initiated commission testing as required by AEPs maintenance and testing program.

Most of the facilities involved in the relevant instances operate at 138 kV, while some of them operate at 345 kV.⁵ Also, some of the facilities serve the Laredo Area – a sensitive, transmission-constrained portion of the ERCOT grid at the time of the occurrences. The implication of the possible broader issues related to the timeliness of implementing Corrective Actions in a manner that avoided future Misoperations of a similar nature is that operational assessment tools such as Real Time Contingency Analysis (RTCA, an operations timeframe model) could be adversely affected. Misoperations could result in operating in unknown states in a more sensitive area of the grid, thus increasing reliability risk. Such a risk is dynamic, varying with then-current system conditions.

In light of the nature of the violation and the foregoing factors, Texas RE determined this violation had a moderate impact to the reliability of the bulk power system.

PRC-005-1 R2

Texas RE determined this violation did not pose a serious or substantial risk to the bulk power system, but had a moderate impact. Equipment was installed and in-service without being duly tested, and because the violation issue reflects broader problems related to Misoperation program inadequacy. By failing to conduct commissioning verification testing in certain cases, AEP experienced multiple Misoperations that compromised BPS reliability risk. The failure to conduct commissioning testing can be attributable to an absence of an adequate maintenance and testing program, most notably, AEPs new equipment documentation procedures.

Texas RE considered the following additional facts in determining the reliability impact: i) AEP has 3,854 miles of 138 kV transmission and 842 miles of 345 kV transmission, ii) the total number of protection system elements in violation of PRC-005-1 R2 is 25 elements out of a total of 24,864 elements (0.01%) covered by AEP’s PRC-005-1 program, iii) once wiring issues were corrected, all tested equipment was found to have been within tolerance and otherwise functional.

In light of the nature of the violation and the foregoing factors, Texas RE determined this violation had a moderate impact to the reliability of the bulk power system.

II. DISCOVERY INFORMATION

METHOD OF DISCOVERY

- | | |
|------------------------------------|-------------------------------------|
| Self-Report | <input type="checkbox"/> |
| Self-Certification | <input type="checkbox"/> |
| Compliance Audit | <input type="checkbox"/> |
| Compliance Violation Investigation | <input type="checkbox"/> |
| Spot Check | <input checked="" type="checkbox"/> |
| Complaint | <input type="checkbox"/> |
| Periodic Data Submittal | <input type="checkbox"/> |
| Exception Reporting | <input type="checkbox"/> |

⁵ Bluff Creek overtrips were 345 kV issues.

DURATION DATE(S)

PRC-004-1 R1 violation duration is from February 19, 2008, when the first Misoperation of a similar nature occurred until December 8, 2011, when AEP completed the associated mitigation plan.

PRC-004-1 R3 violation duration is from June 1, 2009, when Misoperation analysis and Corrective Action Plans were due to the Regional Reliability Organization but not provided, until December 8, 2011 when AEP completed the associated mitigation plan.

PRC-005-1 R2 violation duration is from June 18, 2007, the enforcement date of the standard, until October 28, 2011, when AEP completed the associated mitigation plan.

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY

01/12/2011

Is the violation still occurring Yes No

Explain if yes

Remedial Action Directive issued Yes No

III. MITIGATION INFORMATION

MITIGATION PLAN NO. TREMIT005691 & TREMIT005692 (identical MPs)
PRC-004-1 R1 & R3

Date Submitted to Regional Entity 12/13/2011

Date Accepted by Regional Entity 12/13/2011

Date approved by NERC 07/18/2012

Date provided to FERC 07/19/2012

Identify and explain all prior versions that were accepted or rejected, if applicable
A version submitted 8/11/11 was rejected on 10/5/11 because while there was adequacy regarding tracking Misoperations, there was not enough substance as it regards timely completing corrective actions in order to avoid future Misoperations of a similar nature.

MITIGATION PLAN COMPLETED Yes No

Expected completion date 12/31/2011

Extensions granted

Actual Completion Date 12/08/2011

Date of Certification Letter 01/09/2012
Certified as complete by Registered Entity as of 12/08/2011

Date of Verification Letter 04/24/2012
Verified complete by Regional Entity as of 12/08/2011

Actions taken to mitigate the issue and prevent recurrence

1. In May of 2010, AEP instituted a monthly misoperation tracking report. This report identifies open, unmitigated misoperation events so that the personnel that have responsibilities for mitigation are kept aware of the status. This will aid in the timely mitigation of misoperations.
2. TRE and ERCOT have re-defined the misoperation reporting format and accompanying definitions for consistency in data, based on the specifications of the NERC ERO-RAPA group. AEP will submit periodic misoperation data per this re-defined process.
3. In June of 2010, AEP enacted a reorganization of its Station Engineering Department that separated out the Protection and Control Engineering functions. This provides better direction, focus and attention to issues pertaining to the design and implementation of Protection and Control schemes.
4. In December 2011, AEP developed and distributed to AEP personnel a high level policy document that outlines prioritization of activities pertaining to the investigation, analysis and mitigation of Misoperations.

List of evidence reviewed by Regional Entity to evaluate completion of Mitigation Plan or Milestones (for cases in which mitigation is not yet completed, list evidence reviewed for completed milestones)

Item 1: Proposed complete: 4/21/11. Actual complete: 4/28/10.

Reviewed email from AEP employee to the Relay Operations Center. The email provided the status of misoperation events/investigations in the Corpus Christi Region as of April 2010. The email reflects an acceptable high-level summary of the status of all Misoperations. The email contains links to additional detail for any individual Misoperations. In addition, Texas RE reviewed a detailed report indicating open Misoperation statuses and the reason still open.

Item 2: Proposed complete: 9/30/11. Actual complete: 8/31/11.

Texas RE reviewed the new Misoperation reporting format dated August 31, 2011. Texas RE did not review conformance with the specifications of the NERC ERO-RAPA group, but accepts AEP's representation that it conforms.

Item 3: Proposed complete: 6/30/11. Actual complete: 6/1/10.

Texas RE reviewed several org charts that indicate that Protection & Control is a separate branch in the organization. Although the dates on several charts fall well into 2011, AEP represented that the org charts apply to personnel as of June 1, 2010.

Item 4: Proposed complete: 12/31/11. Actual complete: 12/8/11.

Texas RE reviewed a Protection System Misoperation Investigation and Reporting Guide, dated November 21, 2011. In addition, Texas RE reviewed an email dated 12/8/2011 with the aforementioned Guide found as an attachment. This email documents evidence that the Guide was developed and distributed to AEP personnel.

MITIGATION PLAN NO. TREMIT005693 PRC-005-1 R2

Date Submitted to Regional Entity	08/11/2011
Date Accepted by Regional Entity	12/16/2011
Date approved by NERC	07/18/2012
Date provided to FERC	07/19/2012

Identify and explain all prior versions that were accepted or rejected, if applicable

MITIGATION PLAN COMPLETED Yes No

Expected completion date	11/01/2011
Extensions granted	
Date of Certification Letter	12/16/2011
Certified as complete by Registered Entity as of	10/28/2011
Date of Verification Letter	12/16/2011
Verified complete by Regional Entity as of	10/28/2011

Actions taken to mitigate the issue and prevent recurrence

AEP was to issue guidance that corrective maintenance activities that equate to activities outlined in AEP's preventative maintenance and testing program shall be documented in AEP's maintenance and testing database.

List of evidence reviewed by Regional Entity to evaluate completion of Mitigation Plan or Milestones (for cases in which mitigation is not yet completed, list evidence reviewed for completed milestones)

Texas RE reviewed the "Guidance on Documenting P&C Corrective Maintenance Work" and found that it met the requirements contained in the mitigation plan. In addition, Texas RE reviewed an email sent 10/28/2011 that documented the distribution of the guidance to affected personnel.

EXHIBITS

- TRE201100243_Spot Check Discovery Record
- TRE201100243_Mitigation Plan
- TRE201100243_MitPlanCertOfCompletion
- TRE201100243_Verification of Mitigation Plan
- TRE201100244_Spot Check Discovery Record
- TRE201100244_Mitigation Plan
- TRE201100244_MitPlanCertOfCompletion
- TRE201100244_Verification of Mitigation Plan
- TRE201100246_Spot Check Discovery Record
- TRE201100246_Mitigation Plan
- TRE201100246_MitPlanCertOfCompletion
- TRE201100246_Verification of Mitigation Plan

PER-003-0 R1 Disposition Document

Addendum D

DISPOSITION OF VIOLATION¹

NERC TRACKING NO.

TRE201100560 (PER-003-0 R1)

REGIONAL ENTITY TRACKING NO.

TRE201100560

I. VIOLATION INFORMATION

RELIABILITY STANDARD	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
PER-003-0	R1		High	Severe

Violation applies to the following functions:

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
												X		

The purpose of PER-003-0 is to ensure certification of operating personnel to ensure minimum competencies for operating a reliable Bulk Electric System.

