



NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

September 25, 2009

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

**Re: NERC Notice of Penalty regarding Brazos Electric Power Cooperative, Inc., FERC  
Docket No. NP09-\_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding Brazos Electric Power Cooperative, Inc. (Brazos), NERC Registry ID NCR04015,<sup>2</sup> in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).<sup>3</sup>

This Notice of Penalty is being filed with the Commission because, based on information from Texas Regional Entity (Texas RE), Brazos does not dispute the alleged violations of PRC-005-1 Requirement (R) 2 and PRC-008-0 R2. Texas RE and Brazos have entered into a Settlement Agreement in which Brazos has agreed to the proposed financial penalty of zero dollars (\$0) to be assessed to Brazos, in addition to other remedies which include mitigation actions and actions to prevent recurrence and to promote prospective compliance required under the terms and conditions of the Settlement Agreement. Texas RE and Brazos have entered into the Settlement Agreement to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in Texas RE's determination and findings of the enforceable alleged violations at issue in this Notice of Penalty. Accordingly, the alleged violations identified as NERC Violation Tracking Identification Numbers TRE200800043 and TRE200800044 are being filed in accordance with the NERC Rules of Procedure and the CMEP.

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<sup>1</sup> *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 (2008). *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).

<sup>2</sup> Texas Regional Entity confirmed that Brazos Electric Power Cooperative, Inc. was included on the NERC Compliance Registry on June 28, 2007 as a Transmission Owner and Transmission Planner, and on January 30, 2008 as a Distribution Provider, and was subject to the requirements of NERC Reliability Standard PRC-005-1 and PRC-008-0.

<sup>3</sup> See 18 C.F.R. § 39.7(c)(2).

### Statement of Findings Underlying the Alleged Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed as of August 13, 2009, by and between Texas RE and Brazos, which is included as Attachment b. 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 (2007), NERC provides the following summary table identifying each alleged violation of a Reliability Standard resolved by the Settlement Agreement, as discussed in greater detail below.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty (\$)
Texas RE	Brazos Electric Power Cooperative, Inc.	NOC-111	TRE200800043	PRC-005-1	2	Lower <sup>4</sup>	0
Texas RE	Brazos Electric Power Cooperative, Inc.	NOC-111	TRE200800044	PRC-008-0	2	Medium	

The purpose of Reliability Standard PRC-005-1 is to ensure all transmission and generation Protection Systems affecting the reliability of the Bulk Electric System (BES) are maintained and tested.

PRC-005-1 R2 requires each Transmission Owner, such as Brazos, that owns a transmission Protection System to provide documentation of its transmission Protection System maintenance and testing program and the implementation of that program to its Regional Entity on request (within 30 calendar days). The documentation of the program implementation shall include: evidence Protection System devices were maintained and tested within the defined intervals; and the date each Protection System device was last tested/maintained. PRC-005-1 R2 has a “Lower” Violation Risk Factor (VRF).

The purpose of Reliability Standard PRC-008-0 is to provide last resort system preservation measures by implementing an Under Frequency Load Shedding (UFLS) program.

PRC-008-0 R2 requires a Transmission Owner, such as Brazos, with a UFLS program (as required by its Regional Entity) to implement its UFLS equipment maintenance and testing program and shall provide UFLS maintenance and testing program results to its Regional Entity and NERC on request (within 30 calendar days). PRC-008-0 R2 has a “Medium” VRF.

According to the Settlement Agreement, during a scheduled on-site Transmission Owner and Transmission Planner compliance audit from February 27-28, 2008, the Texas RE Audit team discovered possible violations of PRC-005-1 R2 and PRC-008-0 R2. Specifically, the Texas RE Audit team found that Brazos did not meet scheduled interval testing for four 138 kV panels (out

<sup>4</sup> PRC-005-1 R2 has a Lower VRF, but the sub-requirements of PRC-005-1 have Higher VRFs.

of 207), as observed in 2007 maintenance records. Three electro-mechanical panels with a three year test interval were delayed for over seven years and one microprocessor panel with a seven year test interval was delayed for over one year beyond scheduled maintenance. Brazos also did not meet the requirements of PRC-008-0 R2 because it did not meet scheduled 2-year interval testing for six UFLS relays (out of 228), as observed in 2007 maintenance records. Four relays were tested more than five years later than scheduled intervals, two relays were more than two years later than scheduled. On March 5, 2008, Texas RE sent Brazos a Preliminary Notice of Alleged Violation (PNAV) notifying Brazos that Texas RE compliance staff had determined that there was sufficient basis for finding that Brazos may not have been in compliance with these two Reliability Standards.

During a meeting on April 4, 2008, between Brazos and Texas RE, Brazos explained that the scheduled interval testing had been deferred pursuant to 2006 and prior years' maintenance program and testing procedures. Brazos did not indicate differences in the details of the maintenance program and testing procedures prior to 2007 other than a discretionary factor allowing carryover of work to succeeding years. Such program and procedures allowed the deferral of 15 percent of scheduled maintenance and testing at the discretion of the Transmission Manager. Brazos suggested that work on transmission relay panels was deferred to perform work on other devices deemed more critical. Brazos' records show extensive work to replace older devices and this appears to have been a factor as well in deferring maintenance; Brazos indicated that these panels themselves were to be replaced within twelve months. Brazos admitted oversight in the underfrequency relay panel work deferral, but Brazos has performed extensive replacements of reclosers during this period, suggesting an emphasis on equipment replacement and upgrades as a rationale behind deferral of testing. Newer microprocessor-controlled reclosers that include underfrequency relaying functions are maintained at a longer interval and provide many other benefits. At the beginning of 2007, Brazos explained that its maintenance program and procedures changed to eliminate this 15 percent discretionary deferred maintenance for protection systems and efforts were launched to bring all previous years' deferred maintenance current by the end of 2007. Brazos asserted that the correct operation of systems during this period of deferred maintenance indicates that these did not impact reliability based on Brazos' review of relay operations. This work was completed during 2007 but was not fully completed prior to June 28, 2007, the date Brazos was included on the NERC Compliance Registry and was responsible for complying with the NERC Reliability Standards. All testing was completed by November 14, 2007. The alleged violations of both PRC-005-1 R2 and PRC-008-0 R2 existed from June 28, 2007 until November 14, 2007.

According to the Settlement Agreement, for PRC-005-1 R2, Texas RE decided to assess no monetary penalty for the following reasons: (1) the basis for the preliminary alleged violation was determined to have occurred while Brazos was transitioning its 2006 maintenance program and procedures to be compliant with mandatory Reliability Standards; (2) maintenance programs for 2007 and beyond allow no deferred maintenance; (3) by the end of 2007 all subject relays were tested and found to be operating properly; (4) the four 138 kV panel subject relays comprised 2 percent of 207 relay panels; (5) the four 138 kV panel subject relays, though not formally tested in accordance with Brazos's maintenance procedure, operated correctly during the audit period and Brazos demonstrated evidence of internal programs to validate all relay operations during system events as correct, or its ability to initiate expedited maintenance if not

correct; (6) based a review of the configuration of the relays, failure of any of those relays were determined to pose no substantial or serious risk to the reliability of the bulk power system (BPS) for these alleged violations; (7) the alleged violations are first time alleged violations of this Reliability Standard; (8) no misrepresentation or concealment of facts was evident; and (9) a review of the Brazos compliance program demonstrated that their program promotes a culture of compliance throughout the company.

According to the Settlement Agreement, for PRC-008-0 R2, Texas RE decided to assess no monetary penalty for the following reason: (1) the basis for the preliminary alleged violation was determined to have occurred while Brazos was transitioning its 2006 maintenance program and procedures to be compliant with mandatory Reliability Standards; (2) maintenance programs and procedures for 2007 and beyond allow no deferred maintenance; (3) by the end of 2007 all subject relays were tested and found to be operating properly; (4) the six UFLS subject relays comprised 2.6 percent of 228 relay panels; (5) failure of any one of the relays would not have impacted Brazos' ability to meet its share of ERCOT Region's mandated load shed MW in the Regional UFLS program to support system reliability and thus there was no serious or substantial risk to the reliability of the BPS for this alleged violation; (6) the alleged violations are first time alleged violations of this Reliability Standard; (7) no misrepresentation or concealment of facts was evident; (8) a review of the Brazos compliance program demonstrated that their program promotes a culture of compliance throughout the company.

