

August 30, 2018

VIA ELECTRONIC FILING

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 Inc. and Public Service Company of Oklahoma,
FERC Docket No. NP18-_-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 American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma (AEPSC), NERC Registry ID# NCR04006,² with information and details regarding the nature and resolution of the violations³ discussed in detail in the Settlement Agreement attached hereto (Attachment A), 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)).⁴

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 (2017). *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 AEPSC was included on the NERC Compliance Registry as a Distribution Provider, Generator Owner (GO), Generator Operator, Transmission Owner (TO), and Transmission Provider on June 28, 2007, and as a Transmission Operator on May 4, 2010.

³ 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.

⁴ See 18 C.F.R § 39.7(c)(2) and 18 C.F.R § 39.7(d).

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NERC is filing this Notice of Penalty with the Commission because Texas Reliability Entity, Inc. (Texas RE) and AEPSC have entered into a Settlement Agreement to resolve all outstanding issues arising from Texas RE's determination and findings of the violations of FAC-009-1 R1 and FAC-009-1 R2.

According to the Settlement Agreement, AEPSC neither admits nor denies the violations, and has agreed to the assessed penalty of two hundred and twenty-five thousand dollars (\$225,000), 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.

Statement of Findings Underlying the Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement, by and between Texas RE and AEPSC. 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 (2018), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement. Further information on the subject violations is set forth in the Settlement Agreement and herein.

* Violation(s) Determined and Discovery Method								
*SR = Self-Report / SC = Self-Certification / CA = Compliance Audit / SPC = Spot Check / CI = Compliance Investigation								
NERC Violation ID	Standard	Req.	VRF/VSL	Applicable Function(s)	Discovery Method*	Violation Start-End Date	Risk	Penalty Amount
TRE2017016853	FAC-009-1	R1	Medium/High	GO, TO	CA 1/25/2017	6/28/2007-4/13/2017	Moderate	\$225,000
TRE2018019039	FAC-009-1	R2	Medium/Severe	GO, TO	CA 1/24/2018	6/28/2007-4/13/2017	Moderate	

FACTS COMMON TO VIOLATIONS

Texas RE conducted a Compliance Audit from October 24, 2016 through January 25, 2017, and determined that AEPSC was in violation of FAC-009-1 R1 and FAC-009-1 R2 from June 28, 2007 through

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April 13, 2017. AEPSC failed to verify that it properly identified and accounted for all individual Facility components in determining the most limiting element and calculating Facility Ratings.

During the Compliance Audit, Texas RE determined that AEPSC failed to consider station jumpers when developing the Facility Rating for 37 Transmission Facilities in existing Facility Ratings calculations. Subsequently, AEPSC identified 10 additional Transmission Facilities for which it similarly failed to consider jumpers in developing Facility Ratings. Thirty-three Facilities required derates to their Normal, Emergency, or both Facility Ratings. Additionally, AEPSC calculated Facility Ratings for three additional Transmission Facilities based on equipment that was not actually located at those specific Transmission Facilities.

The root cause of these violations was AEPSC's inadequate process for validating that it had included all applicable equipment in its Facility Ratings for its Transmission Facilities.

TRE2017016853 FAC-009-1 R1 – OVERVIEW

Texas RE determined that AEPSC did not establish Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology. Attachment A includes additional facts regarding the violation.

Texas RE determined that this violation posed a moderate and not serious or substantial risk to the reliability of the bulk power system (BPS). Attachment A includes the facts regarding the violation that Texas RE considered in its risk assessment.

AEPSC submitted its Mitigation Plan with an anticipated completion date of May 1, 2019. Attachments A and B include specific information on the actions AEPSC will take to address this violation.

TRE2018019039 FAC-009-1 R2 – OVERVIEW

Texas RE determined that AEPSC did not provide accurate Facility Ratings to its Reliability Coordinator as requested. Attachment A includes additional facts regarding the violation.

Texas RE determined that this violation posed a moderate and not serious or substantial risk to the reliability of the bulk power system (BPS). Attachment A includes the facts regarding the violation that Texas RE considered in its risk assessment.

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AEPSC submitted its Mitigation Plan with an anticipated completion date of May 1, 2019. Attachments A and B include specific information on the actions AEPSC will take to address this violation.

Regional Entity's Basis for Penalty

According to the Settlement Agreement, Texas RE has assessed a penalty of two hundred and twenty-five thousand dollars (\$225,000) for the referenced violations. In reaching this determination, Texas RE considered the following factors:

1. Texas RE considered the instant violations as repeat noncompliance with the subject NERC Reliability Standards. Texas RE considered AEPSC's affiliate compliance history with FAC-009-1 R1 as an aggravating factor in the penalty determination, as discussed in Attachment A;
2. Texas RE did not afford AEPSC mitigating credit for its internal compliance program (ICP) because these violations represent challenges AEPSC has had in successfully implementing the ICP, as discussed in Attachment A;
3. AEPSC was cooperative throughout the compliance enforcement process, resulting in some mitigating credit;
4. there was no evidence of any attempt to conceal violations nor evidence of intent to do so;
5. the violations of FAC-009-1 R1 and FAC-009-1 R2 posed a moderate and not a serious or substantial risk to the reliability of the BPS, as discussed in Attachment A; 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 and twenty-five thousand dollars (\$225,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violations.

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Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed⁵

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,⁶ the NERC BOTCC reviewed the violation on August 14, 2018 and approved the resolution between Texas RE and AEPSC. In approving the resolution, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violations at issue.

For the foregoing reasons, the NERC BOTCC believes that the assessed penalty of two hundred and twenty-five thousand dollars (\$225,000) 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.

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:

1. Settlement Agreement by and between Texas RE and AEPSC executed August 20, 2018 included as Attachment A;
 - a. Disposition of Violations as Addendum A to the Settlement Agreement;
 - b. Audit Report for FAC-009-1 R1 dated January 27, 2017, included as Attachment A to the Settlement Agreement;

⁵ See 18 C.F.R. § 39.7(d)(4).

⁶ *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 ¶ 61,069 (2009); *North American Electric Reliability Corporation*, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).

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- c. Audit Report for FAC-009-1 R2 dated January 29, 2018, included as Attachment B to the Settlement Agreement;
2. AEPSC's Mitigation Plan designated as TREMIT014060 for FAC-009-1 R1 and FAC-009-1 R2 submitted August 15, 2018, included as Attachment B.

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

<p>Derrick Davis*</p> <p>Director, Enforcement, Reliability Standards & Registration</p> <p>Texas Reliability Entity, Inc.</p> <p>805 Las Cimas Parkway</p> <p>Suite 200</p> <p>Austin, TX 78746</p> <p>(512) 583-4923</p> <p>(512) 233-2233 – facsimile</p> <p>derrick.davis@texasre.org</p>	<p>Sonia C. Mendonça*</p> <p>Vice President, Deputy General Counsel, and Director of Enforcement</p> <p>North American Electric Reliability Corporation</p> <p>1325 G Street N.W.</p> <p>Suite 600</p> <p>Washington, DC 20005</p> <p>(202) 400-3000</p> <p>(202) 644-8099 – facsimile</p> <p>sonia.mendonca@nerc.net</p>
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<p>Mishani Kasper*</p> <p>CMEP Analyst, Sr.</p> <p>Texas Reliability Entity, Inc.</p> <p>805 Las Cimas Parkway</p> <p>Suite 200</p> <p>Austin, TX 78746</p> <p>(512) 583-4993</p> <p>(512) 233-2233 – facsimile</p> <p>mishani.kasper@texasre.org</p>	<p>Alexander Kaplen*</p> <p>Associate Counsel</p> <p>North American Electric Reliability Corporation</p> <p>1325 G Street N.W.</p> <p>Suite 600</p> <p>Washington, DC 20005</p> <p>(202) 400-3000</p> <p>(202) 644-8099 – facsimile</p> <p>alexander.kaplen@nerc.net</p>

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*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.

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Conclusion

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

Respectfully submitted,

/s/ Alexander Kaplen

Sonia C. Mendonça

Vice President, Deputy General Counsel,
and Director of Enforcement

Edwin G. Kichline

Senior Counsel and Director of
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cc: American Electric Power Service Corp
Texas Reliability Entity, Inc.

Attachments

Attachment A

Settlement Agreement by and between Texas RE and AEPSC
Executed August 20, 2018

- a. Disposition of Violations as Addendum A to the Settlement Agreement
- b. Audit Report for FAC-009-1 R1 dated January 27, 2017, included as Attachment A to the Settlement Agreement
- c. Audit Report for FAC-009-1 R2 dated January 29, 2018, included as Attachment B to the Settlement Agreement

SETTLEMENT AGREEMENT**OF****TEXAS RELIABILITY ENTITY, INC.****AND****AMERICAN ELECTRIC POWER SERVICE CORP AS AGENT FOR AEP TEXAS INC. AND
PUBLIC SERVICE COMPANY OF OKLAHOMA****I. INTRODUCTION**

1. The 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 Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma (AEPSC) enter into this Settlement Agreement (Settlement Agreement or 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 the following two alleged violations by AEPSC:

NERC Violation ID	Standard Requirement
TRE2017016853	FAC-009-1 R1
TRE2018019039	FAC-009-1 R2

3. AEPSC neither admits nor denies the violations of NERC Reliability Standards FAC-009-1 R1 and FAC-009-1 R2, and has agreed to the proposed penalty of \$225,000 to be assessed to AEPSC, 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 AEPSC and Texas RE, the matters discussed herein and do not constitute stipulations or admissions for any other purpose. The attached Disposition

Document, Addendum A to this Agreement, is incorporated herein in its entirety. AEPSC and Texas RE hereby stipulate and agree to the following:

BACKGROUND

5. See Section I of the Disposition Document, Addendum A to this Agreement, for a description of AEPSC.

VIOLATIONS OF NERC RELIABILITY STANDARDS

6. The violations of the NERC Reliability Standards subject to this Settlement Agreement are as follows:

NERC Violation ID	Standard Requirement	Discovery Method
TRE2017016853	FAC-009-1 R1	Audit
TRE2018019039	FAC-009-1 R2	Audit

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

7. During a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC, as a Transmission Owner (TO), was in violation of FAC-009-1 R1. Based upon its review of the facts and circumstances regarding this issue, Texas RE subsequently determined that AEPSC likewise was in violation of FAC-009-1 R2. Section III of the Disposition Document, Addendum A to this Agreement, provides a full and complete description of the basis for Texas RE's determination regarding these two violations.
8. 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 AEPSC