TEXT OF RELIABILITY STANDARD AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

Standard PER-003-0 R1

Each Transmission Operator, Balancing Authority, and Reliability Coordinator shall staff all operating positions that meet both of the following criteria with personnel that are NERC-certified for the applicable functions:

R1.1 - Positions that have the primary responsibility, either directly or through communications with others, for the real-time operation of the interconnected Bulk Electric System.

R1.2 - Positions directly responsible for complying with NERC standards.

VIOLATION DESCRIPTION

As a result of a December 6, 2011 Compliance Spot Check concerning the Texas February 3, 2011 winter event, Texas RE has determined that AEP's Manager of Transmission Dispatching has primary responsibility, either directly or through communications with others for the real-time

¹ For purposes of this document and attachments hereto, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

operation of the interconnected bulk electric system, but at the time was not NERC-certified as required by the standard. Primary responsibility is documented in the manager's position description, which includes the phrase "responsible for the safe, reliable and cost-effective coordination, dispatching and restoration of assigned transmission facilities and the overall moment-to-moment operation of a portion of the AEP transmission system." Additionally, the manager's actions on February 3, 2011 demonstrate primary responsibility for the real-time operation of the BES. Such actions included participating in phone conversations about real-time operations matters, directing actions specific to real-time operations, and coordinating with other entities regarding real-time operations issues.

Thus, AEP violated PER-003-0 R1 beginning with registration on May 4, 2010, until December 10, 2012.

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

Texas RE determined this violation did pose serious or substantial risk to the bulk power system and had a moderate impact because an individual who was not NERC certified actively participated in real-time system operations. Although the individual involved in this noncompliance is considered a knowledgeable, experienced staff member, and although his actions on February 3, 2011 were appropriate, he was not NERC certified. The intent of the standard is to ensure a minimum level of competency among all operating staff. Theoretically, persons who were not NERC certified and thus of questionable competency could have potentially initiated real-time operating actions that had a deleterious effect on grid reliability.

II. DISCOVERY INFORMATION

METHOD OF DISCOVERY

- | | |
|------------------------------------|-------------------------------------|
| Self-Report | <input type="checkbox"/> |
| Self-Certification | <input type="checkbox"/> |
| Compliance Audit | <input type="checkbox"/> |
| Compliance Violation Investigation | <input type="checkbox"/> |
| Spot Check | <input checked="" type="checkbox"/> |
| Complaint | <input type="checkbox"/> |
| Periodic Data Submittal | <input type="checkbox"/> |
| Exception Reporting | <input type="checkbox"/> |

DURATION DATE(S)

05/04/2010 (date of TOP registration) until
12/10/2012 (completion of mitigation activities)

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY

12/09/2011

Is the violation still occurring

Yes No

Explain if yes

Remedial Action Directive issued

Yes No **III. MITIGATION INFORMATION**

MITIGATION PLAN NO. TREMIT008285 PER-003-0 R1

Date Submitted to Regional Entity 10/19/2012

Date Accepted by Regional Entity 10/22/2012

Date approved by NERC 11/22/2012

Date provided to FERC 01/22/2013

Identify and explain all prior versions that were accepted or rejected, if applicable

MITIGATION PLAN COMPLETED

Yes No

Expected completion date 2/28/2013

Extensions granted

Date of Certification Letter 01/18/2013

Certified as complete by Registered Entity as of 12/10/2012

Date of Verification Letter 02/22/2013

Verified complete by Regional Entity as of 12/10/2012

Actions taken to mitigate the issue and prevent recurrence

Following the spot check exit briefing on December 8, 2011, the Authority to Act document has been reviewed with the operators and the Transmission Dispatch Manager. The Authority to Act document has since then been updated to clarify the role of Transmission System Control Center Operators and Transmission Dispatchers with respect to real time operations. In addition, the Manager of Transmission Dispatching job description has been updated to clarify that job position with respect to real time operations. The current Manager of Transmission Dispatching has obtained NERC RC certification as of December 10, 2012.

List of evidence reviewed by Regional Entity to evaluate completion of Mitigation Plan or Milestones (for cases in which mitigation is not yet completed, list evidence reviewed for completed milestones)

- The Authority to Act document
- The job description for Manager of Transmission Dispatching
- Manager's NERC RC Certificate

EXHIBITS

- TRE201100560_Spot Check Discovery Record
- TRE201100560_Mitigation Plan
- TRE201100560_MitPlanCertOfCompletion
- TRE201100560_Verification of Mitigation Plan

EOP-003-1 R8 Disposition Document

Addendum E

DISPOSITION OF VIOLATION¹

NERC TRACKING NO. **REGIONAL ENTITY TRACKING NO.**
 TRE2012010887 (EOP-003-1 R8) 22154

I. VIOLATION INFORMATION

RELIABILITY STANDARD	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
EOP-003-1	R8		High	High

Violation applies to the following functions:

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
												X		

The purpose statement of Reliability Standard EOP-003-1 provides: “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.”

TEXT OF RELIABILITY STANDARD AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

Standard EOP-003-1 R8

Each Transmission Operator or Balancing Authority shall have plans for operator-controlled manual load shedding to respond to real-time emergencies. The Transmission Operator or Balancing Authority shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.

VIOLATION DESCRIPTION

Texas RE audited AEP from July 30 – August 10, 2012 and determined that AEP, as Transmission Operator, failed to timely implement and sufficiently maintain its load shedding obligation as directed by the Electric Reliability Council of Texas, Inc. (ERCOT) in a timeframe adequate for responding to an emergency on February 2, 2011 (the Event).

¹ For purposes of this document and attachments hereto, each violation at issue is described as a “violation,” regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

Operating Guide §4.5.3.3 contains the ERCOT Load Shed Table, and by extension, AEP's prorated load shed Obligation. At the time of the February 2, 2011 Event, AEP's share was 9.33 MW per 100 MW of total ERCOT firm load shed. Consistent with AEP's load shedding plan and the Operating Guide, AEP is expected to respond to ERCOT load shed directives within 30 minutes of being called. **Per the JRO Matrix (dated November 2010):** Each Local Control Center and ERCOT shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.²

During the Event, ERCOT declared an Energy Emergency Alert (EEA) 3 at 5:43 a.m. February 2, 2011 and subsequently issued certain directives to AEP (186.6 total MW at 06:04, 373.2 total MW at 06:23, and) to implement load shedding in steps established to minimize the risk of further uncontrolled separation, loss of generation or system shutdown.

Thirty minutes later, AEP responded as follows:

Time	MW Load Shed Obligation	MW Actually Shed	MW Under Obligation
06:34	186.6	141.5	45.1
06:53	373.2	209.4	163.8

Notes,

1. AEP was expected to shed firm load a total of 483 minutes. AEP did not shed adequate firm load a total of 82 minutes or 17% of the time.
2. AEP's maximum MW Under-Obligation occurred at 7:20 a.m. when AEP was expected to shed 373.2 MW and actually shed 171.3 MW – a 54% shortfall.

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

This violation posed a moderate risk to the bulk power system because the ERCOT system experienced an Energy Emergency Alert Level 3 and AEP failed to fully contribute their obligated load reduction. This insufficiency compromised ERCOT ISOs ability to mitigate the system emergency. Furthermore, ERCOT ISO counted on a certain amount of load shed capability, yet such capability did not exist when called upon. In other words, ERCOT ISO experienced a situation where they did not have an accurate count of their operating reserves; such reserves were overstated both in absolute terms and in response characteristics.

² AEP and ERCOT registered for the Transmission Operator function via a Coordinated Functional Registration (CFR), effective April 1, 2010. The CFR includes a Responsibility Matrix that specifies the entities' respective compliance responsibilities. In the Responsibility Matrix AEP is designated as a Local Control Center or "LCC".

II. DISCOVERY INFORMATION

METHOD OF DISCOVERY

Self-Report	<input type="checkbox"/>
Self-Certification	<input type="checkbox"/>
Compliance Audit	<input checked="" type="checkbox"/>
Compliance Violation Investigation	<input type="checkbox"/>
Spot Check	<input type="checkbox"/>
Complaint	<input type="checkbox"/>
Periodic Data Submittal	<input type="checkbox"/>
Exception Reporting	<input type="checkbox"/>

DURATION DATE(S) 02/02/2011

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY
08/10/2012

Is the violation still occurring Yes No

Explain if yes

Remedial Action Directive issued Yes No

III. MITIGATION INFORMATION

MITIGATION PLAN NO. TREMIT008318-1 TRE2012010887 EOP-003-1, R8

Date Submitted to Regional Entity 01/11/2013

Date Accepted by Regional Entity 01/16/2013

Date approved by NERC 01/18/2013

Date provided to FERC 01/18/2013

Identify and explain all prior versions that were accepted or rejected, if applicable

Texas RE rejected the initial mitigation plan submitted for TRE2012010887 on December 20, 2012 and requested the entity to provide more clarification on the number of drills AEP commits to perform, and the relevant period of time AEP commits to doing it. It was also requested to provide additional information on the new multiple feeder automatic load shedding computer application.