Thus, Texas RE determined that, in this instance, the single, aggregate financial penalty amount of zero dollars (\$0) bears a reasonable relation to the seriousness and duration of the alleged violations and takes into consideration Brazos' voluntary efforts to remedy the alleged violations in a timely manner. Furthermore, based on Brazos' cooperation, commitment to compliance and agreement to expeditiously mitigate this issue, Texas RE determined that the penalty of zero dollars (\$0) was appropriate. Texas RE also considered the fact that Brazos is a cooperative (not-for-profit) entity.

#### **Status of Mitigation Plans<sup>5</sup>**

Brazos' Mitigation Plans to address the alleged violations of PRC-005-1 R2 and PRC-008-0 R2 were submitted to Texas RE on October 6, 2008 and approved by NERC on June 17, 2009. The Mitigation Plan for the PRC-005-1 R2 is designated as MIT-08-1755 and the Mitigation Plan for the PRC-008-0 R2 is designated as MIT-08-1756 were submitted as non-public information to FERC on June 19, 2009, in accordance with FERC orders. These are discussed in greater detail below. Brazos certified on October 6, 2008 to Texas RE that the Mitigation Plans were completed on November 14, 2007. In a letter dated February 5, 2009, Texas RE stated that it verified on February 28, 2008, during the audit, that the violation had been corrected. Texas RE Staff reviewed a listing of planned and actual test dates, along with Brazos' maintenance intervals documentation. The evidence indicated that the testing had been completed at the time of the audit.

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<sup>5</sup> See 18 C.F.R § 39.7(d)(7).

The Mitigation Plans identified that there were four relay panels (PRC-005-1 R2) and six UFLS relays (PRC-008-0 R2) that were scheduled for testing during the 2006 calendar year. In accordance with the former maintenance procedures, the testing of these relay panels was deferred and carried over to the 2007 calendar year. The decision to reschedule the testing was made in 2006 by authority of Brazos' Manager of Transmission consistent with Brazos corporate policy to defer up to 15% of scheduled maintenance. Once that decision had been made, under Brazos' then effective maintenance policies, the effective schedule for testing of the facilities became the 2007 calendar year. In early 2007, the maintenance program and procedures changed to eliminate this 15 percent discretionary deferred maintenance for protection systems and efforts were launched to bring all previous years' deferred maintenance current. From the testing records provided, it appears that Brazos had not deferred protection system testing beyond those few devices cited in the violation - the other relaying work in 2007 was completed at the appropriate interval in Brazos' protection system maintenance program. However, the work associated with these 4 relay panels and 6 underfrequency relays was not completed prior to the registration of Brazos and the effective date of the mandatory and enforceable Reliability Standards and thus did not meet Brazos' maintenance program requirements. The terms of the Mitigation Plans required that all subject relays be tested with the effective maintenance schedule. All testing was completed in accordance with the new schedule by November 14, 2007, with no problems detected. Brazos also modified their maintenance test procedures. As a result, the relay maintenance schedule now includes a target completion date for relay testing one year prior to the scheduled due date to allow ample time for that testing to be completed prior to the scheduled due date, in effect providing a longer testing window to help assure completion in accordance with Brazos' stated intervals. This does not pose a concern to reliability and the added flexibility is a prudent measure given the occasional need to keep facilities in service due to system conditions. Maintenance schedules will now be reviewed by Brazos management and a report on compliance will be presented to a Board of Directors' Committee.

Brazos completed its Mitigation Plans prior to the February compliance audit. Texas RE determined that the failure of any one of the subject relays did not pose a risk to the reliability to the BPS, because they were tested by the end of 2007 and were found to be operating properly.

In order to prevent reoccurrence, and as part of the Settlement Agreement, Brazos initiated additional efforts to enhance its ongoing maintenance program and procedures including those for protection systems. Specifically, a new staff position was created with the responsibility of updating the equipment maintenance database on a daily basis. The daily maintenance schedules are reviewed by the Manager of Transmission Maintenance on a weekly basis. The weekly maintenance schedules are reviewed by the Vice President -Transmission Division on a monthly basis. A report detailing adherence to the maintenance schedule is presented to the Transmission and Distribution Planning -Operations Committee of the Brazos Electric Board of Directors on a quarterly basis.

## **Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed<sup>6</sup>**

### **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 Guidance Order,<sup>7</sup> the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on February 8, 2009. The NERC BOTCC approved the Settlement Agreement, including Texas RE's imposition of a financial penalty of zero dollars (\$0) against Brazos, in addition to other actions to promote prospective compliance required under the terms and conditions of the Settlement Agreement. In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the alleged violations at issue.

In reaching this determination, NERC BOTCC considered the following factors: (1) the basis for the preliminary alleged violation was determined to have occurred while Brazos was transitioning its 2006 maintenance program and procedures to be compliant with mandatory Reliability Standards; (2) maintenance programs and procedures for 2007 and beyond allow no deferred maintenance; (3) by the end of 2007 all subject relays were tested and found to be operating properly; (4) the absence of prior violation history for Brazos of this standard or a closely-related requirement; (5) no misrepresentation or concealment of facts was evident; (6) Brazos had an appropriate culture of compliance; and (7) Brazos is a cooperative (not-for-profit) entity.

Therefore, NERC approves the Settlement Agreement and believes that the proposed financial penalty of zero dollars (\$0) is appropriate and consistent with NERC's goal to ensure reliability of the bulk power system.

Pursuant to Order No. 693, 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.

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<sup>6</sup> See 18 C.F.R § 39.7(d)(4).

<sup>7</sup> *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008).



**Attachments to be Included as Part of the Notice of Penalty**

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

- a) Transmission Owner/Transmission Planner Audit Initial Results Summary, included as Attachment a;
- b) Settlement Agreement by and between Brazos and Texas RE, included as Attachment b;
- c) Brazos Mitigation Plans designated as TRE200800043 and TRE200800044 and Certification of Completion of the Mitigation Plans, dated October 6, 2008, included as Attachment c; and
- d) Texas RE's Verification that the Mitigation Plans have been completed, dated February 5, 2009 included as Attachment d.

**A Form of Notice Suitable for Publication<sup>8</sup>**

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

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<sup>8</sup> See 18 C.F.R § 39.7(d)(6).

## Notices and Communications

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

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David N. Cook\*  
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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.



**Conclusion**

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

Respectfully submitted,

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David N. Cook  
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cc: Brazos Electric Power Cooperative, Inc.  
Texas Regional Entity

Attachment(s)

**Attachment a**

**Texas RE's Transmission Owner/Transmission  
Planner Audit Initial Results Summary, dated  
February 27-28, 2008**

TO/TP Audit Initial Results Summary		
Entity Name:	Brazos Electric Power Co Op, Inc.	
Audit Date:	February 27 and 28, 2008	
Audit Leader:	Mark Henry	
Audit Team:	Ken Kan, Bob Collins, Frank Vick, Kent Grammer	
Are there any Possible Violations?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Standard	Text of Requirement	Full Compliance?
TO Audit Initial Results Summary		
<b>CIP-002 thru 009</b>	<b>Critical Infrastructure Protection Standards</b>	
	Phased Implementation: Confirmed Self-Certified.	Yes
<b>Audit Notes:</b>		
<b>FAC-003-1</b>	<b>Vegetation Management</b>	
<b>R1.</b>	The Transmission Owner shall prepare, and keep current, a formal transmission vegetation management program (TVMP). The TVMP shall include the Transmission Owner's objectives, practices, approved procedures, and work specifications <sup>1</sup> .	Yes
<b>RSAW</b>	<p>_____ Bring for reference IEEE Standard 516-2003</p> <p>_____ (R1.): Review and ensure that Transmission Owner has a current TVMP that includes:</p> <p>_____ Objectives</p> <p>_____ Practices</p> <p>_____ Approved procedures</p> <p>_____ Work specifications</p> <p>_____ (R1.): To determine whether the Transmission Owner has met the Requirement 1 Measures above:</p> <p>_____ (R1.1.): Review the evidence provided by the entity to verify that Transmission Owner has defined a schedule for ROW vegetation inspections.</p> <p>_____ The schedule will identify what type of inspection (ground, aerial) for the ROW will be used</p> <p>_____ The schedule should be flexible enough to adjust for changing conditions.</p> <p>_____ The schedule should be based on the anticipated growth of vegetation and any other environmental or operational factors that could impact the relationship of vegetation to the Transmission Owner's transmission lines.</p> <p>_____ (R1.2.): Review the evidence provided by the entity</p>	

<sup>1</sup> ANSI A300, Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, while not a requirement of this standard, is considered to be an industry best practice.