9. AEPSC neither admits nor denies that the facts set forth and agreed to by the parties for purposes of this Agreement constitute violations of FAC-009-1 R1 and FAC-009-1 R2.
10. Although AEPSC does not admit to, nor does it deny, the alleged violations, AEPSC 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. AEPSC agrees that this Settlement Agreement is in the best interest of the parties and in the best interest of maintaining a reliable electric infrastructure.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

11. Texas RE and AEPSC agree that AEPSC has completed or will complete and Texas RE has verified completion or will verify completion of the mitigating actions set forth in Section III of the Disposition Document, Addendum A to this Agreement. Further, Texas RE will verify that AEPSC has completed or will complete the additional actions addressed in Section III of the Disposition Document, Addendum A to this Agreement (if any). The Mitigating Actions, Remedies, and Sanctions are discussed in detail in the Disposition Document.
12. For purposes of settling any and all disputes arising from Texas RE's assessment into the matters referenced below, Texas RE and AEPSC agree that on or after the effective date of this Agreement, AEPSC has taken or shall take, on or after the effective date of this Agreement, the following actions to enhance the reliability of the BPS and prevent recurrence of the issues presented in this Agreement:

NERC Violation ID	Standard Requirement
TRE2017016853	FAC-009-1 R1
TRE2018019039	FAC-009-1 R2

Activities for the Violation ID(s) Referenced Above	Dates to be completed
i. Revise the Facility Ratings for the affected Transmission Facilities	Complete
ii. Provide the corrected Facility Ratings to its Reliability Coordinator (RC)	Complete
iii. Develop and implement a revised Facility Ratings methodology that includes explicit steps to verify all equipment ratings against inventory and one-line diagrams for all planned equipment projects	To be completed
iv. Develop and implement an updated process to verify that Facility Ratings are correctly determined before placing the Facility in service, including specific steps regarding who should perform the Facility Rating verification and when the Facility Rating verification will be performed	To be completed
v. Develop and implement a detective internal control that periodically samples field data to verify field conditions match one-line diagrams, inventory lists, and/or other applicable source documents	To be completed
vi. Provide training for all applicable personnel regarding the updated Facility Ratings verification process	To be completed
vii. Complete Facility Ratings data validation for all of the applicable Facilities	To be completed
viii. Based on the results of the validation process, update internal records, as appropriate, and make appropriate notifications	To be completed

13. In order to facilitate Texas RE's need to communicate the status and provide accountability to the Electric Reliability Organization (NERC), AEPSC will provide updates quarterly, or more frequently, upon request by Texas RE. AEPSC will submit these status updates to Texas RE in accordance with the confidentiality provisions of Section 1500 of the NERC Rules of Procedure.
14. 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 AEPSC related to this Agreement.
15. Texas RE staff considered the facts and circumstances of the violations and AEPSC'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 violations and shall take into consideration the efforts of such user, owner, or operator to remedy the violations in a timely manner."¹ The factors considered by Texas RE staff in the determination of the appropriate penalty are set forth in Section IV of the Disposition Document.
16. Based on the above factors, as well as the mitigation actions and preventative measures taken, AEPSC shall pay the monetary penalty of \$225,000 to Texas RE within thirty days after the Agreement is either approved by the Federal Energy Regulatory Commission (Commission) or by operation of law, and Texas RE shall notify NERC if the payment is not received.
17. 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 AEPSC to new or additional enforcement, penalty, or sanction actions in accordance with the NERC Rules of Procedure.
18. If AEPSC does not make the monetary penalty payment above at the times agreed to by the parties, interest payable to Texas RE will begin to accrue from the date that payment is due pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii), in addition to the penalty specified above. AEPSC shall retain all rights to defend against such additional enforcement actions in accordance with the NERC Rules of Procedure.

¹ 16 U.S.C. § 824o(e)(6).

V. ADDITIONAL TERMS

19. 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 AEPSC has been made to induce the signatories or any other party to enter into the Settlement Agreement.
20. 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 AEPSC 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 settlement agreement with AEPSC, 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.
21. 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.
22. AEPSC agrees that this Settlement Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein and AEPSC waives its right to further hearings and appeal, unless and only to the extent that AEPSC 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 AEPSC in accordance with the NERC Rules of Procedure in the event that AEPSC fails to comply with the Mitigation Plan and compliance program agreed to in this Settlement Agreement. In the event AEPSC 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 AEPSC 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, AEPSC shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.
23. AEPSC 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 AEPSC 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 AEPSC consent to the use of this Settlement Agreement by any other party in any other action or proceeding.

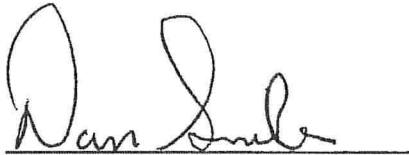
24. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity, and accepts the Settlement Agreement on the entity's behalf.
25. The undersigned representative of each party affirms that he or she has read the Settlement 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, provided, however, that such affirmation by each party's representative shall not apply to the other party's statements of position set forth in Section III of this Settlement Agreement.
26. The Settlement Agreement may be signed in counterparts.
27. This Settlement Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

Agreed to and accepted:

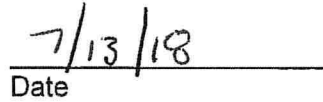


W. Lane Lanford
President & CEO
Texas Reliability Entity, Inc.


Date



Dan Snider
Managing Director, NERC Compliance & RTO Policy
American Electric Power Service Corporation


Date

Addendum A

DISPOSITION OF VIOLATION(S)¹

Regional Entity: Texas Reliability Entity, Inc. (Texas RE)

Registered Entity Name: American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma

NERC Registry ID: NCR04006

I. ENTITY REGISTRATION INFORMATION

ENTITY IS REGISTERED FOR THE FOLLOWING FUNCTIONS:

Registered Function	Registration Date
Distribution Provider (DP)	6/28/2007
Generator Owner (GO)	6/28/2007
Generator Operator (GOP)	6/28/2007
Transmission Owner (TO)	6/28/2007
Transmission Planner (TP)	6/28/2007
Transmission Operator (TOP)	5/4/2010

Description of Registered Entity

American Electric Power, Inc. (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 26,000 MW of generating capacity in the U.S., serving over 5 million customers in 11 states. AEP also owns the nation's largest electricity transmission system, a 40,000+ 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 11 percent of the electricity demand in ERCOT. AEP Texas, Inc. (AEP Texas), a unit of AEP, delivers electricity to some 1,000,000 homes, businesses, and industries in south and west Texas. AEP Texas provides regulated energy delivery service to consumers, regardless of which Retail Electric Provider they choose.

AEP Texas's service territory covers about 100,000 square miles, including 392 communities and all or parts of 96 counties. American Electric Power Service Corporation (AEPSC) is registered with Texas RE as agent for AEP Texas and Public Service Company of Oklahoma.

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.

II. EXECUTIVE SUMMARY

Overview of the Alleged Violation and Mitigation

Section III of this Disposition Document provides a full and complete description of the basis for Texas RE's determination that AEPSC was noncompliant with FAC-009-1 R1 and FAC-009-1 R2. The same section further describes the mitigation actions AEPSC has performed or will perform to address all applicable instances of noncompliance.

Assessed Penalty or Sanction:

\$225,000

Is there a settlement agreement?

Yes ☒ No ☐

If there is no settlement agreement, Registered Entity contests:

Findings ☐

Penalty ☐

Both ☐

Hearing Requested

Yes ☐ No ☒

Date

Outcome

Appeal Requested

With respect to the violation, the 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, the Registered Entity:

Accepts it/Does not contest it ☒

III. VIOLATION INFORMATION

NERC Violation ID #1

TRE2017016853

RELIABILITY STANDARD	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
FAC-009-1 FAC-008-3	R1 R6		Medium	High

Purpose of FAC-009-1: To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.

Purpose of FAC-008-3: To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on technically sound principles. A Facility Rating is essential for the determination of System Operating Limits.

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

Reliability Standard FAC-009-1 R1: The Transmission Owner and Generator Owner shall each establish Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology.

Reliability Standard FAC-008-3 R6: Each Transmission Owner and Generator Owner shall have Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings methodology or documentation for determining its Facility Ratings.

VIOLATION DESCRIPTION

During a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC, as a Transmission Owner (TO), was in violation of FAC-008-3 R6. Texas RE subsequently determined that the duration pertaining to AEPSC's Facility Ratings issues was from June 28, 2007 until April 13, 2017. Accordingly, Texas RE determined that AEPSC was in violation of FAC-009-1 R1 from June 28, 2007 until December 31, 2012. AEPSC was then in violation of FAC-008-3 R6 from January 1, 2013 until April 13, 2017. Texas RE further determined that, for purposes of this violation, there was no substantive change in AEPSC's compliance obligations under the two applicable Standard Requirements.

During the Compliance Audit, Texas RE determined that AEPSC did not consider station jumpers on 37 Transmission Facilities in existing Facility Ratings calculations.² Subsequently, AEPSC identified 10 additional Transmission Facilities for which it had similarly failed to consider jumpers in developing Facility Ratings, contrary to its current Facility Ratings Methodology. As such, the issue impacted a total of 47 Transmission Facilities. When these jumpers were considered, they

² Station jumpers are bare overhead and underground conductors that connect the station bus to other pieces of equipment on the Transmission line or in the substation.

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became the most limiting applicable series element for 32 Transmission Facilities in the Texas RE footprint, resulting in different Facility Ratings for these Transmission Facilities.

After including all jumpers, 32 Facilities required derates to their Normal and/or Emergency Facility Ratings. The following table lists the 32 affected Transmission Facilities and summarizes the required Facility Rating changes stemming from AEPSC's failure to consider all jumpers in calculating its Facility Ratings.