AEP initially certified the mitigation plan was completed December 7, 2012. Texas RE subsequently determined that the level of completion of AEPs new multi-feeder load

shedding application (activity 5) was partial³ and would not prevent recurrence of the issues that precipitated the violation. Texas RE rejected the initial certification of completion on February 22, 2013.

MITIGATION PLAN COMPLETEDYes No **Expected completion date**

05/31/2013

Extensions granted

03/20/2013

Date of Certification Letter**Certified as complete by Registered Entity as of****Date of Verification Letter****Verified complete by Regional Entity as of****Actions taken to mitigate the issue and prevent recurrence**

Since the February 2011 winter storm event, AEP has completed all items below.

1. The AEP Transmission Dispatch Center (TDC) and AEP Texas Distribution Dispatch Center (DDC) telephone system have been programmed to include an "Emergency Button". The use of the "Emergency Button" helps to filter out normal calls from an immediate response call. Guidelines for proper use of this feature have been created in October 2011.
2. AEP Texas TDC and DDC had two jointly held load shed drills in 2011 and 2012, respectively.
3. DDC dispatchers have reviewed and acknowledged receiving AEP's policy on Operator Responsibility and Authority to Act as of June 2011.
4. DDC dispatchers have received instructions that if a load shed directive is received during the daily change in crew shift, the load shed will be completed prior to the shift change. It is of paramount importance and a priority to achieve the requested load shed amount as opposed to taking time for a crew to complete a proper "pass down" of information to another crew and to log off and then log on to the same SCADA work station.
5. AEP Texas has developed a new multi-feeder load shedding application. This new application allows for the interruption by inputting the MW amount to shed by district. A user can hit the enter-key to allow the program to total the amount of load that has been shed and then executing the action on the feeders to reach the

³ The application could effect a first call for firm load shed, but could not accommodate subsequent additional calls.

desired MW amount. The program will keep running totals by district and for the company (i.e., AEP Texas) to ensure load shedding happens much more quickly as compared to the manual process used during the February 2011 winter storm. Since the program automatically keeps track of the numbers, this also helps to ensure a rotation does not reduce the load shed amount during the rotation period and before restoration is begun.

6. AEP Texas has conducted training for DDC and TDC dispatchers to use the new load shed application.
7. Distribution Dispatch has implemented the production SCADA host load shedding application.

List of evidence reviewed by Regional Entity to evaluate completion of Mitigation Plan or Milestones (for cases in which mitigation is not yet completed, list evidence reviewed for completed milestones)

1. AEP submitted a picture of the emergency button. In addition, AEP provided an attestation indicating the button was implemented in October of 2011.
2. AEP Texas TDC and DDC held drills on 5/23/11, 10/19/11, 4/27/12, and 10/25/12. For each of these drills, AEP submitted documentation of drill participants, the date drills were held, and detailed descriptions of the drill process. In addition, the documentation contained lessons learned and for some drills, training suggestions.
3. AEP provided the Authority to Act document as well as signatures indicating when the document was read by each operator.
4. AEP represents that on February 24, the Supervisor, Distribution Dispatching, talked to the Dispatch Leads regarding the load shed event and the Dispatch Leads were to pass down the information to other dispatchers. The Supervisor subsequently reinforced the message by discussing the load shed issues with dispatchers during the March safety meeting and the night meetings with every crew. The Supervisor completed the crew night meetings on April 18th, 2012 the date noted on his attestation. Texas RE reviewed Ken Macune's attestation and noted it reiterated the events on April 18th. Texas RE also reviewed a "refresher" email dated February 19th, 2013 reminding operators to complete load sheds prior to shift change.

EXHIBITS

- TRE2012010887_Audit Discovery Record
- TRE2012010887_Mitigation Plan

Attachment b

Record documents for the violation of PRC-010-0 R1:

- 1. AEP's Source Document submitted February 10, 2011**
 - 2. AEP's Mitigation Plan designated as TREMIT005667 submitted August 9, 2011**
 - 3. AEP's Certification of Mitigation Plan Completion dated February 1, 2012**
 - 4. Texas RE's Verification of Mitigation Plan Completion dated July 9, 2012**
-

Violation - Discovery Record

Registered Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
NERC Registry ID: ~~NR10400~~ Public Service of Oklahoma

NERC Violation ID: TRE201100206

Discovery Method: Spot Check

Date Submitted: February 10, 2011

Region Contact: Curtis Crews

Phone: 512-583-4900 Email: curtis.crews@texasre.org

Standard: PRC-010-0 - Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program

Purpose: Provide System preservation measures in an attempt to prevent system voltage collapse or voltage instability by implementing an Undervoltage Load Shedding (UVLS) program.

Requirement: R1

The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall periodically (at least every five years or as required by changes in system conditions) conduct and document an assessment of the effectiveness of the UVLS program. This assessment shall be conducted with the associated Transmission Planner(s) and Planning Authority(ies).

Violated Sub-Req(s):

Violated Function(s): LSE, TO, TOP

Init Determ a Vltn: February 10, 2011

Begin Date of Vltn: June 28, 2007

End Date: January 03, 2012

Notified of Vltn on: February 10, 2011

Potential Impact to BES: This violation did not pose a serious or substantial risk to the bulk power system because of the magnitude and the risk of re-occurrence were/are not significant. The UVLS program effectively performed the design intent despite the misoperations.

Brief Vltn Descr. & Cause: Based on an event review of August 12, 2008 initiated by a fault of a Laredo Plant Substation Capacitor Bank, it was noted that on the afternoon of August 12, 2008 AEP was replacing several capacitor cans in capacitor bank 255 connected to Laredo CB 255 on the 69 kV bus network. Capacitor bank 255 had been out of service since May 23, 2006 due to the failure of several capacitor cans. After replacing the faulty or removed capacitor cans, at approximately 14:25 AEP closed CB 255 to energize capacitor bank 255. Approximately six (6) seconds later several of the capacitor cans failed causing a phase-to-phase fault. The fault initiated a chain reaction tripping a Static Compensator, 69 kV transmission lines, two generation units (referred to as LEC Unit #4 and #5), and triggering the local Under Voltage Load Shed (UVLS) system. Eight breakers associated with UVLS automatically reclosed representing a 33% (8 of 24) reduction in the effectiveness of the UVLSAEP possibly had not conducted an assessment of the effectiveness of the UVLS program nor have a UVLS program in place.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: Medium

Severity Level: VSL - Lower

Factual Basis:

Mitigation Plan

Registered Entity: American Electric Power Service Corp as agent for AEP

<u>NERC Violation ID</u>	<u>Requirement</u>	<u>Violation Validated On</u>
TRE201100206	PRC-010-0 R1	02/10/2011

Mitigation Plan Submitted On: August 09, 2011

Mitigation Plan Accepted On: August 17, 2011

Mitigation Plan Proposed Completion Date: January 31, 2012

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by AEPSCO001 On: February 01, 2012

Mitigation Plan Completion Validated by TRE On:

Mitigation Plan Completed? (Yes/No): No

Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

- (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.
- (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
- (3) The cause of the Alleged or Confirmed Violation(s).
- (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
- (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
- (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
- (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
- (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.
- (9) Any other information deemed necessary or appropriate.
- (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.
- (11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

- The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.
- If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.
- Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.
- The user has read and accepts the conditions set forth in these Compliance Notices.

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP
Texas Central Co, and Public Service of Oklahoma
NERC Compliance Registry ID: NCR04006
Address: 1 Riverside Plaza
Columbus OH 43215

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan.:

Name: Thad Ness
Title: Reliability Standards Compliance Manager
Email: tkness@aep.com
Phone: 614-716-2053

Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
Requirement Description		
TRE201100206	08/12/2008	PRC-010-0 R1
The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall periodically (at least every five years or as required by changes in system conditions) conduct and document an assessment of the effectiveness of the UVLS program. This assessment shall be conducted with the associated Transmission Planner(s) and Planning Authority(ies).		

C.2 Identify the cause of the violation(s) identified above:

Based on the results of 2011 Spot Check of PRC-010 and PRC-011 conducted by TRE, there are several items related to an 8/12/2008 event that have been identified as potential violations of PRC-010, specifically:

"The evidence provided is indicative of a possible violation associated with R1 specifically with the R1 language as follows: 'coordination of the UVLS programs' and 'conduct and document an assessment of the effectiveness of the UVLS program.'"

These instances of possible non-compliance include the following:

- There was no formal plan provided for the UVLS that included restoration of load after an event.
- There was no indication provided to the P&C Technicians commissioning the relays that blocking reclosing was required for UVLS.
- There was no apparent coordination of the UVLS programs with "other protection and control systems in the region" that included AEP DP or the BA/TOP/RC.
- The reclosing of (8) UVLS feeders demonstrated a lack of internal "coordination of the UVLS Programs".