	<p>to verify that Transmission Owner has documentation that describes the clearances.</p> <p>_____(R1.3.): Review the evidence provided by the entity to verify that the personnel directly involved in the design and implementation of the Transmission Owner's TVMP hold the qualifications identified by the Transmission Owner.</p> <p>_____(R1.4.): Review the evidence provided by the entity to verify that Transmission Owner has identified any areas not meeting the its standard for vegetation management and any mitigating measures the Transmission Owner has taken to address these deficiencies.</p> <p>_____(R1.5.): Review the evidence provided by the entity to verify that Transmission Owner has a documented process for the immediate communication of imminent threats by vegetation.</p>	
<p><b>Audit Notes:</b></p>		
<p><b>R2.</b></p>	<p>The Transmission Owner shall create and implement an annual plan for vegetation management work to ensure the reliability of the system. The plan shall describe the methods used, such as manual clearing, mechanical clearing, herbicide treatment, or other actions. The plan should be flexible enough to adjust to changing conditions, taking into consideration anticipated growth of vegetation and all other environmental factors that may have an impact on the reliability of the transmission systems. Adjustments to the plan shall be documented as they occur. The plan should take into consideration the time required to obtain permissions or permits from landowners or regulatory authorities. Each Transmission Owner shall have systems and procedures for documenting and tracking the planned vegetation management work and ensuring that the vegetation management work was completed according to work specifications.</p>	<p>Yes</p>
<p><b>RSAW</b></p>	<p>_____(R2.): Review the evidence provided by the entity to verify the Transmission Owner has created an annual plan for vegetation management work to ensure the reliability of the system.</p> <p>_____(R2.): Review the evidence provided by the entity to verify that Transmission Owner has implemented the work plan.</p> <p>_____(R2.):Review and verify that the annual plan for vegetation management:</p> <p>____Describes methods used, such as manual clearing, mechanical clearing, herbicide treatment, or other actions.</p> <p>____Provides flexibility for changing conditions, taking into consideration anticipated growth of vegetation and all other environmental factors that may have an impact on the reliability of the transmission systems.</p> <p>____Documents any adjustments as they occurred.</p> <p>____Considers the time required to obtain permission or permits from landowners or regulatory authorities.</p> <p>_____(R2.): Review the evidence provided by the entity to</p>	

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	verify that Transmission Owner have systems and procedures for documenting and tracking planned vegetation management work and have ensured that work was completed according to work specifications.	
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<b>Audit Notes:</b>		
<b>R3.</b>	The Transmission Owner shall report quarterly to its RRO, or the RRO's designee, sustained transmission line outages determined by the Transmission Owner to have been caused by vegetation.	Yes
<b>RSAW</b>	<p>_____(R3.1.-R3.4.):Review processes and procedures (these do not have to be documented) to determine if a particular outage is a vegetation outage to ensure that the Transmission Owner reports sustained transmission line outages determined to have been caused by vegetation to the RRO or RRO's designee as outlined by R3.1 through R3.4.</p> <p>_____(R3.3.): Review the evidence provided by the entity to verify that Transmission Owner has submitted all Category 1,Category 2, and Category 3 outages to the RRO or RRO's designee by reviewing the documentation used in the preparation of the most recent four quarterly outage reports.</p>	
<b>Audit Notes:</b>		
<b>FAC-008-1</b>	<b>Normal Operations Planning</b>	
<b>R1.</b>	<p>The Transmission Owner and Generator Owner shall each document its current methodology used for developing Facility Ratings (Facility Ratings Methodology) of its solely and jointly owned Facilities. The methodology shall include all of the following:</p> <p><b>R1.1.</b> A statement that a Facility Rating shall equal the most limiting applicable Equipment Rating of the individual equipment that comprises that Facility.</p> <p><b>R1.2.</b> The method by which the Rating (of major BES equipment that comprises a Facility) is determined.</p> <p><b>R1.2.1.</b> The scope of equipment addressed shall include, but not be limited to, generators, transmission conductors, transformers, relay protective devices, terminal equipment, and series and shunt compensation devices.</p> <p><b>R1.2.2.</b> The scope of Ratings addressed shall include, as a minimum, both Normal and Emergency Ratings.</p> <p><b>R1.3.</b> Consideration of the following:</p> <p><b>R1.3.1.</b> Ratings provided by equipment manufacturers.</p> <p><b>R1.3.2.</b> Design criteria (e.g., including applicable references to industry Rating practices such as manufacturer's warranty, IEEE, ANSI or other standards).</p>	Yes



	<p><b>R1.3.3.</b> Ambient conditions.</p> <p><b>R1.3.4.</b> Operating limitations.</p> <p><b>R1.3.5.</b> Other assumptions.</p>	
<b>RSAW</b>	<p>_____ (R1.): Review the evidence provided by the entity to verify that Transmission Owner and Generator Owner have a documented methodology(ies) for use in developing Facility Ratings for solely and jointly owned facilities.</p> <p>_____ Review the evidence provided by the entity to verify that the methodology include all of the following:</p> <p>_____ (R1.1.): A statement that the Facility Rating shall equal the most limiting applicable Equipment Rating of all the individual equipment that comprises the Facility.</p> <p>_____ (R1.2.): Method by which the rating is determined.</p> <p>_____ (R1.2.1): The scope of equipment addressed.</p> <p>_____ (R1.2.2): The scope of Ratings includes both Normal and Emergency Ratings.</p> <p>_____ (R1.3.): Consideration of the following:</p> <p>_____ (R1.3.1.): Ratings provided by equipment manufacturers.</p> <p>_____ (R1.3.2.): Design criteria.</p> <p>_____ (R1.3.3.): Ambient conditions.</p> <p>_____ (R1.3.4.): Operating limitations.</p> <p>_____ (R1.3.5.): Other assumptions.</p>	
<b>Audit Notes:</b>		
<b>R2.</b>	<p>The Transmission Owner and Generator Owner shall each make its Facility Ratings Methodology available for inspection and technical review by those Reliability Coordinators, Transmission Operators, Transmission Planners, and Planning Authorities that have responsibility for the area in which the associated Facilities are located, within 15 business days of receipt of a request.</p>	Yes
<b>RSAW</b>	<p>_____ (R2.): Review all requests received by the entity to determine the receipt date of the request. This can originate from the requesting entity if this is part of an investigation, from neighbor's questionnaire, or from the records of the entity being audited. If from a requesting entity, allowances will need to be made regarding timing of receipt of the request based on the method of request.</p> <p>_____ (R2.): Review the evidence provided by the entity to verify that the date Facility Ratings Methodology was made</p>	

	available to the requester was within 15 business days of receipt of request.	
<b>Audit Notes:</b>		
<b>R3.</b>	If a Reliability Coordinator, Transmission Operator, Transmission Planner, or Planning Authority provides written comments on its technical review of a Transmission Owner's or Generator Owner's Facility Ratings Methodology, the Transmission Owner or Generator Owner shall provide a written response to that commenting entity within 45 calendar days of receipt of those comments. The response shall indicate whether a change will be made to the Facility Ratings Methodology and, if no change will be made to that Facility Ratings Methodology, the reason why.	Yes
<b>RSAW</b>	<p>_____ (R3.): Review the date received by the Transmission owner or Generator owner of all documented comments on its Ratings Methodology from a technical review by a Reliability Coordinator, Transmission Operator, Transmission Planner, or Planning Authority (now Planning Coordinator).</p> <p>_____ (R3.): Review the evidence provided by the entity to verify evidence that the written response to the comments:</p> <p>_____ (R3.): Was provided within 45 calendar days of comment receipt by the entity.</p> <p>_____ (R3.): Indicated whether a change will be made to that Facility Ratings Methodology and, if no change will be made, a reason why not was supplied.</p>	
<b>Audit Notes:</b>		

FAC-009-1	Establish and Communicate Facility Ratings	
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.	Yes
RSAW	<p>(R1.): Review the evidence provided by the entity to verify that the entity's Facility Ratings were developed consistent with its Facility Ratings Methodology.</p> <hr/> <p>(R1.): Review the evidence provided by the entity to verify that the entity has Facility Ratings for its solely and jointly owned Facilities including:</p> <ul style="list-style-type: none"> <li>New Facilities</li> <li>Existing Facilities</li> <li>Modifications to existing Facilities</li> <li>Re-ratings of existing Facilities.</li> </ul>	
Audit Notes:		
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.	Yes
RSAW	<p>(R2.): Determine the requesting entity schedule for providing Facility Ratings to the entities listed in R2.</p> <hr/> <p>(R2.): Review the evidence provided by the entity to verify evidence that the entity provided its Facility Ratings to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) as scheduled by the requesting entities for:</p> <ul style="list-style-type: none"> <li>Existing Facilities</li> <li>New Facilities</li> <li>Modifications to existing Facilities</li> <li>Re-ratings of existing Facilities (this could include seasonal ratings)</li> </ul>	
Audit Notes:		