Transmission Facility Name	Bus Rating (KV)	Facility Rating in FRM Documentation (MVA)		Correct Facility Rating (MVA)		Derate (MVA)	
		Normal	Emergency	Normal	Emergency	Normal	Emergency
FORMOSA – JOSLIN	138	216	216	213	216	3	0
KLEBERG – STEC LOYOLA	138	216	216	213	216	3	0
DUPONT SS – RINCON CKT #1	138	216	216	213	216	3	0
EQUISTAR – LON HILL	138	216	245	179	242	37	3
DUPONT SS – GPP CKT#1	138	404	470	280	331	124	139
DUPONT SS – GPP CKT#2	138	404	470	213	275	191	195
MILITARY HIGHWAY – PUB MILITARY HIGHWAY CKT #1	138	555	669	213	275	342	394
MILITARY HIGHWAY – PUB MILITARY HIGHWAY CKT #2	138	555	669	213	275	342	394
MILITARY HIGHWAY – PUB MILITARY HIGHWAY CKT #3	138	488	578	213	275	275	303
CITGO NORTH OAK PARK – CORPUS CHRISTI ENERGY CENTER CKT#1	138	717	717	647	717	70	0
CITGO NORTH OAK PARK – CORPUS CHRISTI ENERGY CENTER CKT#2	138	717	717	647	717	70	0
AIRCO – CARBIDE	138	157	157	154	157	3	0
CARBIDE SEADRIFT – JOSLIN	138	216	216	209	216	7	0
RINCON BUS TIE	138	287	287	228	287	59	0
LAREDO HEIGHTS BUS TIE	138	717	717	639	717	78	0
ABILENE NORTHWEST 138 KV BUS TIE	138	382	382	270	331	112	51
OKLAUNION HVDC (ERCOT)	345	1797	1797	910	1077	887	720

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LA PALMA – MILITARY HIGHWAY	138	234	234	213	234	21	0
ABILENE NORTHWEST – FORT PHANTOM	138	271	271	179	242	92	29
NORTH EDINBURG – NORTH MCALLEN CKT #1	138	360	360	280	331	80	29
NORTH MCALLEN – SOUTH MCALLEN	138	365	365	216	278	149	87
BATES – FRONTERA	138	469	469	280	287	189	182
LAREDO VFT NORTH – NORTH LAREDO SWITCHING STATION	138	213	257	209	246	4	11
LON HILL – PELICAN	138	423	478	421	478	2	0
PELICAN –WHITEPOINT	138	423	478	416	473	7	5
OKLAUNION – SOUTHWEST VERNON	138	209	209	176	209	33	0
OKLAUNION 138 KV BUS TIE	138	312	345	279	330	33	15
LA PALMA 345/138 KV	345	600	660	535	660	65	0
EQUISTAR –WESTSIDE	138	157	157	156	157	1	0
FRIEND RANCH – SONORA	138	170	242	156	200	14	42
LAREDO POWER PLANT – LAREDO STATCOM	138	400	481	216	278	184	122
SIERRA VISTA - WORMSER	138	239	347	209	246	30	101

AEPSC also identified one Transmission Facility, the ABILENE MULBERRY CREEK – ABILENE NORTHWEST 138 kV line, for which AEPSC did not consider jumpers in developing Facility Ratings contrary to its current Facility Ratings Methodology. When considered, the jumpers resulted in a derate in the line's Normal Facility Rating. Specifically, AEPSC originally calculated the Normal Facility Rating for the ABILENE MULBERRY CREEK – ABILENE NORTHWEST 138 kV line as 270 MVA. When AEPSC considered the line's jumpers, AEPSC reduced the line's Normal Facility Rating to 267 MVA. However, during this field verification, AEPSC also performed several recalculations that increased the line's Emergency Facility Rating. AEPSC had originally determined the ABILENE MULBERRY CREEK – ABILENE NORTHWEST line's Emergency Facility Rating to be 287 MVA. To reflect the omitted jumpers in the line's Emergency Facility Rating, as well as recalculate the line's overall Facility Rating, AEPSC increased the line's Emergency Facility Rating to 316 MVA. The following table summarizes the changes on the ABILENE MULBERRY CREEK – ABILENE NORTHWEST 138 kV line.

Transmission Facility Name	Bus Rating (KV)	Facility Rating in FRM Documentation (MVA)		Correct Facility Rating (MVA)	
		Normal	Emergency	Normal	Emergency

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ABILENE MULBERRY CREEK – ABILENE NORTHWEST	138	270	287	267	316
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In addition to these 33 Facilities that had derates to their Normal, Emergency or both Facility Ratings, AEPSC calculated Facility Ratings for three additional Transmission Facilities based on equipment that was not actually located at those specific Transmission Facilities. First, AEPSC originally calculated the Facility Rating for the HEC – NORTH EDINBURG CKT #2 138 kV line as 213 MVA based on equipment not actually located on that specific line. When AEPSC performed a field evaluation of the HEC – NORTH EDINBURG line, it determined that a jumper that had been previously omitted from its Facility Ratings calculations now constituted the most limiting series element on the line. As such, AEPSC revised the HEC – EDINBURG CKT Normal Facility Rating from 213 MVA to 275 MVA to reflect the jumper actually located on that line and the corresponding Emergency Facility Rating from 320 MVA to 363 MVA. AEPSC likewise determined after field verifications on two additional 138 kV Transmission Facilities, DUPONT SS – JOSLIN and the GARZA – ROMA TAP, that the original Facility Ratings on both lines reflected equipment not actually located on those Facilities. AEPSC further determined that jumpers previously omitted from its Facility Ratings calculations now constituted the most limiting series element on both Transmission Facilities. Regarding DUPONT SS – JOSLIN, AEPSC originally calculated a Normal Facility Rating of 209 MVA and an Emergency Facility Rating of 216 MVA. When the correct equipment and jumpers were considered, AEPSC revised the DUPONT SS – JOSLIN Normal Facility Rating to 216 MVA. There was no change in the line's Emergency Facility Rating. Regarding the GARZA – ROMA TAP line, AEPSC established Normal and Emergency Facility Ratings of 143 MVA and 158 MVA respectively. However, when AEPSC considered the actual equipment on the line, it revised the Normal and Emergency Facility Ratings to 216 MVA and 251 MVA. The following table summarizes the changes on these three additional Facilities:

Transmission Facility Name	Bus Rating (KV)	Facility Rating in FRM Documentation (MVA)		Correct Facility Rating (MVA)	
		Normal	Emergency	Normal	Emergency
HEC – NORTH EDINBURG CKT #2	138	213	320	275	363
DUPONT SS – JOSLIN	138	209	216	216	216
GARZA – ROMA TAP	138	143	158	216	251

The root cause of this violation was that AEPSC did not have an adequate process to validate that it had included all applicable equipment in its Facility Ratings for its Transmission Facilities when the standard became mandatory and enforceable. In particular, AEPSC failed to verify that all individual Facility components were properly identified and applied in determining the limiting element to ensure Facility Ratings were properly calculated.

DURATION DATE(S)6/28/2007 – 4/13/2017³

FAC-009-1 R1: 6/28/2007 through 12/31/2012

FAC-008-3 R6: 1/01/2013 through 4/13/2017

The violation began on June 28, 2007, when AEPSC registered as a TO, and ended on April 13, 2017, when AEPSC corrected the last incorrect Facility Rating at issue and submitted the Rating information to ERCOT.

Region Notified of/Found Violation On:

1/25/2017 (date discovered at Audit)

Is the violation still occurring:Yes ☐ No ☒**If yes, explain:****Remedial Action Directive issued:**Yes ☐ No ☒**Reliability Impact Statement – Potential and Actual**

This violation posed a moderate risk to the reliability of the bulk power system. AEPSC's failure to establish accurate Transmission Facility Ratings increased the potential for its Transmission Facilities to be operated in excess of their correct capacity rating, creating the opportunity for equipment damage, incorrect modeling outputs and operating assumptions. In particular, AEPSC's incorrect Facility Ratings were greater than the Facility's actual Facility Ratings in 33 instances. As a result, AEPSC could have overloaded the equipment in question, potentially resulting in damage to the affected Facilities and/or other pieces of in-series equipment.

However, the risk posed by this issue was also mitigated by a number of factors. First, there were no identified exceedances throughout the duration for 31 of the 33 Facilities with incorrect Facility Ratings in excess of their actual Facility Ratings. The remaining two Facilities at issue experienced limited exceedances, representing only 0.8% and 0.2% of the total operational hours for the most recent three-year period for which operational information was available. Further, AEPSC did not experience any operational outages during these limited exceedance periods. Second, AEPSC personnel performed routine, periodic inspections of the jumper equipment in question throughout the issue duration. This review likely would have detected any equipment stress or other issues resulting from operating the jumper equipment in excess of its actual equipment ratings. AEPSC personnel conducted bi-monthly field inspections of all affected Facilities and found no signs of visible damage, hot spots, or other equipment damage. Finally, AEPSC reviewed the Dispatch Operating Logs for the stations associated with the Facilities and found no reliability issues.

³ NERC tracks violations to the version of the standard effective when the violation first occurred. Texas RE references violation number TRE2017016853 as Reliability Standard FAC-009-1 R1, which includes all versions of the standard in effect during the violation duration dates.

No harm is known to have occurred.

Regional Entity required a formal Mitigation Plan

Yes ☒ No ☐

NERC Mitigation Plan No.

Date submitted to Regional Entity

Date accepted by Regional Entity

Date approved by NERC

Date provided to FERC

If applicable, identify and explain all prior versions that were accepted or rejected:

Mitigation Plan Completed?

Yes ☐ No ☒

Proposed approved completion date: 5/1/2019

Extensions requested?

Yes ☐ No ☒

Date Regional Entity submitted Completion Certification

Date Registered Entity certified it completed the Mitigation Plan

Date Regional Entity verified completion of the Mitigation Plan

Actual Completion Date as determined by the Regional Entity

Description of Mitigation:

To mitigate this violation, AEPSC:

- 1) revised the Facility Ratings for the affected Transmission Facilities; and
- 2) provided the corrected Facility Ratings to its RC.

Additionally, AEPSC will complete the following mitigation actions by May 1, 2019:

- 1) develop and implement a revised Facility Ratings methodology that includes explicit steps to verify all equipment ratings against inventory and one-line diagrams for all planned equipment projects;

- 2) develop and implement an updated process to verify that Facility Ratings are correctly determined before placing the Facility in service, including specific steps regarding who should perform the Facility Rating verification and when the Facility Rating verification will be performed;
- 3) develop and implement a detective internal control that periodically samples field data to verify field conditions match one-line diagrams, inventory lists, and/or other applicable source documents;
- 4) provide training for all applicable personnel regarding the updated Facility Ratings verification process;
- 5) complete Facility Ratings data validation for all of the applicable Facilities; and
- 6) based on the results of the validation process, update internal records, as appropriate, and make appropriate notifications.