C.3 Provide any relevant information regarding the violation(s) associated with this Mitigation Plan: [If known]
[above]

Section D: Details of Proposed Mitigation Plan

- D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:
- Issue an Under-Frequency and Under-Voltage Load Shedding Program Methodology document:
 Issue Under-Frequency and Under-Voltage Load Shedding Program Methodology which will include information regarding automatic load restoration after an event.
 - Distribute Authority to Act document:
 Distribute AEP Authority to Act document which defines responsibilities surrounding load shedding and restoration.
 - Develop documentation that addresses criteria to trigger a UVLS assessment:
 Develop a new document that addresses what criteria would trigger a UVLS assessment outside of the maximum five year interval.
 - Develop and distribute a discussion guide on disabling reclosing on UVLS relays

- D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: January 31, 2012

- D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
1	Issue Under-Frequency and Under-Voltage Load Shedding Program Methodology	09/15/2011	
2	Distribute Authority to Act document	09/30/2011	
3	Develop documentation that addresses criteria to trigger a UVLS assessment	11/30/2011	
4	Develop and distribute a discussion guide on disabling reclosing on UVLS relays	01/31/2012	

- D.4 Additional Relevant Information (Optional)

Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BES Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

AEP believes that there is no substantial risk to the BPS while this mitigation plan is being implemented. While the milestones described above will provide significant enhancements to AEP's UVLS program, AEP contends that the current UVLS program is not considered a threat to the BPS. The reclosing settings for locations indicated in AEP's UVLS program have already been modified to block reclosing following an event.

E.2 Prevention of Future BES Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

AEP Transmission strives to continually improve its compliance program. The mitigating activities described above will further strengthen AEP's UVLS program and provide a high level of confidence with PRC-010 compliance.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

1. I am Senior Vice President - Transmission of American Electric Power Service Corp as agent for AEP
2. I am qualified to sign this Mitigation Plan on behalf of American Electric Power Service Corp as agent for
3. I have read and understand American Electric Power Service Corp as agent for AEP Texas North Co, AEP with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
5. American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature: _____

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Name: Michael Heyeck

Title: Senior Vice President - Transmission

Authorized On: August 04, 2011

Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

NERC Registry ID: NCR04006

NERC Violation ID(s): TRE201100206

Mitigated Standard Requirement(s): PRC-010-0 R1,

Scheduled Completion as per Accepted Mitigation Plan: January 31, 2012

Date Mitigation Plan completed: January 03, 2012

Submission Date of Completion Certification: February 01, 2012

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	AEP TRE PRC-010 Spot Check Mitigation Plan Completion Certification package 20120111.pdf		3,075,708

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Michael Heyeck

Title: Senior VP - Transmission

Email: mheyeck@aep.com

Phone:

Authorized Signature _____ Date _____

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

E-Mail Notification Detail

From: noreply@oati.net
Sent: 07/09/2012 11:48:44
To: tkness@aep.com
Subject: A Mitigation Plan has been verified as completed for American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - TRE201100206 - CONFIDENTIAL NON-PUBLIC

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

The following Mitigation Plan has been verified as completed by Texas RE.

Entity: **American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - NCR04006**

NERC Violation ID: **TRE201100206**

Standard Requirement: **PRC-010-0 R1**

Mitigation Plan submitted on: **08/09/2011** (Version **1**, for Program Year **2011**)

Proposed Completion Date: **01/31/2012**

Actual Completion Date: **01/03/2012**

Verification Date: **07/09/2012**

Region Comment:

If you have any questions regarding this Mitigation Plan, please contact:

Entity Contact: **Thad Ness**

Phone: **614-716-2053**

Email: **tkness@aep.com**

Note: This is a webCDMS application generated message. Please do NOT respond to this email. If you have questions, please contact webcdms@texasre.org.

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan_Completed]

Attachment c

Record documents for the violation of PRC-004-1 R1:

- 1. AEP's Source Document submitted January 12, 2011**
 - 2. AEP's Mitigation Plan designated as TREMIT005691 submitted December 13, 2011**
 - 3. AEP's Certification of Mitigation Plan Completion dated January 9, 2012**
 - 4. Texas RE's Verification of Mitigation Plan Completion dated April 24, 2012**
-

Violation - Discovery Record

Registered Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
NERC Registry ID: ~~NERC 4900~~ Public Service of Oklahoma

NERC Violation ID: TRE201100243

Discovery Method: Spot Check

Date Submitted: January 12, 2011

Region Contact: Curtis Crews

Phone: 512-583-4900 Email: curtis.crews@texasre.org

Standard: PRC-004-1 - Analysis and Mitigation of Transmission and Generation Protection System Misoperations

Purpose: Ensure all transmission and generation Protection System Misoperations affecting the reliability of the Bulk Electric System (BES) are analyzed and mitigated.

Requirement: R1

The Transmission Owner and any Distribution Provider that owns a transmission Protection System shall each analyze its transmission Protection System Misoperations and shall develop and implement a Corrective Action Plan to avoid future Misoperations of a similar nature according to the Regional Reliability Organization's procedures developed for Reliability Standard PRC-003 Requirement 1.

Violated Sub-Req(s):

Violated Function(s): TO

Init Determ a Vltn: February 15, 2011

Begin Date of Vltn: February 19, 2008

End Date: December 08, 2011

Notified of Vltn on: January 12, 2011

Potential Impact to BES: This violation did not pose a serious or substantial risk to the bulk power system because of the magnitude and the risk of re-occurrence were/are not significant. The UVLS program effectively performed the design intent despite the misoperations.

Brief Vltn Descr. & Cause: From Texas RE's review of the protection system misoperations reported for the period, approximately 57% of the misoperations reported can be attributed to human error per the Transmission Availability Data System (TADS) definition, of which 34% can be attributed to incorrect relay settings and 23% to incorrect wiring, incorrect implementation, etc. The evidence indicates a possible issue with analyzing, developing, and implementing Corrective Action Plans supported by the review of PRC-004 requirements.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: High

Severity Level: VSL - Moderate

Factual Basis:

Mitigation Plan

Registered Entity: American Electric Power Service Corp as agent for AEP

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
TREMIT005691	TRE201100243	PRC-004-1 R1	02/15/2011	1

Mitigation Plan Submitted On: December 13, 2011

Mitigation Plan Accepted On: December 13, 2011

Mitigation Plan Proposed Completion Date: December 31, 2011

Actual Completion Date of Mitigation Plan: December 08, 2011

Mitigation Plan Certified Complete by AEPSCO001 On: January 09, 2012

Mitigation Plan Completion Verified by TRE On: April 24, 2012

Mitigation Plan Completed? (Yes/No): Yes

Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

- (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.
 - (11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.
- The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
 - This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.
 - If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.
 - Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
 - Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.
 - The user has read and accepts the conditions set forth in these Compliance Notices.

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP
Texas Central Co, and Public Service of Oklahoma
NERC Compliance Registry ID: NCR04006
Address: 1 Riverside Plaza
Columbus OH 43215

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Thad Ness
Title: Reliability Compliance Manager
Email: tkness@aep.com
Phone: 614-716-2053

Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
Requirement Description		
TRE201100243	01/01/2011	PRC-004-1 R1
The Transmission Owner and any Distribution Provider that owns a transmission Protection System shall each analyze its transmission Protection System Misoperations and shall develop and implement a Corrective Action Plan to avoid future Misoperations of a similar nature according to the Regional Reliability Organization's procedures developed for Reliability Standard PRC-003 Requirement 1.		

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

Based on a Spot Check performed by TRE from February 4 through March 21, 2011, TRE found possible violations with the following:

1. R1: There were multiple examples of re-occurring misoperations over an extended timeframe that indicated the Transmission Owner did not "develop and implement a Corrective Action Plan to avoid future Misoperations of a similar nature."

For some misoperations, AEP had taken an extended period of time to investigate and/or mitigate certain misoperations. Also, in some cases repeat misoperations occurred during that extended mitigation timeframe.

2. R3: There were Misoperation Relay Reports provided by the Transmission Owner that did not include "documentation of its Misoperation analyses and Corrective Action Plans."

In some cases, AEP provided data in periodic data submissions that was recorded in the incorrect data fields, thus not provided as per the reporting requirements of ERCOT. Corrective actions or Corrective plans were submitted in the "Recommendations" field.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

None provided.

Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In May of 2010, AEP instituted a monthly misoperation tracking report. This report identifies open, unmitigated misoperation reports so that the personnel that have responsibilities for mitigation are kept aware of the reports" status. This will aid in the timely mitigation of misoperations.

TRE and ERCOT has re-defined the misoperation reporting format and accompanying definitions for consistency in data, based on the specifications of the NERC ERO-RAPA group. AEP will submit periodic misoperation data per this re-defined process.