IRO-004-1	Reliability Coordinator – Operations Planning	
R4.	<p>_____(R4.):Verify that each Transmission Operator, Balancing Authority, Transmission Owner, Generator Owner, Generator Operator, and Load-Serving Entity in the Reliability Coordinator Area have provided the following required information:</p> <p>____ Critical facility status            ____ Load            ____ Generation            ____ Operating reserve projections            ____ Known Interchange Transactions</p> <p>_____(R4.):Review the evidence provided by the entity that demonstrates the information was submitted by 1200 CST for the Eastern Interconnection and 1200 PST for Western Interconnection.</p>	Yes
RSAW	<p>_____(R4.):Verify that each Transmission Operator, Balancing Authority, Transmission Owner, Generator Owner, Generator Operator, and Load-Serving Entity in the Reliability Coordinator Area have provided the following required information:</p> <p>____ Critical facility status            ____ Load            ____ Generation            ____ Operating reserve projections            ____ Known Interchange Transactions</p> <p>_____(R4.):Review the evidence provided by the entity that demonstrates the information was submitted by 1200 CST for the Eastern Interconnection and 1200 PST for Western Interconnection.</p>	
Audit Notes:		
PRC-004-1	Analysis and Mitigation of Transmission and Generation Protection System Operations	
R1.	<p>The Generator Owner shall analyze its generator Protection System misoperations, and shall develop and implement a Corrective Action Plan to avoid future misoperations of a similar nature according to the Regional Reliability Organization’s procedures developed for PRC-003 R1.</p>	Yes

<p><b>RSAW</b></p>	<p>_____(R1.): Review the evidence provided by the entity to verify that the entity analyzed all transmission Protection System operations.</p> <p>_____(R1.): Review the evidence provided by the entity to determine if the entity has had any transmission Protection System misoperations on its transmission protection System..</p> <p>_____(R1.): Review the evidence provided by the entity to verify that the entity has maintained a record of all transmission Protection System misoperations in accordance with Regional Reliability Organization Procedures specified in Reliability Standards PRC-003-0_R1</p>	
<p><b>Audit Notes:</b></p>		
<p><b>R2.</b></p>	<p>The Generator Owner shall analyze its generator Protection System misoperations, and shall develop and implement a Corrective Action Plan to avoid future misoperations of a similar nature according to the Regional Reliability Organization's procedures developed for PRC-003 R1.</p>	<p>Not Applicable</p>
<p><b>RSAW</b></p>	<p>_____(R2.): Review the evidence provided by the entity to verify that the entity analyzed all generator Protection System operations.</p> <p>_____(R2.): Review the evidence provided by the entity to determine if the entity has had any generator Protection System misoperations on its transmission protection System..</p> <p>_____(R2.): Review the evidence provided by the entity to verify that the entity has maintained a record of all generator Protection System misoperations in accordance with Regional Reliability Organization Procedures specified in Reliability Standards PRC-003-0_R1</p>	
<p><b>Audit Notes:</b></p>		
<p><b>R3.</b></p>	<p>The Transmission Owner, any Distribution Provider that owns a transmission Protection System, and the Generator Owner shall each provide to its Regional Reliability Organization, documentation of its Misoperations analyses and Corrective Action Plans according to the Regional Reliability Organization's procedures developed for PRC-003 R1.</p>	<p>Yes</p>
<p><b>RSAW</b></p>	<p>____If the entity had any misoperations as determined in R1</p> <p>_____(R3.):Determine if the Entity supplied the required documentation of misoperations analyses and Corrective Action Plans to the Regional Reliability Organization as per the Regional Reliability Organization's procedures developed for PRC-003-1</p>	
<p><b>Audit Notes:</b></p>		

PRC-005-1	Transmission and Generation Protection System Maintenance and Testing	
R1.	<p>Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include:</p> <p><b>R1.1.</b> Maintenance and testing intervals and their basis.</p> <p><b>R1.2.</b> Summary of maintenance and testing procedures.</p>	Yes
RSAW	<p>_____ Review the evidence provided by the entity to determine if the entity has a transmission Protection System and/or a generation Protection System (see R2). If yes:</p> <p>_____ (R1.): Review the evidence provided by the entity to verify the entity has a maintenance and testing program for the Protection System. The maintenance and testing program should include (see note on page 2):</p> <ul style="list-style-type: none"> <li>_____ Protective relays</li> <li>_____ Associated communication systems</li> <li>_____ Voltage and current sensing devices</li> <li>_____ Station batteries</li> <li>_____ DC control circuitry</li> </ul> <p>_____ (R1.): Review the program and determine if it has the following</p> <ul style="list-style-type: none"> <li>_____ (R1.1.): Maintenance and testing intervals</li> <li>_____ (R1.1.): Basis for those intervals</li> <li>_____ (R1.2.): Summary of Maintenance and Testing procedures</li> </ul>	
<b>Audit Notes:</b>		
R2.	<p>Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program implementation shall include:</p> <p><b>R2.1.</b> Evidence Protection System devices were maintained and tested within the defined intervals</p> <p><b>R2.2.</b> Date each Protection System device was last tested/maintained</p>	Possible Violation
RSAW	<p>_____ Review the evidence provided by the entity to determine if the entity is required to have a Protection System maintenance and testing program. If yes:</p> <p>_____ Review the evidence provided by the entity to determine if the entity's Regional Reliability Organization requested documentation of its Protection System maintenance and testing program and the implementation</p>	



	<p>of that program (if the RRO did not, this requirement is N/A at this time)</p> <p>_____(R2.): Review the evidence provided by the entity to determine if the entity provided the above information to its Regional Reliability Organization within 30 calendar days of the request and that the documentation included:</p> <p>_____(R2.1.):Evidence Protection System devices were maintained and tested within the defined intervals</p> <p>_____(R2.2.):Date when each Protection System device was last tested/maintained.</p>	
<b>Audit Notes:</b>		
<b>PRC-008-0</b>	<b>Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Programs</b>	
<b>R1.</b>	<p>The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall have a UFLS equipment maintenance and testing program in place. This UFLS equipment maintenance and testing program shall include UFLS equipment identification, the schedule for UFLS equipment testing, and the schedule for UFLS equipment maintenance.</p>	Yes
<b>RSAW</b>	<p>Review the evidence provided by the entity to determine if the entity has a UFLS program. If yes:</p> <hr/> <p>_____(R1.):Review the evidence provided by the entity to determine if the entity has a UFLS equipment maintenance and testing program</p> <hr/> <p>_____(R1.):Review the evidence provided by the entity to determine if the UFLS maintenance program has the following:</p> <p>_____(R1.):UFLS equipment identification</p> <p>_____(R1.):Schedule for UFLS equipment testing</p> <p>_____(R1.):Schedule for UFLS equipment maintenance</p>	
<b>Audit Notes:</b>		
<b>R2.</b>	<p>The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall implement its UFLS equipment maintenance and testing program and shall provide UFLS maintenance and testing program results to its Regional Reliability Organization and NERC on request (within 30 calendar days).</p>	Possible Violation
<b>RSAW</b>	<p>If the entity has a UFLS program as identified in R1</p> <p>_____(R2.):Review the evidence provided by the entity to determine if the entity has implemented its UFLS equipment maintenance and testing program as per the schedule defined in their program.</p>	

	<p>_____(R2.):Review the evidence provided by the entity to determine if it has received a request by NERC or the RRO to provide its results.</p> <p>_____(R2.):Review the evidence provided by the entity to determine if the entity has provided the UFLS maintenance and testing program results to its RRO and NERC within 30 calendar days of receipt of the request.</p>	
<b>Audit Notes:</b>		
<b>PRC-010-0</b>	<b>Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program</b>	
<b>R1.</b>	<p>The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall periodically (at least every five years or as required by changes in system conditions) conduct and document an assessment of the effectiveness of the UVLS program. This assessment shall be conducted with the associated Transmission Planner(s) and Planning Authority(ies).</p> <p><b>R1.1.</b> This assessment shall include, but is not limited to:</p> <p><b>R1.1.1.</b> Coordination of the UVLS programs with other protection and control systems in the Region and with other Regional Reliability Organizations, as appropriate.</p> <p><b>R1.1.2.</b> Simulations that demonstrate that the UVLS programs performance is consistent with Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0 and TPL-004-0.</p> <p><b>R1.1.3.</b> A review of the voltage set points and timing.</p>	Yes
<b>RSAW</b>	<p>Determine if the entity owns or operates a UVLS system. If yes:</p> <p>_____(R1.): Review the evidence provided by the entity to verify the Entity has conducted and documented an assessment within the past 5 years.</p> <p>_____(R1.): Review the evidence provided by the entity to determine if changes in system conditions required an assessment of the UVLS system recently (within the past 5 years)</p> <p>_____(R1.): Review the evidence provided by the entity to verify the entity conducted and documented an assessment after the above system changes</p> <p>_____(R1.1.): Review the evidence provided by the entity to verify the above assessment(s) included:</p> <p>_____(R1.1.1.):Coordination of UVLS program with other protection and control systems in the Region and other RROs as appropriate</p> <p>_____(R1.1.2.):Simulations that demonstrate the UVLS program performance is consistent with NERC Reliability</p>	