List of evidence reviewed by Regional Entity to evaluate completion of mitigation activity

Mitigation Activity #	Evidence Supporting Mitigation Action	Mitigation Completion Date
1	AEP Response Additional Question GARZA_WORMSER_LineUpdates_13Apr17	4/13/2017
2	AEP Response Additional Question GARZA_WORMSER_LineUpdates_13Apr17	4/13/2017
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EXHIBITS

- TRE2017016853_Audit Finding_AEPSC
- TRE2017016853_Notice of Possible Violation_AEPSC

NERC Violation ID #2

TRE2018019039

RELIABILITY STANDARD	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
FAC-009-1 FAC-008-3	R2 R8		Medium	Severe

Purpose of FAC-009-1: To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.

Purpose of FAC-008-3: To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on technically sound principles. A Facility Rating is essential for the determination of System Operating Limits.

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

Reliability Standard FAC-009-1 R2: The Transmission Owner and Generator Owner shall each provide Facility Ratings for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) as scheduled by such requesting entities.

Reliability Standard FAC-008-3 R8: Each Transmission Owner (and each Generator Owner subject to Requirement R2) shall provide requested information as specified below (for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities) to its associated Reliability Coordinator(s), Planning Coordinator(s), Transmission Planner(s), Transmission Owner(s) and Transmission Operator(s):

8.1. As scheduled by the requesting entities:

8.1.1. Facility Ratings

8.1.2. Identity of the most limiting equipment of the Facilities

8.2. Within 30 calendar days (or a later date if specified by the requester), for any requested Facility with a Thermal Rating that limits the use of Facilities under the requester's authority by causing any of the following: 1) An Interconnection Reliability Operating Limit, 2) A limitation of Total Transfer Capability, 3) An impediment to generator deliverability, or 4) An impediment to service to a major load center:

8.2.1. Identity of the existing next most limiting equipment of the Facility

8.2.2. The Thermal Rating for the next most limiting equipment identified in Requirement R8, Part 8.2.1.

VIOLATION DESCRIPTION

After a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC, as a Transmission Owner (TO), was in violation of FAC-009-1 R2. In particular, AEPSC did not provide accurate Facility Ratings for 32 Transmission Facilities to its Reliability Coordinator (RC) as requested. Texas RE subsequently determined that the duration pertaining to AEPSC's Facility Ratings issues was from June 28, 2007 until April 13, 2017. Accordingly, Texas RE determined that AEPSC was in violation of FAC-009-1 R2 from June 28, 2007 until December 31, 2012. AEPSC was then in violation of FAC-008-3 R8 from January 1, 2013 until April 13, 2017. Texas RE further determined that, for purposes of this violation, there was no substantive change in AEPSC's compliance obligations under the two applicable Standard Requirements.

During the Compliance Audit, Texas RE determined that AEPSC did not consider station jumpers on 37 Transmission Facilities in existing Facility Ratings calculations.⁴ Subsequently, AEPSC identified 10 additional Transmission Facilities for which it had similarly failed to consider jumpers in developing Facility Ratings, contrary to its current Facility Ratings Methodology. As such, the issue impacted a total of 47 Transmission Facilities. When these jumpers were considered, they became the most limiting applicable series element for 32 Transmission Facilities in the Texas RE footprint, resulting in different Facility Ratings for these Transmission Facilities.

After including all jumpers, 32 Facilities required derates to their Normal and/or Emergency Facility Ratings. The following table lists the 32 affected Transmission Facilities and summarizes the required Facility Rating changes stemming from AEPSC's failure to consider all jumpers in calculating its Facility Ratings.

Transmission Facility Name	Bus Rating (KV)	Facility Rating in FRM Documentation (MVA)		Correct Facility Rating (MVA)		Derate (MVA)	
		Normal	Emergency	Normal	Emergency	Normal	Emergency
FORMOSA – JOSLIN	138	216	216	213	216	3	0
KLEBERG – STEC LOYOLA	138	216	216	213	216	3	0
DUPONT SS – RINCON CKT #1	138	216	216	213	216	3	0
EQUISTAR – LON HILL	138	216	245	179	242	37	3
DUPONT SS – GPP CKT#1	138	404	470	280	331	124	139
DUPONT SS – GPP CKT#2	138	404	470	213	275	191	195
MILITARY HIGHWAY – PUB MILITARY HIGHWAY CKT #1	138	555	669	213	275	342	394
MILITARY HIGHWAY – PUB MILITARY HIGHWAY CKT #2	138	555	669	213	275	342	394

⁴ Station jumpers are bare overhead and underground conductors that connect the station bus to other pieces of equipment on the Transmission line or in the substation.

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MILITARY HIGHWAY – PUB MILITARY HIGHWAY CKT #3	138	488	578	213	275	275	303
CITGO NORTH OAK PARK – CORPUS CHRISTI ENERGY CENTER CKT#1	138	717	717	647	717	70	0
CITGO NORTH OAK PARK – CORPUS CHRISTI ENERGY CENTER CKT#2	138	717	717	647	717	70	0
AIRCO – CARBIDE	138	157	157	154	157	3	0
CARBIDE SEADRIFT – JOSLIN	138	216	216	209	216	7	0
RINCON BUS TIE	138	287	287	228	287	59	0
LAREDO HEIGHTS BUS TIE	138	717	717	639	717	78	0
ABILENE NORTHWEST 138 KV BUS TIE	138	382	382	270	331	112	51
OKLAUNION HVDC (ERCOT)	345	1797	1797	910	1077	887	720
LA PALMA – MILITARY HIGHWAY	138	234	234	213	234	21	0
ABILENE NORTHWEST – FORT PHANTOM	138	271	271	179	242	92	29
NORTH EDINBURG – NORTH MCALLEN CKT #1	138	360	360	280	331	80	29
NORTH MCALLEN – SOUTH MCALLEN	138	365	365	216	278	149	87
BATES – FRONTERA	138	469	469	280	287	189	182
LAREDO VFT NORTH – NORTH LAREDO SWITCHING STATION	138	213	257	209	246	4	11
LON HILL – PELICAN	138	423	478	421	478	2	0
PELICAN –WHITEPOINT	138	423	478	416	473	7	5
OKLAUNION – SOUTHWEST VERNON	138	209	209	176	209	33	0
OKLAUNION 138 KV BUS TIE	138	312	345	279	330	33	15
LA PALMA 345/138 KV	345	600	660	535	660	65	0
EQUISTAR –WESTSIDE	138	157	157	156	157	1	0
FRIEND RANCH – SONORA	138	170	242	156	200	14	42
LAREDO POWER PLANT – LAREDO STATCOM	138	400	481	216	278	184	122
SIERRA VISTA - WORMSER	138	239	347	209	246	30	101

AEPSC also identified one Transmission Facility, the ABILENE MULBERRY CREEK – ABILENE NORTHWEST 138 kV line, for which AEPSC did not consider jumpers in developing Facility Ratings contrary to its current Facility Ratings Methodology. When considered, the jumpers resulted in a derate in the line's Normal Facility Rating. Specifically, AEPSC originally calculated the Normal Facility Rating for the ABILENE MULBERRY CREEK – ABILENE NORTHWEST 138 kV line as 270 MVA. When AEPSC considered the line's jumpers, AEPSC reduced the line's Normal Facility Rating to 267 MVA. However, during this field verification, AEPSC also performed several recalculations that increased the line's Emergency Facility Rating. AEPSC had originally determined the ABILENE MULBERRY CREEK – ABILENE NORTHWEST line's Emergency Facility Rating to be 287 MVA. To reflect the omitted jumpers in the line's Emergency Facility Rating, as well as recalculate the line's overall Facility Rating, AEPSC increased the line's Emergency Facility Rating to 316 MVA. The following table summarizes the changes on the ABILENE MULBERRY CREEK – ABILENE NORTHWEST 138 kV line.

Transmission Facility Name	Bus Rating (KV)	Facility Rating in FRM Documentation (MVA)		Correct Facility Rating (MVA)	
		Normal	Emergency	Normal	Emergency
ABILENE MULBERRY CREEK – ABILENE NORTHWEST	138	270	287	267	316

In addition to these 33 Facilities that had derates to their Normal, Emergency or both Facility Ratings, AEPSC calculated Facility Ratings for three additional Transmission Facilities based on equipment that was not actually located at those specific Transmission Facilities. First, AEPSC originally calculated the Facility Rating for the HEC – NORTH EDINBURG CKT #2 138 kV line as 213 MVA based on equipment not actually located on that specific line. When AEPSC performed a field evaluation of the HEC – NORTH EDINBURG line, it determined that a jumper that had been previously omitted from its Facility Ratings calculations now constituted the most limiting series element on the line. As such, AEPSC revised the HEC – EDINBURG CKT Normal Facility Rating from 213 MVA to 275 MVA to reflect the jumper actually located on that line and the corresponding Emergency Facility Rating from 320 MVA to 363 MVA. AEPSC likewise determined after field verifications on two additional 138 kV Transmission Facilities, DUPONT SS – JOSLIN and the GARZA – ROMA TAP, that the original Facility Ratings on both lines reflected equipment not actually located on those Facilities. AEPSC further determined that jumpers previously omitted from its Facility Ratings calculations now constituted the most limiting series element on both Transmission Facilities. Regarding DUPONT SS – JOSLIN, AEPSC originally calculated a Normal Facility Rating of 209 MVA and an Emergency Facility Rating of 216 MVA. When the correct equipment and jumpers were considered, AEPSC revised the DUPONT SS – JOSLIN Normal Facility Rating to 216 MVA. There was no change in the line's Emergency Facility Rating. Regarding the GARZA – ROMA TAP line, AEPSC established Normal and Emergency Facility Ratings of 143 MVA and 158 MVA respectively. However, when AEPSC considered the actual equipment on the line, it revised the Normal and Emergency Facility Ratings to 216 MVA and 251 MVA. The following table summarizes the changes on these three additional Facilities:

Transmission Facility Name	Bus Rating (KV)	Facility Rating in FRM Documentation (MVA)		Correct Facility Rating (MVA)	
		Normal	Emergency	Normal	Emergency
HEC – NORTH EDINBURG CKT #2	138	213	320	275	363
DUPONT SS – JOSLIN	138	209	216	216	216
GARZA – ROMA TAP	138	143	158	216	251

The root cause of this violation was that AEPSC did not have an adequate process to validate that it had included all applicable equipment in its Facility Ratings for its Transmission Facilities when the standard became mandatory and enforceable. In particular, AEPSC failed to verify that all individual Facility components were properly identified and applied in determining the limiting element to ensure Facility Ratings were properly calculated.