In June of 2010, AEP enacted a reorganization of its Station Engineering Department that separated out the Protection and Control Engineering functions. This provides better direction, focus and attention to issues pertaining to the design and implementation of Protection and Control schemes.

By 12/31/2011, AEP will develop a high level policy document that outlines prioritization of activities pertaining to the investigation, analysis and mitigation of Misoperations.

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: December 31, 2011

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Institute a monthly misoperation status report	Institute a monthly misoperation status report	04/28/2011	04/28/2010
Reorganize AEP Station Engineering Department that separates out the Protection and Control Engineering	Reorganize AEP Station Engineering Department that separates out the Protection and Control Engineering	06/30/2011	06/01/2010
Submit periodic misoperations data per defined format.	Submit periodic misoperations data per defined format.	09/30/2011	08/31/2011
Develop a high level policy document that outlines prioritization of activities pertaining to the investigation, analysis and mi	Develop a high level policy document that outlines prioritization of activities pertaining to the investigation, analysis and mitigation of Misoperations.	12/31/2011	

D.4 Additional Relevant Information (Optional)

Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

AEP believes that there is no substantial risk to the BPS while this mitigation plan is being implemented. While the milestones described above provide significant enhancements to AEP's management of misoperation mitigation, AEP contends that current processes and procedures are not considered a threat to the BPS.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

AEP strives to continually improve its compliance program. The mitigating activities described above will further strengthen AEP's program and provide a high level of confidence.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

1. I am VP Transmission Region Operations of American Electric Power Service Corp as agent for AEP
2. I am qualified to sign this Mitigation Plan on behalf of American Electric Power Service Corp as agent for
3. I have read and understand American Electric Power Service Corp as agent for AEP Texas North Co, AEP with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
5. American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature: _____
(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Robert Wagner

Title: VP Transmission Region Operations

Authorized On: December 12, 2011

Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

NERC Registry ID: NCR04006

NERC Violation ID(s): TRE201100243

Mitigated Standard Requirement(s): PRC-004-1 R1,

Scheduled Completion as per Accepted Mitigation Plan: December 31, 2011

Date Mitigation Plan completed: December 08, 2011

TRE Notified of Completion on Date: January 09, 2012

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	AEP TRE PRC-004 Spot Check Mitigation Plan Completion Certification package 20111212.pdf		1,877,176

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Michael Heyeck

Title: Senior Vice President - Transmission

Email: mheyeck@aep.com

Phone: 1 (614) 552-1700

Authorized Signature _____ Date _____

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

E-Mail Notification Detail

From: noreply@oati.net
Sent: 04/24/2012 15:15:49
To: tkness@aep.com
Subject: A Mitigation Plan has been verified as completed for Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - Violation#TRE201100243

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

The following Mitigation Plan has been verified as completed by TRE.

Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - NCR04006

NERC Violation ID: TRE201100243

Standard Requirement: PRC-004-1 R1

Proposed Completion Date: 12/31/2011

Verification Date: 04/24/2012

Mitigation Plan submitted on: 08/11/2011 (Version 1), for Program Year: 2011

If you have any questions regarding this notification, please contact: webcdms@texasre.org.

[Note: This is a webCDMS application generated message. Please Do NOT respond to this email.](#)

[CONFIDENTIAL INFORMATION: This email and any attachment\(s\) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.](#)

[\[OATI Information - Email Template: MitPlan Completed\]](#)

Attachment d

Record documents for the violation of PRC-004-1 R3:

- 1. AEP's Source Document submitted January 12, 2011**
 - 2. AEP's Mitigation Plan designated as TREMIT005692 submitted December 13, 2011**
 - 3. AEP's Certification of Mitigation Plan Completion dated January 9, 2012**
 - 4. Texas RE's Verification of Mitigation Plan Completion dated April 24, 2012**
-

Violation - Discovery Record

Registered Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
NERC Registry ID: ~~NERC-000~~ Public Service of Oklahoma

NERC Violation ID: TRE201100244

Discovery Method: Spot Check

Date Submitted: January 12, 2011

Region Contact: Curtis Crews

Phone: 512-583-4900 Email: curtis.crews@texasre.org

Standard: PRC-004-1 - Analysis and Mitigation of Transmission and Generation Protection System Misoperations

Purpose: Ensure all transmission and generation Protection System Misoperations affecting the reliability of the Bulk Electric System (BES) are analyzed and mitigated.

Requirement: R3

The Transmission Owner, any Distribution Provider that owns a transmission Protection System, and the Generator Owner shall each provide to its Regional Reliability Organization, documentation of its Misoperations analyses and Corrective Action Plans according to the Regional Reliability Organization's procedures developed for PRC-003 R1.

Violated Sub-Req(s):

Violated Function(s): TO

Init Determ a Vltn: February 15, 2011

Begin Date of Vltn: June 01, 2009

End Date: December 08, 2011

Notified of Vltn on: January 12, 2011

Potential Impact to BES: This violation did not pose a serious or substantial risk to the bulk power system because of the magnitude and the risk of re-occurrence were/are not significant. The UVLS program effectively performed the design intent despite the misoperations.

Brief Vltn Descr. & Cause: From Texas REI's review of the protection system misoperations reported for the period, approximately 57% of the misoperations reported can be attributed to human error per the Transmission Availability Data System (TADS) definition, of which 34% can be attributed to incorrect relay settings and 23% to incorrect wiring, incorrect implementation, etc. The evidence indicates a possible issue with analyzing, developing, and implementing Corrective Action Plans supported by the review of PRC-004 requirements.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: Lower

Severity Level: VSL - Lower

Factual Basis:

Mitigation Plan

Registered Entity: American Electric Power Service Corp as agent for AEP

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
TREMIT005692	TRE201100244	PRC-004-1 R3	02/15/2011	1

Mitigation Plan Submitted On: December 13, 2011

Mitigation Plan Accepted On: December 13, 2011

Mitigation Plan Proposed Completion Date: December 31, 2011

Actual Completion Date of Mitigation Plan: December 08, 2011

Mitigation Plan Certified Complete by AEPSCO001 On: January 09, 2012

Mitigation Plan Completion Verified by TRE On: April 24, 2012

Mitigation Plan Completed? (Yes/No): Yes

Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

- (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.
 - (11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.
- The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
 - This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.
 - If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.
 - Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
 - Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.
 - The user has read and accepts the conditions set forth in these Compliance Notices.

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP
Texas Central Co, and Public Service of Oklahoma
NERC Compliance Registry ID: NCR04006
Address: 1 Riverside Plaza
Columbus OH 43215

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Thad Ness
Title: Reliability Compliance Manager
Email: tkness@aep.com
Phone: 614-716-2053

Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
Requirement Description		
TRE201100244	01/01/2011	PRC-004-1 R3
The Transmission Owner, any Distribution Provider that owns a transmission Protection System, and the Generator Owner shall each provide to its Regional Reliability Organization, documentation of its Misoperations analyses and Corrective Action Plans according to the Regional Reliability Organization's procedures developed for PRC-003 R1.		

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

Based on a Spot Check performed by TRE from February 4 through March 21, 2011, TRE found possible violations with the following:

1. R1: There were multiple examples of re-occurring misoperations over an extended timeframe that indicated the Transmission Owner did not "develop and implement a Corrective Action Plan to avoid future Misoperations of a similar nature."

For some misoperations, AEP had taken an extended period of time to investigate and/or mitigate certain misoperations. Also, in some cases repeat misoperations occurred during that extended mitigation timeframe.

2. R3: There were Misoperation Relay Reports provided by the Transmission Owner that did not include "documentation of its Misoperation analyses and Corrective Action Plans."

In some cases, AEP provided data in periodic data submissions that was recorded in the incorrect data fields, thus not provided as per the reporting requirements of ERCOT. Corrective actions or Corrective plans were submitted in the "Recommendations" field.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

No additional details.

Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In May of 2010, AEP instituted a monthly misoperation tracking report. This report identifies open, unmitigated misoperation reports so that the personnel that have responsibilities for mitigation are kept aware of the reports" status. This will aid in the timely mitigation of misoperations.

TRE and ERCOT has re-defined the misoperation reporting format and accompanying definitions for consistency in data, based on the specifications of the NERC ERO-RAPA group. AEP will submit periodic misoperation data per this re-defined process.

In June of 2010, AEP enacted a reorganization of its Station Engineering Department that separated out the Protection and Control Engineering functions. This provides better direction, focus and attention to issues pertaining to the design and implementation of Protection and Control schemes.

By 12/31/2011, AEP will develop a high level policy document that outlines prioritization of activities pertaining to the investigation, analysis and mitigation of Misoperations.