	Standards TPL-001-0, TPL-002-0, TPL-003-0, and TPL-004-0 _____(R1.1.3.):A review of the voltage set points and timing.	
<b>Audit Notes:</b>		
<b>R2.</b>	The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall provide documentation of its current UVLS program assessment to its Regional Reliability Organization and NERC on request (30 calendar days).	Yes
<b>RSAW</b>	____Determine if the RRO or NERC requested documentation of the entities current UVLS program ____(R2.): Review the evidence provided by the entity to verify the entity provided the documentation to NERC or the RRO within 30 calendar days.	
<b>Audit Notes:</b>		
<b>PRC-011-0</b>	<b>UVLS System Maintenance and Testing</b>	
<b>R1.</b>	The Transmission Owner and Distribution Provider that owns a UVLS system shall have a UVLS equipment maintenance and testing program in place. This program shall include:  <b>R1.1.</b> The UVLS system identification which shall include but is not limited to: <b>R1.1.1.</b> Relays. <b>R1.1.2.</b> Instrument transformers. <b>R1.1.3.</b> Communications systems, where appropriate. <b>R1.1.4.</b> Batteries. <b>R1.2.</b> Documentation of maintenance and testing intervals and their basis. <b>R1.3.</b> Summary of testing procedure. <b>R1.4.</b> Schedule for system testing. <b>R1.5.</b> Schedule for system maintenance. <b>R1.6.</b> Date last tested/maintained.	Yes
<b>RSAW</b>	____R1. Determine if the entity has a UVLS system ____R1. Determine if the entity has a UVLS equipment maintenance and testing program in place ____R1.1-R1.6 Determine if the entity has the following items contained in its UVLS equipment maintenance and	

	<p>testing program: The UVLS program identifies at least the following:</p> <p>_____ R1.1.1 Relays. _____ R1.1.2 Instrument transformers. _____ R1.1.3 Communications systems, where appropriate. _____ R1.1.4 Batteries. _____ R1.2 Documentation of maintenance and testing intervals and their basis. _____ R1.3 Summary of testing procedure. _____ R1.4 Schedule for system testing. _____ R1.5 Schedule for system maintenance. _____ R1.6 Date last tested/maintained.</p>	
<b>Audit Notes:</b>		
<b>R2.</b>	The Transmission Owner and Distribution Provider that owns a UVLS system shall provide documentation of its UVLS equipment maintenance and testing program and the implementation of that UVLS equipment maintenance and testing program to its Regional Reliability Organization and NERC on request (within 30 calendar days).	Yes
<b>RSAW</b>	<p>_____ Determine if the RRO or NERC requested documentation of the entities current UVLS equipment maintenance and testing program</p> <p>_____ (R2.): Review the evidence provided by the entity to determine if the entity provided the documentation to NERC or the RRO within 30 calendar days.</p> <p>_____ (R2.): Review the evidence provided by the entity to determine if the entity has implemented its UVLS equipment maintenance and testing program as per the schedule defined in their program.</p>	
<b>Audit Notes:</b>		
<b>PRC-016-0</b>	<b>Special Protection System Misoperations</b>	
<b>R1.</b>	The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall analyze its SPS operations and maintain a record of all misoperations in accordance with the Regional SPS review procedure specified in Reliability Standard PRC-012-0_R1.	Yes
<b>RSAW</b>	<p>_____ (R1.): Review the evidence provided by the entity to verify that the entity analyzed all operations.</p> <p>_____ (R1.): Review the evidence provided by the entity to determine if the entity has had any misoperations on its SPS.</p> <p>_____ (R1.): Review the evidence provided by the entity to verify that the entity has maintained a record of all misoperations in accordance with Regional SPS review Procedures specified in Reliability Standards PRC-012-0_R1</p>	

<b>Audit Notes:</b>		
<b>R2.</b>	The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall take corrective actions to avoid future misoperations.	Yes
<b>RSAW</b>	(R2.): Review the evidence provided by the entity to verify the entity has taken corrective action to prevent future misoperations on their SPS.	
<b>Audit Notes:</b>		
<b>R3.</b>	The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall provide documentation of the misoperation analyses and the corrective action plans to its Regional Reliability Organization and NERC on request (within 90 calendar days).	Yes
<b>RSAW</b>	<p>_____ If the entity had any misoperations as determined in R1</p> <p>_____ (R3.): Determine if NERC or the RRO requested the analysis and/or correcting action plan</p> <p>_____ (R3.): Determine if the Entity supplied the requested documentation within 90 calendar days.</p>	
<b>Audit Notes:</b>		
<b>PRC-017-0</b>	<b>Special Protection System Maintenance and Testing</b>	
<b>R1.</b>	<p>The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have a system maintenance and testing program(s) in place. The program(s) shall include:</p> <p><b>R1.1.</b> SPS identification shall include but is not limited to:</p> <p><b>R1.1.1.</b> Relays.</p> <p><b>R1.1.2.</b> Instrument transformers.</p> <p><b>R1.1.3.</b> Communications systems, where appropriate.</p> <p><b>R1.1.4.</b> Batteries.</p> <p><b>R1.2.</b> Documentation of maintenance and testing intervals and their basis.</p> <p><b>R1.3.</b> Summary of testing procedure.</p> <p><b>R1.4.</b> Schedule for system testing.</p>	Yes

	<p><b>R1.5.</b> Schedule for system maintenance.</p> <p><b>R1.6.</b> Date last tested/maintained.</p>	
<b>RSAW</b>	<p>_____ Determine if the entity has an SPS system maintenance and testing program</p> <p>_____ (R1.): Review the evidence provided by the entity to determine if the following items are included at a minimum:</p> <p>_____ (R1.1.): The SPS program identifies at least the following:</p> <p>_____ (R1.1.1.) Relays.</p> <p>_____ (R1.1.2.) Instrument transformers.</p> <p>_____ (R1.1.3.) Communications systems, where appropriate.</p> <p>_____ (R1.1.4.) Batteries.</p> <p>_____ (R1.2.) Documentation of maintenance and testing intervals and their basis.</p> <p>_____ (R1.3.) Summary of testing procedure.</p> <p>_____ (R1.4.) Schedule for system testing.</p> <p>_____ (R1.5.) Schedule for system maintenance.</p> <p>_____ (R1.6.) Date last tested/maintained.</p>	
<b>Audit Notes:</b>		
<b>R2.</b>	<p>The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall provide documentation of the program and its implementation to the appropriate Regional Reliability Organizations and NERC on request (within 30 calendar days).</p>	Yes
<b>RSAW</b>	<p>_____ Determine if the RRO or NERC requested documentation of the entities SPS program and implementation.</p> <p>_____ (R2.): Determine if the entity provided the documentation to NERC or the RRO within 30 calendar days.</p> <p>_____ (R2.): Review the evidence provided by the entity to determine if the entity has implemented its SPS equipment maintenance and testing program as per the schedule defined in their program.</p>	
<b>Audit Notes:</b>		
<b>PRC-021-1</b>	<b>Under-Voltage Load Shedding Program Data</b>	
<b>R1.</b>	<p>Each Transmission Owner and Distribution Provider that owns a UVLS program to mitigate the risk of voltage collapse or voltage instability in the BES shall annually update its UVLS data to support the Regional UVLS program database. The following data shall be provided to the Regional Reliability Organization for each installed UVLS system:</p>	Yes