DURATION DATE(S)

6/28/2007 – 4/13/2017⁵

FAC-009-1 R1: 6/28/2007 through 12/31/2012

FAC-008-3 R6: 1/01/2013 through 4/13/2017

The violation began on June 28, 2007, when AEPSC registered as a TO, and ended on April 13, 2017, when AEPSC corrected the last incorrect Facility Rating at issue and submitted the Rating information to ERCOT.

Region Notified of/Found Violation On:

1/25/2017 (date discovered at Audit)

Is the violation still occurring:

Yes ☐ No ☒

If yes, explain:

Remedial Action Directive issued:

Yes ☐ No ☒

Reliability Impact Statement – Potential and Actual

This violation posed a moderate risk to the reliability of the bulk power system. In 33 instances, AEPSC provided Facility Ratings to its Reliability Coordinator (RC) that were greater than the rating of each Facility's actual Facility Rating. That is, the Facility Ratings were higher than the actual capability of that equipment. As a result, the RC could have overloaded the equipment in

⁵ NERC tracks violations to the version of the standard effective when the violation first occurred. Texas RE references violation number TRE2018019039 as Reliability Standard FAC-009-1 R2, which includes all versions of the standard in effect during the violation duration dates.

question, potentially resulting in damage to the affected Facilities and/or other pieces of in-series equipment.

However, the risk posed by this issue was also mitigated by a number of factors. First, there were no identified exceedances throughout the duration for 31 of the 33 Facilities with incorrect Facility Ratings in excess of their actual Facility Ratings. The remaining two Facilities at issue experienced limited exceedances, representing only 0.8% and 0.2% of the total operational hours for the most recent three-year period for which operational information was available. Further, AEPSC did not experience any operational outages during these limited exceedance periods. Second, AEPSC personnel performed routine, periodic inspections of the jumper equipment in question throughout the issue duration, which would have likely detected any equipment stress or other issues resulting from operating the jumper equipment in excess of its actual equipment ratings. AEPSC personnel conducted bi-monthly field inspections of all affected Facilities and found no signs of visible damage, hot spots, or other equipment damage. Finally, AEPSC reviewed the Dispatch Operating Logs for the stations associated with the Facilities and found no reliability issues.

No harm is known to have occurred.

Regional Entity required a formal Mitigation Plan

Yes ☒ No ☐

NERC Mitigation Plan No.

Date submitted to Regional Entity

Date accepted by Regional Entity

Date approved by NERC

Date provided to FERC

If applicable, identify and explain all prior versions that were accepted or rejected:

Mitigation Plan Completed?

Yes ☐ No ☒

Proposed approved completion date: 5/1/2019

Extensions requested?

Yes ☐ No ☒

Date Regional Entity submitted Completion Certification

Date Registered Entity certified it completed the Mitigation Plan

Date Regional Entity verified completion of the Mitigation Plan

Actual Completion Date as determined by the Regional Entity**Description of Mitigation:**

To mitigate this violation, AEPSC:

- 1) revised the Facility Ratings for the affected Transmission Facilities; and
- 2) provided the corrected Facility Ratings to its RC.

Additionally, AEPSC will complete the following mitigation actions by May 1, 2019:

- 1) develop and implement a revised Facility Ratings methodology that includes explicit steps to verify all equipment ratings against inventory and one-line diagrams for all planned equipment projects;
- 2) develop and implement an updated process to verify that Facility Ratings are correctly determined before placing the Facility in service, including specific steps regarding who should perform the Facility Rating verification and when the Facility Rating verification will be performed;
- 3) develop and implement a detective internal control that periodically samples field data to verify field conditions match one-line diagrams, inventory lists, and/or other applicable source documents;
- 4) provide training for all applicable personnel regarding the updated Facility Ratings verification process;
- 5) complete Facility Ratings data validation for all of the applicable Facilities; and
- 6) based on the results of the validation process, update internal records, as appropriate, and make appropriate notifications.

List of evidence reviewed by Regional Entity to evaluate completion of mitigation activity

Mitigation Activity #	Evidence Supporting Mitigation Action	Mitigation Completion Date
1	AEP Response Additional Question GARZA_WORMSER_LineUpdates_13Apr17	4/13/2017
2	AEP Response Additional Question GARZA_WORMSER_LineUpdates_13Apr17	4/13/2017
3		
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EXHIBITS

- TRE2018019039_Audit Finding_AEPSC
- TRE2018019039_040_042_Notice of Possible Violations_AEPSC

IV. PENALTY INFORMATION

Assessed Penalty or Sanction:
\$225,000

A. Factors Affecting Penalty Determination

1. REGISTERED ENTITY'S COMPLIANCE HISTORY

Any previously filed violations of the same or similar Reliability Standard(s) or Requirement(s)?

 Yes ☐ No ☒

If yes, list violations and status

N/A

Any previously filed violations of the same or similar Reliability Standard(s) or Requirement(s) for affiliate entities?

 Yes ☒ No ☐

List of Affiliate Violations

NCR ID#	Entity Name	Regional Compliance Enforcement Authority	NERC Violation ID	Standard Requirement
NCR00682	American Electric Power Service Corporation	RF	RFC2016016427	FAC-008-3 R6
NCR00682 ⁶	American Electric Power Service Corporation	RF	RFC2015014576	FAC-008-3 R6
NCR00682	American Electric Power Service Corporation	RF	RFC2012010148	FAC-009-1 R1
NCR00682	American Electric Power Service Corporation	RF	RFC2011001049	FAC-009-1 R1
NCR00682	American Electric Power Service Corporation	RF	RFC200800072	FAC-009-1 R1

⁶ American Electric Power Service Corporation as agent for Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, Wheeling Power Company, AEP Ohio Transmission Company, AEP Appalachian Transmission Company, AEP West Virginia Transmission Company, AEP Indiana Michigan Transmission Company and AEP Kentucky Transmission Company, Inc.

If yes, list violations and status

Texas RE considered the compliance history of AEPSC's affiliate, American Electric Power Service Corporation as agent for Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, Wheeling Power Company, AEP Ohio Transmission Company, AEP Appalachian Transmission Company, AEP West Virginia Transmission Company, AEP Indiana Michigan Transmission Company and AEP Kentucky Transmission Company, Inc. (AEP), and determined that AEP had multiple instances of noncompliance pertaining to FAC-009-1 R1 and/or FAC-008-3 R6.

In RFC2016016427 (FAC-008-3 R6), AEPSC failed to account for two riser sections in calculating the Facility Ratings for three transformer facilities, resulting in an inaccurate higher rating for all three transformers. The root cause of the issue included a lack of sufficient verification controls to ensure proper modeling of ratings within the ratings database. In particular, AEPSC personnel overlooked the risers for the three transformers at issue and did not update the database following the completion of the project.

In RFC2015014576 (FAC-008-3 R6), AEPSC increased the winter emergency rating from 352 MVA to 429 MVA on a single 138 kV Transmission Facility. However, AEPSC's Transmission Planning department failed to communicate this ratings change to AEPSC's Protection and Control Engineering Department in order for them to calculate a new relay trip limit. As a result, AEPSC placed the line back into service without properly adjusting the Facility Rating for the line to reflect a new Most Limiting Series Element (MLSE). The root cause of the issue was ineffective verification practices, which created a process gap that permitted an unverified rating to be put into production.

In RFC2012010148 (FAC-009-1 R1), AEPSC provided a Rating for one 138 kV transmission line that was inconsistent with the temporarily derated condition of the line. Specifically, AEPSC mistakenly provided PJM with the rating contained in the permanent ratings database, which does not include temporary rating.

In RFC2011001049 (FAC-009-1 R1), AEPSC failed to establish Facility Ratings for the 2870 Bus Conductors consistent with its Facility Rating Methodology. AEPSC added the 2870 Kilo Circular Mills Aluminum Conductor (2870 KCM ACSR) bus conductors (2870 Bus Conductors) to the existing ampacity rating table in its Facility Ratings Methodology, but did not implement the Facility Ratings for the 2870 Bus Conductors in the Terminal Element List within its Facility Ratings database.

In RFC200800072 (FAC-009-1 R1), AEPSC failed to establish line ratings that were consistent with AEP's then enforceable Facility Ratings Methodology (Revision 2), resulting in transmission lines continuing to have conductor emergency ratings used in excess of the normal rating. AEPSC discovered that it had not rigorously follow its Facility Ratings Methodology and used conductor emergency rating for certain lines that should have been de-rated to equal the conductor normal rating.

Texas RE considered AEPSC's FAC-008 compliance history to be an aggravating factor in the current circumstances. Specifically, the current issues stem from AEPSC's lack of an adequate process to validate that it had included all applicable equipment in its Facility Ratings for its

Transmission Facilities when the standard became mandatory and enforceable. In particular, AEPSC lacked a detailed process to verify that it properly identified and considered all applicable equipment in its Facility Ratings. Correspondingly, both RFC2016016472 and RFC2015014576 involved AEPSC's ineffective verification processes for new Facility Ratings. In particular, the mitigation associated with RFC2015014576 included AEPSC developing a new Facility Rating process, as well as conducting internal Transmission Planning training covering rating methodology for relay protective devices with emphasis on validating data associated with Transmission Facilities' Most Limiting Series Elements.

Does the Registered Entity's compliance history indicate that there are broader compliance culture problems?

Yes ☐ No ☒

If yes, state whether such problems were considered aggravating factors in the penalty determination.

Texas RE considered the compliance history of AEPSC's affiliate, American Electric Power Service Corporation as agent for Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, Wheeling Power Company, AEP Ohio Transmission Company, AEP Appalachian Transmission Company, AEP West Virginia Transmission Company, AEP Indiana Michigan Transmission Company and AEP Kentucky Transmission Company, Inc. (AEP), and determined that AEP had multiple instances of noncompliance pertaining to FAC-009-1 R1 and/or FAC-008-3 R6.

Regional Entity Conclusion Regarding Compliance History:

Based on the reasons set forth above, Texas RE determined that the previous violations pertaining to AEPSC's affiliate constitute repeat violations and therefore were considered an aggravating factor in the overall penalty determination.

2. THE PRESENCE AND QUALITY OF THE REGISTERED ENTITY'S COMPLIANCE PROGRAM**Is there a documented compliance program**Yes ☒ No ☐ Undetermined ☐**Explain**

In late 2006, AEPSC created the Reliability Compliance Committee (RCC) as a cross-functional team of executives from business units within AEPSC. The RCC is responsible for ensuring the implementation and oversight of AEPSC's program to comply with the NERC reliability standards designed to protect the integrity of the North American bulk power system. The RCC oversees the development of a comprehensive plan for compliance with the NERC and Regional Reliability Organization (RRO) standards, as well as addressing other compliance related matters such as the approval of reliability compliance plans, policies, and procedures.