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: December 31, 2011

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Institute a monthly misoperation status report	Institute a monthly misoperation status report	04/28/2011	04/28/2010
Reorganize AEP Station Engineering Department that separates out the Protection and Control Engineering	Reorganize AEP Station Engineering Department that separates out the Protection and Control Engineering	06/30/2011	06/01/2010
Submit periodic misoperations data per defined format	Submit periodic misoperations data per defined format	09/30/2011	08/31/2011
Develop a high level policy document that outlines prioritization of activities pertaining to the investigation, analysis and mi	Develop a high level policy document that outlines prioritization of activities pertaining to the investigation, analysis and mitigation of Misoperations.	12/31/2011	

D.4 Additional Relevant Information (Optional)

Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

AEP believes that there is no substantial risk to the BPS while this mitigation plan is being implemented. While the milestones described above provide significant enhancements to AEP's management of misoperation mitigation, AEP contends that current processes and procedures are not considered a threat to the BPS.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

AEP strives to continually improve its compliance program. The mitigating activities described above will further strengthen AEP's program and provide a high level of confidence.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

1. I am VP Transmission Region Operations of American Electric Power Service Corp as agent for AEP
2. I am qualified to sign this Mitigation Plan on behalf of American Electric Power Service Corp as agent for
3. I have read and understand American Electric Power Service Corp as agent for AEP Texas North Co, AEP with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
5. American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature: _____
(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Robert Wagner

Title: VP Transmission Region Operations

Authorized On: December 12, 2011

Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

NERC Registry ID: NCR04006

NERC Violation ID(s): TRE201100244

Mitigated Standard Requirement(s): PRC-004-1 R3,

Scheduled Completion as per Accepted Mitigation Plan: December 31, 2011

Date Mitigation Plan completed: December 08, 2011

TRE Notified of Completion on Date: January 09, 2012

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	AEP TRE PRC-004 Spot Check Mitigation Plan Completion Certification package 20111212.pdf		1,877,176

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Michael Heyeck

Title: Senior Vice President - Transmission

Email: mheyeck@aep.com

Phone: 1 (614) 552-1700

Authorized Signature _____ Date _____

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

E-Mail Notification Detail

From: noreply@oati.net
Sent: 04/24/2012 15:35:04
To: tkness@aep.com
Subject: A Mitigation Plan has been verified as completed for Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - Violation#TRE201100244

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

The following Mitigation Plan has been verified as completed by TRE.

Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - NCR04006

NERC Violation ID: TRE201100244

Standard Requirement: PRC-004-1 R3

Proposed Completion Date: 12/31/2011

Verification Date: 04/24/2012

Mitigation Plan submitted on: 08/11/2011 (Version 1), for Program Year: 2011

If you have any questions regarding this notification, please contact: webcdms@texasre.org.

Note: This is a webCDMS application generated message. Please Do NOT respond to this email.

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan Completed]

Attachment e

Record documents for the violation of PRC-005-1 R2:

- 1. AEP's Source Document submitted January 12, 2011**
 - 2. AEP's Mitigation Plan designated as TREMIT005693 submitted August 11, 2011**
 - 3. AEP's Certification of Mitigation Plan Completion dated December 16, 2011**
 - 4. Texas RE's Verification of Mitigation Plan Completion dated December 16, 2011**
-

Violation - Discovery Record

Registered Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
NERC Registry ID: ~~NERC 4900~~ Public Service of Oklahoma

NERC Violation ID: TRE201100246

Discovery Method: Spot Check

Date Submitted: January 12, 2011

Region Contact: Curtis Crews

Phone: 512-583-4900 Email: curtis.crews@texasre.org

Standard: PRC-005-1 - Transmission and Generation Protection System Maintenance and Testing

Purpose: To ensure all transmission and generation Protection Systems affecting the reliability of the Bulk Electric System (BES) are maintained and tested.

Requirement: R2

Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30calendar days). The documentation of the program implementation shall include:

Violated Sub-Req(s):

Violated Function(s): TO

Init Determ a Vltn: February 15, 2011

Begin Date of Vltn: June 18, 2007

End Date: October 28, 2011

Notified of Vltn on: January 12, 2011

Potential Impact to BES: This violation did not pose a serious or substantial risk to the bulk power system because of the magnitude and the risk of re-occurrence were/are not significant. The UVLS program effectively performed the design intent despite the misoperations.

Brief Vltn Descr. & Cause: From Texas REI's review of the protection system misoperations reported for the period, approximately 57% of the misoperations reported can be attributed to human error per the Transmission Availability Data System (TADS) definition, of which 34% can be attributed to incorrect relay settings and 23% to incorrect wiring, incorrect implementation, etc. The evidence indicates a possible issue with analyzing, developing, and implementing Corrective Action Plans supported by the review of PRC-004 requirements.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: Lower

Severity Level: VSL - Lower

Factual Basis:

Mitigation Plan

Registered Entity: American Electric Power Service Corp as agent for AEP

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
TREMIT005693	TRE201100246	PRC-005-1 R2	02/15/2011	1

Mitigation Plan Submitted On: August 11, 2011

Mitigation Plan Accepted On: December 16, 2011

Mitigation Plan Proposed Completion Date: November 01, 2011

Actual Completion Date of Mitigation Plan: October 28, 2011

Mitigation Plan Certified Complete by AEPSCO001 On: December 16, 2011

Mitigation Plan Completion Verified by TRE On: December 16, 2011

Mitigation Plan Completed? (Yes/No): Yes

Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

- (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.
 - (11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.
- The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
 - This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.
 - If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.
 - Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
 - Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.
 - The user has read and accepts the conditions set forth in these Compliance Notices.

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP
Texas Central Co, and Public Service of Oklahoma
NERC Compliance Registry ID: NCR04006
Address: 1 Riverside Plaza
Columbus OH 43215

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Thad Ness
Title: Reliability Compliance Manager
Email: tkness@aep.com
Phone: 614-716-2053

Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
Requirement Description		
TRE201100246	01/01/2011	PRC-005-1 R2
Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30calendar days). The documentation of the program implementation shall include:		

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

Based on a Spot Check performed by TRE from February 4 through March 21, 2011, TRE found possible violations with the following:

1. R2: There were examples of Protection System changes that warranted testing or maintenance per documentation provided by AEP, but the documentation did not demonstrate that all "Protection System devices were maintained and tested.?"

Specific instances of actions performed as a result of corrective maintenance or in the process of mitigating misoperations were not adequately documented in AEP's maintenance and testing database.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

No additional information provided.

Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

AEP will issue guidance that corrective maintenance activities that equate to activities outlined in AEP's preventative maintenance and testing program shall be documented in AEP's maintenance and testing database.

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: November 01, 2011

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
1	Issue guidance that corrective maintenance activities that equate to activities outlined in AEP's preventative maintenance and testing program shall be documented in AEPs maintenance and testing database.	11/01/2011	

D.4 Additional Relevant Information (Optional)

The Mitigation Plan will be fully implemented, as outlined below by 11/1/2011.

Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

AEP believes that there is no substantial risk to the BPS while this mitigation plan is being implemented. This issue is more of a documentation violation.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

AEP strives to continually improve its compliance program. The mitigating activities described above will further strengthen AEP's program and provide a high level of confidence.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

1. I am VP Transmission Region Operations of American Electric Power Service Corp as agent for AEP
2. I am qualified to sign this Mitigation Plan on behalf of American Electric Power Service Corp as agent for
3. I have read and understand American Electric Power Service Corp as agent for AEP Texas North Co, AEP with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
5. American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature: _____
(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Robert Wagner

Title: VP Transmission Region Operations

Authorized On: August 10, 2011

Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

NERC Registry ID: NCR04006

NERC Violation ID(s): TRE201100246

Mitigated Standard Requirement(s): PRC-005-1 R2,

Scheduled Completion as per Accepted Mitigation Plan: November 01, 2011

Date Mitigation Plan completed: October 28, 2011

TRE Notified of Completion on Date: December 16, 2011

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	Evidence T1 AEP TRE Mitigation Plan PRC-005 Spot Check.pdf		1,235,628
Entity	Evidence T2 D_3_1a email Guidance on Documenting P_C CM 20111028.pdf		28,874
Entity	Evidence T2 D_3_1b Guidance on documenting P and C corrective maintenance work in AEP.pdf		14,890

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Robert Wagner

Title: VP Transmission Region Operations

Email: rcwagner@aep.com

Phone: 1 (614) 552-1900

Authorized Signature _____ Date _____

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

E-Mail Notification Detail

From: noreply@oati.net
Sent: 12/16/2011 15:14:43
To: tkness@aep.com
Subject: A Mitigation Plan has been verified as completed for Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - Violation#TRE201100246

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

The following Mitigation Plan has been verified as completed by TRE.

Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - NCR04006

NERC Violation ID: TRE201100246

Standard Requirement: PRC-005-1 R2

Proposed Completion Date: 11/01/2011

Verification Date: 12/16/2011

Mitigation Plan submitted on: 08/11/2011 (Version 1), for Program Year: 2011

If you have any questions regarding this notification, please contact: webcdms@texasre.org.