	<p><b>R1.1.</b> Size and location of customer load, or percent of connected load, to be interrupted.</p> <p><b>R1.2.</b> Corresponding voltage set points and overall scheme clearing times.</p> <p><b>R1.3.</b> Time delay from initiation to trip signal.</p> <p><b>R1.4.</b> Breaker operating times.</p> <p><b>R1.5.</b> Any other schemes that are part of or impact the UVLS programs such as related generation protection, islanding schemes, automatic load restoration schemes, UFLS and Special Protection Systems.</p>	
<b>RSAW</b>	<p>_____(R1.): Review the evidence provided by the entity to determine if the entity updated the above UVLS system annually to support the regional UVLS program database</p> <p>_____. Review the evidence provided by the entity to determine if the following information was provided to the RRO for each installed UVLS system</p> <p>_____(R1.1.):Size and location of customer load, or percent of connected load, to be interrupted.</p> <p>_____(R1.2.):Corresponding voltage set points and overall scheme clearing times.</p> <p>_____(R1.3.):Time delay from initiation to trip signal.</p> <p>_____(R1.4.):Breaker operating times.</p> <p>_____(R1.5.):Any other schemes that are part of or impact the UVLS programs such as related generation protection, islanding schemes, automatic load restoration schemes, UFLS and Special Protection Systems.</p>	
<b>Audit Notes:</b>		
<b>R2.</b>	Each Transmission Owner and Distribution Provider that owns a UVLS program shall provide its UVLS program data to the Regional Reliability Organization within 30 calendar days of a request.	Yes
<b>RSAW</b>	<p>_____(R2.):Determine if the RRO requested documentation of the entities current UVLS program</p> <p>_____(R2.): Review the evidence provided by the entity to determine if the entity provided the documentation to the RRO within 30 calendar days.</p>	
<b>Audit Notes:</b>		
<b>TPL-001-0</b>	<b>System Performance Under Normal Conditions</b>	
<b>R1.</b>	The Planning Authority and Transmission Planner shall each demonstrate through a valid assessment that its portion of the interconnected transmission system is planned such that, with all transmission facilities in service and with normal (pre-contingency) operating procedures in effect, the Network can be operated to supply projected	Yes

	<p>customer demands and projected Firm (non- recallable reserved) Transmission Services at all Demand levels over the range of forecast system demands, under the conditions defined in Category A of Table I. To be considered valid, the Planning Authority and Transmission Planner assessments shall:</p> <p><b>R1.1.</b> Be made annually.</p> <p><b>R1.2.</b> Be conducted for near-term (years one through five) and longer-term (years six through ten) planning horizons.</p> <p><b>R1.3.</b> Be supported by a current or past study and/or system simulation testing that addresses each of the following categories, showing system performance following Category A of Table 1 (no contingencies). The specific elements selected (from each of the following categories) shall be acceptable to the associated Regional Reliability Organization(s).</p> <p><b>R1.3.1.</b> Cover critical system conditions and study years as deemed appropriate by the entity performing the study.</p> <p><b>R1.3.2.</b> Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p><b>R1.3.3.</b> Be conducted beyond the five-year horizon only as needed to address identified marginal conditions that may have longer lead-time solutions.</p> <p><b>R1.3.4.</b> Have established normal (pre-contingency) operating procedures in place.</p> <p><b>R1.3.5.</b> Have all projected firm transfers modeled.</p> <p><b>R1.3.6.</b> Be performed for selected demand levels over the range of forecast system demands.</p> <p><b>R1.3.7.</b> Demonstrate that system performance meets Table 1 for Category A (no contingencies).</p> <p><b>R1.3.8.</b> Include existing and planned facilities.</p> <p><b>R1.3.9.</b> Include Reactive Power resources to ensure that adequate reactive resources are available to meet system performance.</p> <p><b>R1.4.</b> Address any planned upgrades needed to meet the performance requirements of Category A.</p>	
<p><b>RSAW</b></p>	<p><b>NOTE: R1.1, R1.2, R1.3 and R1.4 refer to the Assessment.</b></p> <p><b>NOTE: R1.3.1 thru R1.3.9 refers to the studies referenced in R1.3.</b></p> <p>_____(R1.):Determine if entity has completed or has participated in an Assessment that studies if its portion of</p>	

	<p>the interconnected transmission system is planned to meet the requirements of R1.</p> <p>_____(R1.1.):Confirm that the above Assessment is conducted annually.</p> <p>_____(R1.2.):Confirm that the Assessment is both for the:</p> <p>_____ 1-5 year planning horizon range.</p> <p>_____ 6-10 year planning horizon range.</p> <p>_____(R1.3.):Confirm that the Assessment is supported by one or more current or past Studies and/or system simulations testing that addresses the following categories showing system performance following Category A of Table 1 (no contingencies)</p> <p>_____(R1.3.1.):Cover critical system conditions and study years as deemed appropriate by the entity performing the study.</p> <p>_____(R1.3.2.):Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p>_____(R1.3.3.):Be conducted beyond the five-year horizon only as needed to address identified marginal conditions that may have longer lead-time solutions.</p> <p>_____(R1.3.4.):Have established normal (pre-contingency) operating procedures in place.</p> <p>_____(R1.3.5.):Have all projected firm transfers modeled.</p> <p>_____(R1.3.6.):Be performed for selected demand levels over the range of forecast system demands.</p> <p>_____(R1.3.7.):Demonstrate that system performance meets Table 1 for Category A (no contingencies).</p> <p>_____(R1.3.8.):Include existing and planned facilities.</p> <p>_____(R1.3.9.):Include Reactive Power resources to ensure that adequate reactive resources are available to meet system performance.</p> <p>_____(R1.4.):Confirm that the Assessment addressed planned upgrades needed to meet the performance requirements of Category A.</p>	
<p><b>Audit Notes:</b></p>		
<p><b>R2.</b></p>	<p>When system simulations indicate an inability of the systems to respond as prescribed in Reliability Standard TPL-001-0_R1, the Planning Authority and Transmission Planner shall each:</p> <p><b>R2.1.</b> Provide a written summary of its plans to achieve the required system performance as described above throughout the planning horizon.</p> <p><b>R2.1.1.</b> Including a schedule for implementation.</p>	<p>Yes</p>

	<p><b>R2.1.2.</b> Including a discussion of expected required in-service dates of facilities.</p> <p><b>R2.1.3.</b> Consider lead times necessary to implement plans.</p> <p><b>R2.2.</b> Review, in subsequent annual assessments, (where sufficient lead time exists), the continuing need for identified system facilities. Detailed implementation plans are not needed.</p>	
<b>RSAW</b>	<p>_____ (R2.): Determine if system simulations indicate an inability of the system to respond as prescribed in Reliability Standard TPL-001-0_R1</p> <p>_____ (R2.1.): Determine if a written summary of plans to achieve the required system performance has been provided</p> <p>_____ Determine if the above summary includes:</p> <p>_____ (R2.1.1.): A schedule for implementation.</p> <p>_____ (R2.1.2.): A discussion of expected required in-service dates of facilities</p> <p>_____ (R2.1.3.): A consideration of the lead times necessary to implementation plans</p> <p>_____ (R2.2.): Determine if the current assessment has reviewed the continuing need for previously identified system facilities.</p>	
<b>Audit Notes:</b>		
<b>R3.</b>	The Planning Authority and Transmission Planner shall each document the results of these reliability assessments and corrective plans and shall annually provide these to its respective NERC Regional Reliability Organization(s), as required by the Regional Reliability Organization.	Yes
<b>RSAW</b>	<p>_____ (R3.): Determine if documentation of the results of reliability Assessments and Corrective Plans per TPL-001-0_R3 exists</p> <p>_____ (R3.): Determine if documentation has been submitted to the entity's RRO per the RRO's submission requirements.</p>	
<b>Audit Notes:</b>		
<b>TPL-002-0</b>	<b>System Performance Following Loss of a Single Bulk Electric System Element (Category B)</b>	
<b>R1.</b>	The Planning Authority and Transmission Planner shall each demonstrate through a valid assessment that its portion of the interconnected transmission system is planned such that the Network can be operated to supply projected customer demands and projected Firm (non-recallable reserved) Transmission Services, at all demand levels over the range of forecast system demands, under the contingency conditions as defined in Category B of Table I. To be valid, the Planning Authority and	Yes