The specific roles of the RCC are as follows:

- Providing oversight and guidance to the implementation of the Reliability Compliance Program and for communicating to other non-RCC senior management on relevant matters
- Overseeing the development and on-going maintenance of a comprehensive Reliability Compliance Program to comply with mandatory electric reliability standards
- Providing guidance for continual improvement of the Reliability Compliance Program, including:
 - Development and implementation of consistent processes across all business units and support groups
 - Promoting a reliability and compliance culture that focuses on transparency and accountability
 - Enhancing the overall sustainability of the program
- Serving as an escalation point on matters not addressable at the NERC Compliance Steering Committee (NCSC)

In June of 2010, the 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:

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

In an effort to continuously strengthen its compliance program, in early 2018, AEPSC restructured its governance of the NERC compliance program to ensure direct line of sight with business units responsible for compliance. AEPSC recognizes that senior management involvement is integral to a healthy compliance program, and the new structure consists of three layers of governance with distinct responsibilities. The Reliability Compliance Committee is now comprised of AEP's top executives who have accountability for compliance programs, and the committee establishes the vision, mission and culture expectations for AEP's NERC compliance program. The Reliability Compliance Strategy Team (RCST) consists of compliance program senior executives who are charged with program strategy, health, and developing cross-business unit solutions. The RCST advises the RCC and directs the Reliability Compliance Implementation Team (RCIT). The RCIT is comprised of director-level program stakeholders representing compliance and operations. This group focuses on implementation, advises the RCST, and engages subject matter experts and compliance teams across AEP.

Additionally, AEPSC has created a new Enterprise NERC Compliance Oversight group within its central compliance organization tasked with ensuring consistency across AEPSC's various business units in fulfilling compliance obligations. In addition, this group will focus on integrating risk management practices and oversee independent evaluations of AEPSC's compliance program. In addition, AEPSC has enhanced the role of its Enterprise NERC Compliance Services group to include coordination of Mitigation Plan implementation, as well as facilitate sharing of compliance best practices across AEPSC's business units. Finally, AEPSC has established a new Change Management team, which is tasked with ensuring communication and consistency in approach throughout AEPSC, including standardizing reliability tasks and change management practices across the organization.

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.

The Office of the CEO includes the AEPSC 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 AEPSC is compliant with all applicable federal and state laws, rules, and regulatory requirements. Audit services reports directly to the Chairman/CEO of AEPSC 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.

Under AEPSC's revised compliance program, AEPSC has also created a new position, Director of Enterprise NERC Compliance Oversight. This position is tasked with, among other things, overseeing independent assessments of AEPSC's compliance program performance and providing information regarding all aspects of AEPSC's compliance program directly to AEPSC Senior Management.

3. THE DEGREE AND QUALITY OF COOPERATION BY THE REGISTERED ENTITYFull cooperation Yes ☒ No ☐

If no, explain:

Texas RE considered AEPSC's cooperation throughout the Compliance Audit, Enforcement investigation, and Settlement processes and awarded some mitigating credit. AEPSC acted in good faith throughout the process, readily made its subject matter experts available on a number of occasions, and worked continuously with Texas RE staff to provide updated information.

4. ANY ATTEMPT BY THE REGISTERED ENTITY TO CONCEAL THE VIOLATION(S) OR INFORMATION NEEDED TO REVIEW, EVALUATE, OR INVESTIGATE THE VIOLATION?Yes ☐ No ☒

If yes, explain:

5. ANY EVIDENCE THE VIOLATION(S) WERE INTENTIONAL?Yes ☐ No ☒

If yes, explain:

6. ANY OTHER AGGRAVATING FACTORS FOR CONSIDERATION?Yes ☐ No ☒

If yes, explain:

7. ANY OTHER EXTENUATING CIRCUMSTANCES?Yes ☐ No ☒

If yes, explain:

B. REGIONAL ENTITY CONCLUSION REGARDING FACTORS AFFECTING THE PENALTY DETERMINATION:

Based on a consideration of the factors identified throughout this Disposition Document and all factors specified throughout the NERC Sanction Guidelines, Texas RE concludes that in the current circumstances, a penalty of \$225,000 reflects the seriousness of AEPSC's violations and their impact to the Texas RE region.

V. OTHER RELEVANT INFORMATION**(1) Notice of Alleged Violation**

Date

Or N/A ☒**(2) Settlement Requested by Registered Entity**

Date

Or N/A ☐**(3) Notice of Confirmed Violation issued**

Date

Or N/A ☒**(4) Supplemental Record information**

Date(s)

Or N/A ☒

Violation - Discovery Record

Registered Entity: 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: TRE2017016853

Discovery Method: Audit

Date Submitted: January 27, 2017

Region Contact: Michael Dillard

Phone: 512-583-4926 Email: michael.dillard@texasre.org

Standard: FAC-008-3 - Facility Ratings

Purpose: To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on technically sound principles. A Facility Rating is essential for the determination of System Operating Limits.

Requirement: FAC-008-3 R6.

Each Transmission Owner and Generator Owner shall have Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings methodology or documentation for determining its Facility Ratings.

Violated Sub-Req(s):

Violated Function(s): Transmission Owner (TO)

Init Determ a Vltn: January 25, 2017

Begin Date of Vltn: December 01, 2015

End Date:

Notified of Vltn on: January 25, 2017

Potential Impact to BES: This issue posed a severe risk and did pose a serious or substantial risk to the reliability of the bulk power system because AEPSC operates approximately 5000 miles of transmission in the ERCOT region, serving approximately 8.7% of total ERCOT load (5790 MW peak). AEPSC mis-rated 12.26% of transmission Facilities, which reduced the ratings of these Facilities by up to 78%. The mis-ratings create the potential for thermal overload due to lack of awareness of equipment capability.

Brief Vltn Descr. & Cause: AEPSCs Facility Ratings for 38 Facilities were not consistent with language in the Facility Rating Methodology that states "All transmission circuits (Lines, Transformers, Series Caps, etc.) are to be analyzed to determine the Most Limiting Series element (MLSE)" due to incorrect rating of jumpers which were the MLSE for the Facilities.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: Medium

Severity Level: VSL - High

Factual Basis: High VSL:

The responsible entity failed to establish Facility Ratings consistent with the associated Facility Ratings methodology or documentation for determining the Facility Ratings for more than 10% up to (and including) 15% of its solely owned and jointly owned Facilities. (R6)

AEPS mis-rated jumpers on 38 of approximately 310 Facilities (12.26%)

Notice of Possible Violation

Date: September 6, 2017

To: American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma (AEPSC)
Attention: Darrel Grumman **Email:** dgrumman@aep.com

NERC Compliance Registry ID: NCR04006

Re: **Possible Violation of Requirement of Reliability Standard Approved by the Applicable Governmental Authority**

NERC Violation ID	Standard Requirement(s)	Violation Duration
TRE2017016853	FAC-009-1 R1 and FAC-008-3 R6	June 28, 2017 – April 13, 2017

During a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC, as a Transmission Owner (TO), was in violation of FAC-008-3 R6. In particular, AEPSC's Facility Ratings were not consistent with the associated Facility Ratings methodology or documentation for determining its Facility Ratings. Texas RE subsequently determined that the duration pertaining to AEPSC's Facility Ratings issues was from June 28, 2007 until April 13, 2017. Accordingly, Texas RE determined that AEPSC was in violation of FAC-009-1 R1 from June 28, 2007 until December 31, 2012. AEPSC was then in violation of FAC-008-3 R6 from January 1, 2013 until April 13, 2017.

Consistent with the audit finding acknowledgement that was sent to AEPSC on January 27, 2017, AEPSC should continue to preserve all documentation pertaining to the Possible Violation. Documentation includes, but is not limited to, operator logs, recorded voice communications, email and written correspondence, work orders, inspection records, patrol records, budget information, and any and all other documents that may be directly or indirectly related to the Possible Violation.

AEPSC may submit a response to the Possible Violation should they believe Texas RE has reached this conclusion in error. Texas RE will notify you of its conclusion after reviewing any response from AEPSC and upon final review of the Possible Violation. Texas RE may conclude that there is insufficient basis to pursue the matter further or may conclude sufficient basis does exist to pursue the matter further with a Notice of Alleged Violation (NAV) that sets forth Texas RE's conclusions and your response options.

Texas RE appreciates your cooperation in advance and looks forward to resolving this matter in the interests of promoting the reliability of the bulk power system. To this end, settlement negotiations may occur at any time after this notice and until such time a Notice of Penalty is filed with the Federal Energy Regulatory Commission (Commission) or Applicable Governmental Authority by NERC. Should you desire to discuss settlement negotiations, please use the webCDMS portal to make your request.

As required by the NERC Rules of Procedure and NERC Compliance Monitoring and Enforcement Program, the information in this notice will be provided on a non-public basis to the Commission or Applicable Governmental Authority. The information regarding the possible noncompliance(s) or violation(s) will not be made public unless and until a violation is confirmed.

If you have any questions, please feel free to contact me at 512-583-4939 or via email at the address indicated below.

Respectfully submitted,

Joseph P. Younger
Texas Reliability Entity, Inc.
Manager, Enforcement
(512) 583-4939
Email: joseph.younger@texasre.org

Violation - Discovery Record

Registered Entity: American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma

NERC Registry ID: NCR04006

NERC Violation ID: TRE2018019039

Discovery Method: Audit

Date Submitted: January 25, 2018

Region Contact: Rashida Caraway

Phone: 512-583-4977 Email: rashida.caraway@texasre.org

Standard: FAC-009-1 - Establish and Communicate Facility Ratings

Purpose: To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.

Requirement: FAC-009-1 R2.

The Transmission Owner and Generator Owner shall each provide Facility Ratings for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) as scheduled by such requesting entities.