[Note: This is a webCDMS application generated message. Please Do NOT respond to this email.](#)

[CONFIDENTIAL INFORMATION: This email and any attachment\(s\) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.](#)

[\[OATI Information - Email Template: MitPlan Completed\]](#)

Attachment f

Record documents for the violation of PER-003-0 R1:

- 1. AEP's Source Document submitted December 09, 2011**
 - 2. AEP's Mitigation Plan designated as TREMIT008285 submitted October 19, 2012**
 - 3. AEP's Certification of Mitigation Plan Completion dated January 22, 2013**
 - 4. Texas RE's Verification of Mitigation Plan Completion dated February 22, 2013**
-

Violation - Discovery Record

Registered Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
NERC Registry ID: ~~NERC 4006~~ Public Service of Oklahoma

NERC Violation ID: TRE201100560

Discovery Method: Spot Check

Date Submitted: December 09, 2011

Region Contact: Jeff Whitmer

Phone: 512-583-4944 Email: jeff.whitmer@texasre.org

Standard: PER-003-0 - Operating Personnel Credentials

Purpose: Certification of operating personnel is necessary to ensure minimum competencies for operating a reliable Bulk Electric System.

Requirement: R1

Each Transmission Operator, Balancing Authority, and Reliability Coordinator shall staff all operating positions that meet both of the following criteria with personnel that are NERC-certified for the applicable functions:

Violated Sub-Req(s):

Violated Function(s): TOP

Init Determ a Vltn: December 08, 2011

Begin Date of Vltn: May 04, 2010

End Date: December 10, 2012

Notified of Vltn on: December 08, 2011

Potential Impact to BES: This violation did pose a serious or substantial risk to the bulk power system because Positions directly responsible for complying with NERC standards did not have clear decision-making authority to assure reliability in its area

Brief Vltn Descr. & Cause: Operating management personnel who were not NERC-certified were directing real-time operator decisions.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: High

Severity Level: VSL - Severe

Factual Basis:

Mitigation Plan

Registered Entity: American Electric Power Service Corp as agent for AEP

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
TREMIT008285	TRE201100560	PER-003-0 R1	07/18/2012	1

Mitigation Plan Submitted On: October 19, 2012

Mitigation Plan Accepted On: October 22, 2012

Mitigation Plan Proposed Completion Date: February 28, 2013

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by AEPSCO001 On:

Mitigation Plan Completion Verified by TRE On:

Mitigation Plan Completed? (Yes/No): No

Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

- (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.
 - (11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.
- The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
 - This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.
 - If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.
 - Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
 - Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.
 - The user has read and accepts the conditions set forth in these Compliance Notices.

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP
Texas Central Co, and Public Service of Oklahoma
NERC Compliance Registry ID: NCR04006
Address: 1 Riverside Plaza
Columbus OH 43215

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Thad Ness
Title: Reliability Standards Compliance Manager
Email: tkness@aep.com
Phone: 614-716-2053

Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
Requirement Description		
TRE201100560	02/03/2011	PER-003-0 R1
Each Transmission Operator, Balancing Authority, and Reliability Coordinator shall staff all operating positions that meet both of the following criteria with personnel that are NERC-certified for the applicable functions:		

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

As a result of a December 6, 2011 Compliance Spot Check concerning the Texas February 3, 2011 winter event, TRE concluded that the Manager of Transmission Dispatching was engaged in real time operating decisions while not being a NERC certified operator.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

As a result of a December 6, 2011 Compliance Spot Check concerning the Texas February 3, 2011 winter event.

Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

- Update AEP's Operator Responsibility and Authority to Act document to clarify the role of Transmission System Control Center Operators and Transmission Dispatchers with respect to real time operations.
- Update the Manager of Transmission Dispatching job description to clarify that job position with respect to real time operations.
- The current Manager of Transmission Dispatching to obtain NERC RC Certification.

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: February 28, 2013

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
1	Update AEP's Operator Responsibility and Authority to Act document to clarify the role of Transmission System Control Center Operators and Transmission Dispatchers with respect to real time operations.	10/31/2012	
2	Update the Manager of Transmission Dispatching job description to clarify that job position with respect to real time operations.	11/30/2012	
3	The current Manager of Transmission Dispatching to obtain NERC RC certification	02/28/2013	

D.4 Additional Relevant Information (Optional)

Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The risk to the Bulk Power System is considered to be minimal during the completion of this mitigation plan.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Having the current Manager of Transmission Dispatching NERC certified will meet the expectations of TRE. The updating of the Operator Responsibility and Authority to Act and position description will clarify the role of the Manager of Transmission Dispatching.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

1. I am Senior Vice President, Transmission of American Electric Power Service Corp as agent for AEP
2. I am qualified to sign this Mitigation Plan on behalf of American Electric Power Service Corp as agent for
3. I have read and understand American Electric Power Service Corp as agent for AEP Texas North Co, AEP with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
5. American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature: _____
(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Michael Heyeck

Title: Senior Vice President, Transmission

Authorized On: September 27, 2012

Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma

NERC Registry ID: NCR04006

NERC Violation ID(s): TRE201100560

Mitigated Standard Requirement(s): PER-003-0 R1,

Scheduled Completion as per Accepted Mitigation Plan: February 28, 2013

Date Mitigation Plan completed: December 10, 2012

TRE Notified of Completion on Date: January 18, 2013

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	AEP PER-003 R1 Mitigation Plan Completion Certification_20130116.pdf		718,030

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Michael Heyeck

Title: Senior Vice President, Transmission

Email: mheyeck@aep.com

Phone: 1 (614) 716-1000

Authorized Signature _____ Date _____

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

 E-Mail Notification Detail

From: noreply@oati.net
Sent: 02/22/2013 12:48:54
To: tkness@aep.com
Subject: A Mitigation Plan has been verified as completed for American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - TRE201100560 - CONFIDENTIAL NON-PUBLIC

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

The following Mitigation Plan has been verified as completed by Texas RE.

Entity: **American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma - NCR04006**

NERC Violation ID: **TRE201100560**

Standard Requirement: **PER-003-0 R1**

Mitigation Plan submitted on: **10/19/2012** (Version **1**, for Program Year **2011**)

Proposed Completion Date: **02/28/2013**

Actual Completion Date: **12/10/2012**

Verification Date: **02/22/2013**

Region Reviewer: **Brent Togrison**

Region Comment: **TRE201100560 - Update AEP's Operator Responsibility and Authority to Act document to clarify the role of Transmission System Control Center Operators and Transmission Dispatchers with respect to real time operations. Texas RE reviewed a redline of the revised Operator Responsibility and Authority to Act and noted that the roles was revised and clarified. - Update the Manager of Transmission Dispatching job description to clarify that job position with respect to real time operations. Texas RE reviewed a redline of the revised Manager of Transmission Dispatching job description and noted that it was revised and clarified. - The current Manager of Transmission Dispatching to obtain NERC RC Certification. AEP provided a screenshot from NERC showing that the Manager of Transmission Dispatching was issued NERC RC Certification on 12/10/12 (Certificate number RC201212026) Texas RE has verified completion of this mitigation plan as of 12/10/12.**

Based on evidence presented by American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma and reviewed by Texas RE, this email confirms the above mentioned mitigation plan is complete. If you have any questions, please feel free to contact Brent Togrison directly or through mitigation@texasre.org.

Note: This is a webCDMS application generated message. Please do NOT respond to this email. If you have questions, please contact webcdms@texasre.org.

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan_ Completed]

Attachment g

Record documents for the violation of EOP-003-1 R8:

- 1. AEP's Source Document dated August 13, 2012**
 - 2. AEP's Mitigation Plan designated as TREMIT008318-1 submitted January 11, 2013**
-

Violation - Discovery Record

Registered Entity: American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and
NERC Registry ID: ~~NR10400~~ Public Service of Oklahoma

NERC Violation ID: TRE2012010887

Discovery Method: Audit

Date Submitted: August 13, 2012

Region Contact: Jagan Mandavilli

Phone: 512-583-4942 Email: jagan.mandavilli@texasre.org

Standard: EOP-003-1 - Load Shedding Plans

Purpose: 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.

Requirement: R8

Each Transmission Operator or Balancing Authority shall have plans for operator-controlled manual load shedding to respond to real-time emergencies. The Transmission Operator or Balancing Authority shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.

Violated Sub-Req(s):

Violated Function(s): TOP

Init Determ a Vltm: August 10, 2012

Begin Date of Vltm: February 02, 2011

End Date:

Notified of Vltm on: August 10, 2012

Potential Impact to BES: Potential impact to BES is high because this violation did pose a serious or substantial risk to the bulk power system because the ERCOT Interconnection was seriously deficient in Physical Responsive Reserve (PRR) and in an EEA level 3 emergency.

Brief Vltm Descr. & Cause: AEP failed to implement and maintain its load shedding obligation in a timeframe adequate for responding to the Winter Event emergency of February 2, 2011, as adequate timeframe was specified by the ERCOT Nodal Operating Guides.