	<p>Transmission Planner assessments shall:</p> <p><b>R1.1.</b> Be made annually.</p> <p><b>R1.2.</b> Be conducted for near-term (years one through five) and longer-term (years six through ten) planning horizons.</p> <p><b>R1.3.</b> Be supported by a current or past study and/or system simulation testing that addresses each of the following categories,, showing system performance following Category B of Table 1 (single contingencies). The specific elements selected (from each of the following categories) for inclusion in these studies and simulations shall be acceptable to the associated Regional Reliability Organization(s).</p> <p><b>R1.3.1.</b> Be performed and evaluated only for those Category B contingencies that would produce the more severe System results or impacts. The rationale for the contingencies selected for evaluation shall be available as supporting information. An explanation of why the remaining simulations would produce less severe system results shall be available as supporting information.</p> <p><b>R1.3.2.</b> Cover critical system conditions and study years as deemed appropriate by the responsible entity.</p> <p><b>R1.3.3.</b> Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p><b>R1.3.4.</b> Be conducted beyond the five-year horizon only as needed to address identified marginal conditions that may have longer lead-time solutions.</p> <p><b>R1.3.5.</b> Have all projected firm transfers modeled.</p> <p><b>R1.3.6.</b> Be performed and evaluated for selected demand levels over the range of forecast system Demands.</p> <p><b>R1.3.7.</b> Demonstrate that system performance meets Category B contingencies.</p> <p><b>R1.3.8.</b> Include existing and planned facilities.</p> <p><b>R1.3.9.</b> Include Reactive Power resources to ensure that adequate reactive resources are available to meet system performance.</p> <p><b>R1.3.10.</b> Include the effects of existing and planned protection systems, including any backup or redundant systems.</p> <p><b>R1.3.11.</b> Include the effects of existing and planned control devices.</p>	
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	<p><b>R1.3.12.</b> Include the planned (including maintenance) outage of any bulk electric equipment (including protection systems or their components) at those demand levels for which planned (including maintenance) outages are performed.</p> <p><b>R1.4.</b> Address any planned upgrades needed to meet the performance requirements of Category B of Table I.</p> <p><b>R1.5.</b> Consider all contingencies applicable to Category B.</p>	
<p><b>RSAW</b></p>	<p>_____(R1.):Determine if entity has completed or has participated in an Assessment that studies if its portion of the interconnected transmission system is planned to meet the requirements of R1.</p> <p>_____(R1.1.):Confirm that the above Assessment is conducted annually.</p> <p>_____(R1.2.):Confirm that the Assessment is both for the:</p> <p>    _____ 1-5 year planning horizon range.</p> <p>    _____ 6-10 year planning horizon range.</p> <p>_____(R1.3.):Confirm that the Assessment is supported by one or more current or past Studies and/or system simulations testing that addresses the following categories showing system performance following Category B of Table 1 (single contingencies)</p> <p>    _____(R1.3.1.):Be performed and evaluated only for those Category B contingencies that would produce the more severe System results or impacts. The rationale for the contingencies selected for evaluation shall be available as supporting information. An explanation of why the remaining simulations would produce less severe system results shall be available as supporting information.</p> <p>    _____(R1.3.2.):Cover critical system conditions and study years as deemed appropriate by the responsible entity.</p> <p>    _____(R1.3.3.):Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p>    _____(R1.3.4.):Be conducted beyond the five-year horizon only as needed to address identified marginal conditions that may have longer lead-time solutions.</p> <p>    _____(R1.3.5.):Have all projected firm transfers modeled.</p> <p>    _____(R1.3.6.):Be performed and evaluated for selected demand levels over the range of forecast system Demands.</p> <p>    _____(R1.3.7.):Demonstrate that system performance meets Category B contingencies.</p> <p>    _____(R1.3.8.):Include existing and planned facilities.</p>	



	<p>_____ (R1.3.9.): Include Reactive Power resources to ensure that adequate reactive resources are available to meet system performance.</p> <p>_____ (R1.3.10.): Include the effects of existing and planned protection systems, including any backup or redundant systems.</p> <p>_____ (R1.3.11.): Include the effects of existing and planned control devices.</p> <p>_____ (R1.3.12.): Include the planned (including maintenance) outage of any bulk electric equipment (including protection systems or their components) at those demand levels for which planned (including maintenance) outages are performed.</p> <p>_____ (R1.4.): Confirm that the Assessment addressed planned upgrades needed to meet the performance requirements of Category B of Table 1.</p> <p>_____ (R1.5.): Confirm that the Assessment considers all contingencies applicable to category B.</p>	
<p><b>Audit Notes:</b></p>		
<p><b>R2.</b></p>	<p>When System simulations indicate an inability of the systems to respond as prescribed in Reliability Standard TPL-002-0_R1, the Planning Authority and Transmission Planner shall each:</p> <p>R2.1. Provide a written summary of its plans to achieve the required system performance as described above throughout the planning horizon:</p> <p>R2.1.1. Including a schedule for implementation.</p> <p>R2.1.2. Including a discussion of expected required in-service dates of facilities.</p> <p>R2.1.3. Consider lead times necessary to implement plans.</p> <p>R2.2. Review, in subsequent annual assessments, (where sufficient lead time exists), the continuing need for identified system facilities. Detailed implementation plans are not needed.</p>	<p>Yes</p>
<p><b>RSAW</b></p>	<p>_____ (R2.): Determine if system simulations indicate an inability of the system to respond as prescribed in Reliability Standard TPL-002-0_R1</p> <p>_____ (R2.1.): Determine if a written summary of plans to achieve the required system performance has been provided</p> <p>_____ Determine if the above summary includes:</p> <p>_____ (R2.1.1.): A schedule for implementation.</p> <p>_____ (R2.1.2.): A discussion of expected required in-</p>	

	<p>service dates of facilities          _____(R2.1.3.):Consider the lead times necessary to implementation plans          _____(R2.2.):Determine if the current assessment has reviewed the continuing need for previously identified system facilities.</p>	
<b>Audit Notes:</b>		
<b>R3.</b>	<p>The Planning Authority and Transmission Planner shall each document the results of its Reliability Assessments and corrective plans and shall annually provide the results to its respective Regional Reliability Organization(s), as required by the Regional Reliability Organization.</p>	Yes
<b>RSAW</b>	<p>_____ (R3.):Determine if documentation of the results of reliability Assessments and Corrective Plans per TPL-002-0_R3 exists          _____(R3.):Determine if documentation has been submitted to the entity's RRO per the RRO's submission requirements.</p>	
<b>Audit Notes:</b>		

TPL-003-0	System Performance Following Loss of Two or More Bulk Electric System Elements	
R1.	<p>The Planning Authority and Transmission Planner shall each demonstrate through a valid assessment that its portion of the interconnected transmission systems is planned such that the network can be operated to supply projected customer demands and projected Firm (non-recallable reserved) Transmission Services, at all demand Levels over the range of forecast system demands, under the contingency conditions as defined in Category C of Table I (attached). The controlled interruption of customer Demand, the planned removal of generators, or the Curtailment of firm (non-recallable reserved) power transfers may be necessary to meet this standard. To be valid, the Planning Authority and Transmission Planner assessments shall:</p> <p><b>R1.1.</b> Be made annually.</p> <p><b>R1.2.</b> Be conducted for near-term (years one through five) and longer-term (years six through ten) planning horizons.</p> <p><b>R1.3.</b> Be supported by a current or past study and/or system simulation testing that addresses each of the following categories, showing system performance following Category C of Table 1 (multiple contingencies). The specific elements selected (from each of the following categories) for inclusion in these studies and simulations shall be acceptable to the associated Regional Reliability Organization(s).</p> <p><b>R1.3.1.</b> Be performed and evaluated only for those Category C contingencies that would produce the more severe system results or impacts. The rationale for the contingencies selected for evaluation shall be available as supporting information. An explanation of why the remaining simulations would produce less severe system results shall be available as supporting information.</p> <p><b>R1.3.2.</b> Cover critical system conditions and study years as deemed appropriate by the responsible entity.</p> <p><b>R1.3.3.</b> Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p><b>R1.3.4.</b> Be conducted beyond the five-year horizon only as needed to address identified marginal conditions that may have longer lead-time solutions.</p> <p><b>R1.3.5.</b> Have all projected firm transfers modeled.</p> <p><b>R1.3.6.</b> Be performed and evaluated for selected demand levels over the range of forecast system demands.</p>	Yes