Violated Sub-Requirement(s):

Violated Function(s): Transmission Owner (TO)

Init Determ a Vltn: January 24, 2018

Begin Date of Vltn: June 28, 2007

End Date: April 13, 2017

Notified of Vltn on: January 24, 2018

Potential Impact to BES: This violation posed a serious risk and substantial risk to the reliability of the bulk power system. In 37 instances, AEPSC provided a Facility Rating to its RC that was greater than the actual rating of the Facility. As a result, the RC could have overloaded the equipment in question, potentially resulting in damage to the affected Facilities and/or other pieces of in-series equipment. In addition, the failure of a TO to provide its RC with accurate Facility Ratings reduces the RC's situational awareness by impacting its ability to develop accurate operational models of real-time demands, contingency analyses, and system planning analyses. Misrated Transmission Facilities also impact the various reliability coordination tasks performed throughout the ERCOT-region, including the development and use of regional transmission planning cases, the performance or Operational Planning Analyses and Real-Time Assessments performed by the RC, and real-time monitoring activities performed by the RC, AEPSC, and neighboring Transmission Operators. Finally, AEPSC's footprint interconnects with at least six other TOs and an outage of a transmission line as a result of overloading the line could impact other TOs.

In assessing the seriousness of this issue, Texas RE considered the fact that the issue was widespread. In particular, AEPSC failed to consider all applicable equipment in calculating Facility Ratings on 47 out of 310 total Transmission Facilities. This issue in turn resulted in Facility Ratings changes on 40 Transmission Facilities, or a total of 12.9% of all of AEPSC's Transmission Facilities. AEPSC had to reduce the Facility Ratings it originally provided to its RC on 37 Transmission Facilities,

with the largest reduction of 887 MVA occurring on the OKLAUNION-OKLAUNION HVDC 345 kV line. The derates occurred on 35 138kV lines and 2 345kV lines. Moreover, the issue duration at each applicable Transmission Facility was lengthy, lasting almost 10 years, and AEPSC did not detect and begin mitigation actions to provide correct Facility Ratings to its RC until Texas RE identified the Facility Rating issues during the Compliance Audit. Collectively, this indicates a weakness in AEPSC's internal controls to identify, correct, assess, and timely mitigate Facility Ratings issues. As a result, it is possible these issues could have become more severe or widespread.

Texas RE also considered the fact that 24 of AEPSC's misrated Transmission Facilities were located in the Lower Rio Grande Valley (LRGV) region. AEPSC serves approximately 67% of the LGRV load. In recent years, the LGRV has experienced localized reliability issues due to strong load growth, Transmission constraints, and limited generation resources. In particular, because peak loads exceed available generating capacity, the LRGV region relies on transmission imports to meet demand. As a result, the LRGV region has experienced significant load shed and/or voltage events on several occasions, including February 3-4, 2011, October 8, 2014, and July 3, 2015. The nature of the LRGV's remote load conditions and need to import power, therefore, increases the risk that the loss of a Transmission Facility could result in cascading outages, voltage instability or other issues.

Finally, Texas RE considered the fact AEPSC exceeded the System Operating Limits (SOLs) on two misrated Transmission Facilities on 42 separate occasions during the issue duration. First, AEPSC exceeded the Normal and Emergency Facility Ratings on the DUPONT SS - GPP CKT #2 138 kV Transmission Facility on three occasions, totaling 51.75 hours between January 20, 2014 and April 30, 2015. The most significant exceedance began on April 28, 2015 when AEPSC operated the line in excess of its Normal and Emergency Facility Ratings for 45.5 hours. In particular, AEPSC operated the Dupont SS - GPP line at a maximum load of 393.5 MVA. AEPSC had erroneously calculated the line's Normal Facility Rating to be 404 MVA and its Emergency Facility Rating to be 470 MVA. However, when AEPSC properly considered all equipment on the line, the actual Normal Facility Rating was 216 MVA and the Emergency Facility Rating was only 278 MVA. Second, beginning on July 30, 2014, and continuing until March 30, 2017, AEPSC operated the NORTH MCALLEN - SOUTH MCALLEN 138 kV Transmission Facility in excess of its Normal Facility for a period longer than the prescribed two-hour Emergency operational time period on 38 separate occasions, totaling 185.75 hours. AEPSC had erroneously calculated the North McAllen line's Normal Facility Rating to be 365 MVA. However, when AEPSC properly accounted for all equipment on the Facility, the McAllen's lines actual Normal Facility Rating was 216 MVA. For this line, the most severe exceedance occurred when AEPSC operated the line at a maximum load of 247 MVA and exceeded the line's Normal Facility Rating for 9.5 hours on May 13, 2016.

In both cases, operating above the Transmission Facilities' actual Facility Ratings for this amount of time risked equipment damage and loss of the Facilities. Particularly regarding the Dupont SS line, the exceedances occurred when the parallel line connecting the 522 MW Gregory Power Station was out of service. As a result, had the Dupont SS - GPP line failed, the Gregory Power Station would have immediately tripped offline, resulting in a loss of 386 MW of generation at the time of the incident. In addition, because AEPSC personnel believed they were operating these lines within their Normal and/or Emergency Facility Ratings, they were not aware of these potential risks and the need to address these exceedances. As such, they did not take steps to reduce exceedances when they occurred and potentially could have operated the two Transmission Facilities or others at much higher MVA levels.

Brief Vltm Descr. & After a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE Cause: determined that American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma (AEPSC), as a Transmission Owner (TO), was in violation of FAC-009-1 R2. In particular, AEPSC did not provide accurate Facility Ratings for 40 Transmission Facilities to its Reliability Coordinator (RC) as requested. Texas RE subsequently determined that the duration pertaining to AEPSC's Facility Ratings issues was from June 28, 2007 until April 13, 2017. Accordingly, Texas RE determined that AEPSC was in violation of FAC-009-1 R2 from June 28, 2007 until December 31, 2012. AEPSC was then in violation of FAC-008-3 R8 from January 1, 2013 until April 13, 2017. Texas RE further determined that, for purposes of this violation, there was no substantive change in AEPSC's compliance obligations under the two applicable Standard Requirements.

Alleged Violation:

Registered Entity
Report/Response:

Risk Factor: Medium

Severity Level: VSL - Severe

Factual Basis:

Notice of Possible Violations

Date: January 29, 2018

To: American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma
Attention: Darrel Grumman **Email:** dgrumman@aep.com

NERC Compliance Registry ID: NCR04006

Re: Possible Violations of Requirements of Reliability Standards Approved by the Applicable Governmental Authority

Discovery Method: Audit

Audit Dates: October 24, 2016 through January 25, 2017

NERC Violation ID	Standard Requirement(s)	Function(s) Violated
TRE2018019039 ¹	FAC-009-1 R2	Transmission Owner
TRE2018019040	TOP-004-2 R1	Transmission Operator
TRE2018019042	TOP-008-1 R1	Transmission Operator

American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma (AEPSC) is hereby notified that Texas Reliability Entity, Inc. (Texas RE) alleges that AEPSC possibly did not comply or possibly was not in compliance with the requirements of the NERC Reliability Standards listed above. Specifically, Texas RE has determined that there is sufficient basis for finding that AEPSC may possibly not be or may not have been in compliance with the indicated Reliability Standard Requirements. Additional detail regarding the basis for Texas RE's findings can be reviewed in Attachment A below.

Consistent with the audit finding acknowledgements that were sent to AEPSC on January 25, 2018, AEPSC should continue to preserve all documentation pertaining to the Possible Violations. Documentation includes, but is not limited to, operator logs, recorded voice communications, email and written correspondence, work orders, inspection records, patrol records, budget information, and any and all other documents that may be directly or indirectly related to the Possible Violations.

AEPSC may submit a response to the Possible Violations should they believe Texas RE has reached any conclusion in error. Texas RE will notify you of its conclusions after reviewing any response from AEPSC and upon final review of the Possible Violations. Texas RE may conclude that there is insufficient basis to pursue the matters further or may conclude sufficient basis does

¹ Texas RE references violation number TRE2018019039 as Reliability Standard FAC-009-1 R2, which includes all versions of the standard in effect during the violation duration dates.

exist to pursue the matters further with a Notice of Alleged Violation (NAV) that sets forth Texas RE's conclusions and your response options.

Texas RE appreciates your cooperation in advance and looks forward to resolving these matters in the interest of promoting the reliability of the bulk power system. If you have not already done so, Texas RE encourages you to review the circumstances of the subject issues and submit Mitigation Plans within 30 days. Mitigation Plan submittals should be made via the webCDMS portal at the following address: <https://www.cdms.oati.com/CDMS/sys-login.wml>. Please note that a Mitigation Plan submittal does not constitute an admission a violation has occurred nor does it waive your right to contest a NAV, if and when it is delivered.

Settlement negotiations may occur at any time after this notice and until such time a Notice of Penalty is filed with the Federal Energy Regulatory Commission (Commission) or Applicable Governmental Authority by NERC. Should you desire to discuss settlement negotiations, please use the webCDMS portal to make your request.

As required by the NERC Rules of Procedure and NERC Compliance Monitoring and Enforcement Program, the information in this notice will be provided on a non-public basis to the Commission or Applicable Governmental Authority. The information regarding the Possible Violations will not be made public unless and until a violation is confirmed.

If you have any questions, please feel free to contact me at 512-583-4939 or via email at the address indicated below.