AEP did not shed 100% of its obligation within 30 minutes for the first or subsequent ERCOT load shed directives. AEP total actual load shed fell below the obligated level several times while load was being restored.

The timeframe of the Possible Violation was February 2, 2011.

AEP described mitigation measures taken to improve their capability of implementing load shedding in a timeframe adequate for responding to emergencies. One of these, a computer application for automatically managing SCADA-based load shedding, is in the process of being installed and debugged.

This standard and its requirements R5 and R8 were added to the scope of this audit in order to perform a Spot Check assessment of the AEP manual load shed performance during the February 2, 2001 Winter Event.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: High

Severity Level: VSL - High

Factual Basis: AEP failed to implement and maintain its load shedding obligation in a timeframe adequate for responding to the Winter Event emergency of February 2, 2011, as adequate timeframe was specified by the ERCOT Nodal Operating Guides.

AEP did not shed 100% of its obligation within 30 minutes for the first or subsequent ERCOT load shed directives. AEP total actual load shed fell below the obligated level several times while load was being restored.

The timeframe of the Possible Violation was February 2, 2011.

AEP described mitigation measures taken to improve their capability of implementing load shedding in a timeframe adequate for responding to emergencies. One of these, a computer application for automatically managing SCADA-based load shedding, is in the process of being installed and debugged.

This standard and its requirements R5 and R8 were added to the scope of this audit in order to perform a Spot Check assessment of the AEP manual load shed performance during the February 2, 2001 Winter Event.

Mitigation Plan

Registered Entity: American Electric Power Service Corp as agent for AEP

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
TREMIT008318-1	TRE2012010887	EOP-003-1 R8	08/20/2012	2

Mitigation Plan Submitted On: January 11, 2013

Mitigation Plan Accepted On: January 16, 2013

Mitigation Plan Proposed Completion Date: December 31, 2012

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by AEPSCO001 On:

Mitigation Plan Completion Verified by TRE On:

Mitigation Plan Completed? (Yes/No): No

Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

- (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.
 - (11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.
- The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
 - This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.
 - If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.
 - Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
 - Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.
 - The user has read and accepts the conditions set forth in these Compliance Notices.

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: American Electric Power Service Corp as agent for AEP Texas North Co, AEP
Texas Central Co, and Public Service of Oklahoma
NERC Compliance Registry ID: NCR04006
Address: 1 Riverside Plaza
Columbus OH 43215

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Thad Ness
Title: Reliability Standards Compliance Manager
Email: tkness@aep.com
Phone: 614-716-2053

Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
Requirement Description		
TRE2012010887	02/02/2011	EOP-003-1 R8
Each Transmission Operator or Balancing Authority shall have plans for operator-controlled manual load shedding to respond to real-time emergencies. The Transmission Operator or Balancing Authority shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.		

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

On February 2, 2011, AEP implemented manual load shed as directed by ERCOT for the EEA 3 event. AEP received three ERCOT directives to shed AEP's share of 373.2 MW of an ERCOT-wide total of 4,000 MW load within a period of 40 minutes. AEP fully completed its 93.3 MW share (1,000 MW total) of the first ERCOT-directed load shed in 32 minutes, or two minutes beyond the "initial clock" period of 30 minutes per Operating Guide 4.5.3(7)(a). AEP fully completed its 93.3 MW share (1,000 MW total) of the second ERCOT-directed load shed in 40 minutes, or ten minutes beyond the additional amount of load shed directed, per 4.5.3(7)(d). AEP fully completed its 186.6 MW share (2,000 MW total) of the third ERCOT-directed load shed in 1 hour and 37 minutes. Per 4.5.3(7)(c) and (d), when ERCOT directs an additional load shed that exceeds 1,000 MW, the "load shed amount requests exceeding 1000 MW on the initial clock may take longer to implement."

While in the process of receiving and executing the three load shed directives, AEP was also directed by ERCOT to coordinate and seek assistance for load transfer from Mexico's Comision Federal de Electricad (CFE) at the Railroad HVDC, Laredo VFT and Eagle Pass HVDC. These unique ERCOT communications to AEP coupled with the multiple load shed directives required a division of AEP dispatch resources placing AEP under tight time constraints and difficult circumstances taxing available manpower. ERCOT has never directed AEP to execute multiple load sheds in the same manner, amounts, time frames and under the circumstances existing on February 2. Under these exceptional circumstances, AEP believes that it acted diligently and capably to complete its obligations to shed load in a time frame adequate for responding to this exceptional emergency.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

Audit finding.

Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Since the February 2011 winter storm event, AEP has completed all items below.

1. The AEP Transmission Dispatch Center (TDC) and AEP Texas Distribution Dispatch Center (DDC) telephone system have been programmed to include an "Emergency Button". The use of the "Emergency Button" helps to filter out normal calls from an immediate response call. Guidelines for proper use of this feature have been created in October 2011. TDC will use the "Emergency Button" to expeditiously contact, notify and update the DDC with ERCOT EEA Level 1, 2A, 2B, and 3 directives which include Manual Load Shed directives initiated by ERCOT or the TDC.
2. AEP Texas TDC and DDC shall have a minimum of one jointly held load shed drills a year.
3. DDC dispatchers have reviewed and acknowledged receiving AEP's policy on Operator Responsibility and Authority to Act as of June 2011.
4. DDC dispatchers have received instructions that if a load shed directive is received during the daily change in crew shift, the load shed will be completed prior to the shift change. It is of paramount importance and a priority to achieve the requested load shed amount as opposed to taking time for a crew to complete a proper "pass down" of information to another crew and to log off and then log on to the same SCADA work station.
5. AEP Texas has developed a new multi-feeder load shedding application. This new application allows for the interruption by inputting the MW amount to shed by district. A user can hit the enter-key to allow the program to total the amount of load that has been shed and then executing the action on the feeders to reach the desired MW amount. The program will keep running totals by district and for the company (i.e., AEP Texas) to ensure load shedding happens much more quickly as compared to the manual process used during the February 2011 winter storm. Since the program automatically keeps track of the numbers, this also helps to ensure a rotation does not reduce the load shed amount during the rotation period and before restoration is begun.
6. AEP Texas has conducted training for DDC and TDC dispatchers to use the new load shed application.
7. AEP has incorporated the application database and control linkages on the production SCADA Host computer and quality test field breaker control.

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: December 31, 2012

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
4	DDC dispatchers have received instructions that if a load shed directive	07/01/2012	02/24/2011

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	is received during the daily change in crew shift, the load shed will be completed prior to the shift change.		
3	DDC dispatchers have reviewed and acknowledged receiving AEP's policy on Operator Responsibility and Authority to Act	07/01/2012	06/30/2011
1	The AEP Transmission Dispatch Center (TDC) and AEP Texas Distribution Dispatch Center (DDC) telephone system have been programmed to include an "Emergency Button".	07/01/2012	10/31/2011
6	AEP Texas has conduct training for DDC and TDC dispatchers to use the new load shed application.	09/14/2012	09/14/2012
5	AEP Texas will develop a new multi-feeder load shedding application	10/09/2012	10/09/2012
2	AEP Texas TDC and DDC shall have at least one jointly held load shed drills a year.	10/25/2012	10/25/2012
7	Distribution Dispatch will implement the production SCADA host load shedding application.	12/31/2012	

D.4 Additional Relevant Information (Optional)

Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The reliability impact that the non-compliance had on ERCOT reliability is minimal. AEP believes, given the circumstances surrounding the three ERCOT load shed directives, that the Company effectively met its load shed obligations pursuant to the intent of the Operating Guides "to shed load without delay.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

AEP has implemented remediation activities communicated to the Texas Reliability Entity (Texas RE) that are designed to better enable it to meet its load shed obligations consistent with the emergency procedures in ERCOT operating guides. AEP has also committed to incorporating a multi-feeder load shed automated system to its load shed process to further improve its ability to timely respond to ERCOT directives in the future.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

1. I am Senior VP - Transmission of American Electric Power Service Corp as agent for AEP Texas North
2. I am qualified to sign this Mitigation Plan on behalf of American Electric Power Service Corp as agent for
3. I have read and understand American Electric Power Service Corp as agent for AEP Texas North Co, AEP with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
5. American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature: _____
(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Michael Heyeck

Title: Senior VP - Transmission

Authorized On: January 09, 2013

Attachment h
Notice of Filing

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

American Electric Power Service Corp as agent
for AEP Texas North Co, AEP Texas Central Co,
and Public Service of Oklahoma

Docket No. NP13-____-000

NOTICE OF FILING
May 30, 2013

Take notice that on May 30, 2013, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding American Electric Power Service Corp as agent for AEP Texas North Co, AEP Texas Central Co, and Public Service of Oklahoma in the Texas Reliability Entity, Inc. region.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: [BLANK]

Kimberly D. Bose,
Secretary