Respectfully submitted,

Joseph P. Younger
Texas Reliability Entity, Inc.
Manager, Enforcement
(512) 583-4939
Email: joseph.younger@texasre.org

Attachment A
American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma (AEPSC) – NCR04006
October 24, 2016 – January 25, 2017 Compliance Audit
Possible Violations

#	Standard	Req	Requirement Text	Violation Description
FAC-009-1 Establish and Communicate Facility Ratings and FAC-008-3 Facility Ratings				
1	FAC-009-1	R2	The Transmission Owner and Generator Owner shall each provide Facility Ratings for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) as scheduled by such requesting entities.	After a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC was in violation of FAC-009-1 R2. In particular, AEPSC did not provide accurate Facility Ratings for 40 Transmission Facilities to its Reliability Coordinator (RC) as requested. Texas RE subsequently determined that the duration pertaining to AEPSC's Facility Ratings issues was from June 28, 2007 until April 13, 2017. Accordingly, Texas RE determined that AEPSC was in violation of FAC-009-1 R2 from June 28, 2007 until December 31, 2012. AEPSC was then in violation of FAC-008-3 R8 from January 1, 2013 until April 13, 2017. Texas RE further determined that, for purposes of this violation, there was no substantive change in AEPSC's compliance obligations under the two applicable Standard Requirements.
	FAC-008-3	R8	<p>Each Transmission Owner (and each Generator Owner subject to Requirement R2) shall provide requested information as specified below (for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities) to its associated Reliability Coordinator(s), Planning Coordinator(s), Transmission Planner(s), Transmission Owner(s) and Transmission Operator(s):</p> <p>8.1. As scheduled by the requesting entities:</p> <p style="padding-left: 40px;">8.1.1. Facility Ratings</p> <p style="padding-left: 40px;">8.1.2. Identity of the most limiting equipment of the Facilities</p> <p>8.2. Within 30 calendar days (or a later date if specified by the requester), for any requested Facility with a Thermal Rating that limits the use of Facilities under the requester's authority by causing any of the following: 1) An Interconnection Reliability Operating Limit, 2) A limitation of Total Transfer Capability, 3) An impediment to generator deliverability, or 4) An impediment to service to a major load center:</p> <p style="padding-left: 40px;">8.2.1. Identity of the existing next most limiting equipment of the Facility</p> <p style="padding-left: 40px;">8.2.2. The Thermal Rating for the next most limiting equipment identified in Requirement R8, Part 8.2.1.</p>	<p>Specifically, Texas RE determined that AEPSC did not consider station jumpers on 38 Transmission Facilities in calculating Facility Ratings. Subsequently, AEPSC identified 9 additional Transmission Facilities for which it had similarly failed to consider jumpers in developing Facility Ratings pursuant to its Facility Ratings Methodology and, therefore, correspondingly failed to provide Facility Ratings reflecting those jumpers to its RC. As such, the issue impacted a total of 47 Transmission Facilities. When these jumpers were properly considered, they became the most limiting applicable series element for 40 Transmission Facilities in the Texas RE footprint, resulting in different Facility Ratings for these Transmission Facilities.</p>

#	Standard	Req	Requirement Text	Violation Description
TOP-004-2 Transmission Operations				
2	TOP-004-2	R1	Each Transmission Operator shall operate within the Interconnection Reliability Operating Limit (IROLs) and System Operating Limits (SOLs).	<p>During a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC was in violation of FAC-008-3 R6. Texas RE Enforcement subsequently determined that AEPSC likewise had an issue with TOP-004-2 R1. In particular, AEPSC failed to operate within the System Operating Limits (SOLs) for two Transmission Facilities on 42 occasions.</p> <p>AEPSC established invalid SOLs for 40 Transmission Facilities. As a result of this failure to establish valid SOLs, AEPSC did not operate within valid SOLs for two 138 kV Transmission Facilities on 42 occasions.</p>
TOP-008-1 Response to Transmission Limit Violations				
3	TOP-008-1	R1	The Transmission Operator experiencing or contributing to an IROL or SOL violation shall take immediate steps to relieve the condition, which may include shedding firm load.	<p>During a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC was in violation of FAC-008-3 R6. Texas RE Enforcement subsequently determined that AEPSC likewise had an issue with TOP-008-1 R1. In particular, AEPSC experienced SOL violations on 42 separate occasions on two Transmission Facilities and did not take immediate steps to relieve the condition(s).</p> <p>AEPSC established invalid SOLs for 40 Transmission Facilities. As a result of this failure to establish valid SOLs, AEPSC did not operate within valid SOLs for two 138 kV Transmission Facilities on 42 occasions.</p>

Addendum B

SERVICE LIST- American Electric Power Service Corporation (NCR04006)
NERC Violation IDs TRE2017016853 and TRE2018019039

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Attachment B

AEPSC's Mitigation Plan designated as
TREMIT014060 for FAC-009-1 R1 and FAC-009-1 R2
submitted August 15, 2018

Mitigation Plan

Mitigation Plan Summary

Registered Entity: American Electric Power Service Corp as agent for AEP Texas Inc.
and Public Service Company of Oklahoma

Mitigation Plan Code: TREMIT014060

Mitigation Plan Version: 1

NERC Violation ID	Requirement	Violation Validated On
TRE2017016853	FAC-009-1 R1.	06/05/2017
TRE2018019039	FAC-009-1 R2.	01/25/2018

Mitigation Plan Submitted On: August 15, 2018

Mitigation Plan Accepted On: August 21, 2018

Mitigation Plan Proposed Completion Date: May 01, 2019

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by AEPSC On:

Mitigation Plan Completion Verified by TRE On:

Mitigation Plan Completed? (Yes/No): No

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.

Entity Information

Identify your organization:

Entity Name: American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Oklahoma

NERC Compliance Registry ID: NCR04006

Address: 1 Riverside Plaza
Columbus OH 43215

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: Darrel Grumman

Title: Enterprise NERC Compliance Specialist

Email: dgrumman@aep.com

Phone: 614-716-2362

Violation(s)

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

Violation ID	Date of Violation	Requirement
Requirement Description		
TRE2017016853	06/28/2007	FAC-009-1 R1.
The Transmission Owner and Generator Owner shall each establish Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology.		
TRE2018019039	06/28/2007	FAC-009-1 R2.
The Transmission Owner and Generator Owner shall each provide Facility Ratings for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) as scheduled by such requesting entities.		

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

During the Compliance Audit, Texas RE determined that AEPSC did not consider station jumpers on 37 Transmission Facilities in existing Facility Ratings calculations. Subsequently, AEPSC identified 10 additional Transmission Facilities for which it had similarly failed to consider jumpers in developing Facility Ratings, contrary to its current Facility Ratings Methodology. As such, the issue impacted a total of 47 Transmission Facilities. When these jumpers were considered, they became the most limiting applicable series element for 32 Transmission Facilities in the Texas RE footprint, resulting in different Facility Ratings for these Transmission Facilities.

Following the Compliance Audit, Texas RE determined that AEPSC was in violation of FAC-009-1 R2. In particular, AEPSC did not provide accurate Facility Ratings for 32 Transmission Facilities to its Reliability Coordinator (RC) as requested.

Relevant information regarding the identification of the violation(s):

During a Compliance Audit conducted from October 24, 2016 through January 25, 2017, Texas RE determined that AEPSC, as a Transmission Owner (TO), was in violation of FAC-008-3 R6. Texas RE subsequently determined that the duration pertaining to AEPSC's Facility Ratings issues was from June 28, 2007 until April 13, 2017. Accordingly, Texas RE determined that AEPSC was in violation of FAC-009-1 R1 from June 28, 2007 until December 31, 2012. AEPSC was then in violation of FAC-008-3 R6 from January 1, 2013 until April 13, 2017.

Plan Details

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:

Initial actions addressed the discovery on the identified Facilities. On 9/8/2016, the Facility equipment data base was updated. On 9/14/16 AEP Transmission Operations was notified and a Network Operations Model Change Request (NOMCR) was requested. On 9/15/2016 AEP Transmission Planning submitted the completed NOMCR to AEP Transmission Operations. On 9/19/2016 AEP Transmission Operations submitted the completed NOMCR to ERCOT Operations.

On 4/13/17 AEP revised the Facility Ratings for the affected Transmission Facilities; and provide the corrected Facility Ratings to the RC. On 6/28/17 AEP reviewed Facility Ratings Methodology for potential improvements and update documentation accordingly.

Other actions are included in the Milestones of this Mitigation Plan

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: May 01, 2019

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	Entity Comment on Milestone Completion	Extension Request Pending
Training on FRRP	Provide training for all applicable personnel regarding the updated Facility Ratings verification process;	11/01/2017	09/18/2017		No
Detective Control	Develop and implement a detective internal control that periodically samples field data to verify field conditions match one-line diagrams, inventory lists, and/or other applicable source documents	02/01/2018	12/19/2017		No
Preventative Control	Develop and	05/01/2018	05/01/2018		No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	implement an updated process to verify that Facility Ratings are correctly determined before placing the Facility in service, including specific steps regarding who should perform the Facility Rating verification and when the Facility Rating verification will be performed				
Ratings Data Validation	Complete Facility Ratings data validation for all of the applicable Facilities	08/01/2018			No
Update and notify	Based on the results of the validation process, update internal records, as appropriate, and make appropriate notifications	11/01/2018			No
Develop a revised Facility Ratings Process	Develop a revised Facility Ratings methodology that includes explicit steps to verify all equipment ratings against inventory and one-line diagrams for all planned equipment projects	02/01/2019			No
Train and implement the revised Facility Rating Process	Provide training for all applicable personnel regarding the updated Facility Ratings verification process and	05/01/2019			No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	implement the revised Facility Ratings methodology.				

Additional Relevant Information

This Mitigation Plan pertains to TRE2017016853 and TRE2018019039.

Reliability Risk

Reliability Risk

While the Mitigation Plan is being implemented, 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 known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

This violation posed a moderate risk to the reliability of the bulk power system. AEPSC's failure to establish accurate Transmission Facility Ratings increased the potential for its Transmission Facilities to be operated in excess of their correct capacity rating, creating the opportunity for equipment damage, incorrect modeling outputs and operating assumptions. In particular, AEPSC's incorrect Facility Ratings were greater than the Facility's actual Facility Ratings in 33 instances. As a result, AEPSC could have overloaded the equipment in question, potentially resulting in damage to the affected Facilities and/or other pieces of in-series equipment.

However, the risk posed by this issue was also mitigated by a number of factors. First, there were no identified exceedances throughout the duration for 31 of the 33 Facilities with incorrect Facility Ratings in excess of their actual Facility Ratings. The remaining two Facilities at issue experienced limited exceedances, representing only 0.8% and 0.2% of the total operational hours for the most recent three-year period for which operational information was available. Further, AEPSC did not experience any operational outages during these limited exceedance periods. Second, AEPSC personnel performed routine, periodic inspections of the jumper equipment in question throughout the issue duration. This review likely would have detected any equipment stress or other issues resulting from operating the jumper equipment in excess of its actual equipment ratings. AEPSC personnel conducted bi-monthly field inspections of all affected Facilities and found no signs of visible damage, hot spots, or other equipment damage. Finally, AEPSC reviewed the Dispatch Operating Logs for the stations associated with the Facilities and found no reliability issues.

Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Completion of the Milestone Activities will ensure that the ratings in the facility ratings database are correct, which ensures that the ratings in the Facility Ratings database are correct.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

Authorization

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

- * Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and
- * if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

1. I am qualified to sign this mitigation plan on behalf of my organization.
2. I have read and understand the obligations to comply with the 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 application NERC CMEP.
3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

American Electric Power Service Corp as agent for AEP Texas Inc. and Public Service Company of Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature: _____

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

Authorized Individual

Name: Wade Smith

Title: SVP, Grid Development

Authorized On: December 15, 2017