	<p><b>R1.3.7.</b> Demonstrate that System performance meets Table 1 for Category C contingencies.</p> <p><b>R1.3.8.</b> Include existing and planned facilities.</p> <p><b>R1.3.9.</b> Include Reactive Power resources to ensure that adequate reactive resources are available to meet System performance.</p> <p><b>R1.3.10.</b> Include the effects of existing and planned protection systems, including any backup or redundant systems.</p> <p><b>R1.3.11.</b> Include the effects of existing and planned control devices.</p> <p><b>R1.3.12.</b> Include the planned (including maintenance) outage of any bulk electric equipment (including protection systems or their components) at those Demand levels for which planned (including maintenance) outages are performed.</p> <p><b>R1.4.</b> Address any planned upgrades needed to meet the performance requirements of Category C.</p> <p><b>R1.5.</b> Consider all contingencies applicable to Category C.</p>	
<p><b>RSAW</b></p>	<p>_____(R1.):Determine if entity has completed or has participated in an Assessment that studies if its portion of the interconnected transmission system is planned to meet the requirements of R1.</p> <p>_____(R1.1.):Confirm that the above Assessment is conducted annually.</p> <p>_____(R1.2.):Confirm that the Assessment is both for the:</p> <ul style="list-style-type: none"> <li>_____1-5 year planning horizon range.</li> <li>_____6-10 year planning horizon range.</li> </ul> <p>1. _____(R1.3.):Confirm that the Assessment is supported by one or more current or past Studies and/or system simulations testing that addresses the following categories showing system performance following Category C of Table 1 (multiple contingencies)</p> <ul style="list-style-type: none"> <li>_____(R1.3.1.):Be performed and evaluated only for those Category C contingencies that would produce the more severe system results or impacts. The rationale for the contingencies selected for evaluation shall be available as supporting information. An explanation of why the remaining simulations would produce less severe system results shall be available as supporting information.</li> <li>_____(R1.3.2.):Cover critical system conditions and study years as deemed</li> </ul>	

	<p>appropriate by the responsible entity.</p> <p>_____(R1.3.3.):Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p>_____(R1.3.4.):Be conducted beyond the five-year horizon only as needed to address identified marginal conditions that may have longer lead-time solutions.</p> <p>_____(R1.3.5.):Have all projected firm transfers modeled.</p> <p>_____(R1.3.6.):Be performed and evaluated for selected demand levels over the range of forecast system Demands.</p> <p>_____(R1.3.7.):Demonstrate that system performance meets Category C contingencies.</p> <p>_____(R1.3.8.):Include existing and planned facilities.</p> <p>_____(R1.3.9.):Include Reactive Power resources to ensure that adequate reactive resources are available to meet system performance.</p> <p>_____(R1.3.10.):Include the effects of existing and planned protection systems, including any backup or redundant systems.</p> <p>_____(R1.3.11.):Include the effects of existing and planned control devices.</p> <p>_____(R1.3.12.):Include the planned (including maintenance) outage of any bulk electric equipment (including protection systems or their components) at those demand levels for which planned (including maintenance) outages are performed.</p> <p>_____(R1.4.):Confirm that the Assessment addressed planned upgrades needed to meet the performance requirements of Category C.</p> <p>_____(R1.5.):Confirm that the Assessment considers all contingencies applicable to Category C.</p>	
<p><b>Audit Notes:</b></p>		
<p><b>R2.</b></p>	<p>When system simulations indicate an inability of the systems to respond as prescribed in Reliability Standard TPL-003-0_R1, the Planning Authority and Transmission Planner shall each:</p> <p><b>R2.1.</b> Provide a written summary of its plans to achieve the required system performance as described above throughout the planning horizon:</p> <p><b>R2.1.1.</b> Including a schedule for implementation.</p> <p><b>R2.1.2.</b> Including a discussion of expected required in-service dates of facilities.</p> <p><b>R2.1.3.</b> Consider lead times necessary to implement plans.</p>	<p>Yes</p>

	<b>R2.2.</b> Review, in subsequent annual assessments, (where sufficient lead time exists), the continuing need for identified system facilities. Detailed implementation plans are not needed.	
<b>RSAW</b>	<p>_____ (R2.): Determine if system simulations indicate an inability of the system to respond as prescribed in Reliability Standard TPL-003-0_R1</p> <p>_____ (R2.1.): Determine if a written summary of plans to achieve the required system performance has been provided</p> <p>_____ Determine if the above summary includes:</p> <p>_____ (R2.1.1.): A schedule for implementation.</p> <p>_____ (R2.1.2.): A discussion of expected required in-service dates of facilities</p> <p>_____ (R2.1.3.): Consider the lead times necessary to implementation plans</p> <p>_____ (R2.2.): Determine if the current assessment has reviewed the continuing need for previously identified system facilities.</p>	
<b>Audit Notes:</b>		
<b>R3.</b>	The Planning Authority and Transmission Planner shall each document the results of these Reliability Assessments and corrective plans and shall annually provide these to its respective NERC Regional Reliability Organization(s), as required by the Regional Reliability Organization.	Yes
<b>RSAW</b>	<p>_____ (R3.): Determine if documentation of the results of reliability Assessments and Corrective Plans per TPL-003-0_R3 exists</p> <p>_____ (R3.): Determine if documentation has been submitted to the entity's RRO per the RRO's submission requirements.</p>	
<b>Audit Notes:</b>		
<b>TPL-004-0</b>	<b>System Performance Following Extreme Events Resulting in the Loss of Two or More Bulk Electric System Elements</b>	
<b>R1.</b>	<p>The Planning Authority and Transmission Planner shall each demonstrate through a valid assessment that its portion of the interconnected transmission system is evaluated for the risks and consequences of a number of each of the extreme contingencies that are listed under Category D of Table I. To be valid, the Planning Authority's and Transmission Planner's assessment shall:</p> <p><b>R1.1.</b> Be made annually.</p> <p><b>R1.2.</b> Be conducted for near-term (years one through five).</p> <p><b>R1.3.</b> Be supported by a current or past study and/or</p>	Yes

	<p>system simulation testing that addresses each of the following categories, showing system performance following Category D contingencies of Table I. The specific elements selected (from within each of the following categories) for inclusion in these studies and simulations shall be acceptable to the associated Regional Reliability Organization(s).</p> <p><b>R1.3.1.</b> Be performed and evaluated only for those Category D contingencies that would produce the more severe system results or impacts. The rationale for the contingencies selected for evaluation shall be available as supporting information. An explanation of why the remaining simulations would produce less severe system results shall be available as supporting information.</p> <p><b>R1.3.2.</b> Cover critical system conditions and study years as deemed appropriate by the responsible entity.</p> <p><b>R1.3.3.</b> Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p><b>R1.3.4.</b> Have all projected firm transfers modeled.</p> <p><b>R1.3.5.</b> Include existing and planned facilities.</p> <p><b>R1.3.6.</b> Include Reactive Power resources to ensure that adequate reactive resources are available to meet system performance.</p> <p><b>R1.3.7.</b> Include the effects of existing and planned protection systems, including any backup or redundant systems.</p> <p><b>R1.3.8.</b> Include the effects of existing and planned control devices.</p> <p><b>R1.3.9.</b> Include the planned (including maintenance) outage of any bulk electric equipment (including protection systems or their components) at those demand levels for which planned (including maintenance) outages are performed.</p> <p><b>R1.4.</b> Consider all contingencies applicable to Category D.</p>	
<p><b>RSAW</b></p>	<p>_____ (R1.): Determine if entity has completed or has participated in an Assessment that studies if its portion of the interconnected transmission system is evaluated to meet the requirements of R1.</p> <p>_____ (R1.1.): Confirm that the above Assessment is conducted annually.</p> <p>_____ (R1. 2.): Confirm that the Assessment looks at the: _____ 1-5 year planning horizon range.</p> <p>_____ (R1.3.): Confirm that the Assessment is supported by one or more current or past Studies and/or system</p>	

	<p>simulations testing that addresses the following categories showing system performance following Category D of Table 1:</p> <p>_____(R1.3.1.):Be performed and evaluated only for those Category D contingencies that would produce the more severe system results or impacts. The rationale for the contingencies selected for evaluation shall be available as supporting information. An explanation of why the remaining simulations would produce less severe system results shall be available as supporting information.</p> <p>_____(R1.3.2.):Cover critical system conditions and study years as deemed appropriate by the responsible entity.</p> <p>_____(R1.3.3.):Be conducted annually unless changes to system conditions do not warrant such analyses.</p> <p>_____(R1.3.4.):Have all projected firm transfers modeled.</p> <p>_____(R1.3.5.):Include existing and planned facilities.</p> <p>_____(R1.3.6.):Include Reactive Power resources to ensure that adequate reactive resources are available to meet system performance.</p> <p>_____(R1.3.7.):Include the effects of existing and planned protection systems, including any backup or redundant systems.</p> <p>_____(R1.3.8.):Include the effects of existing and planned control devices.</p> <p>_____(R1.3.9.):Include the planned (including maintenance) outage of any bulk electric equipment (including protection systems or their components) at those demand levels for which planned (including maintenance) outages are performed.</p> <p>_____(R1.4.):Confirm that the Assessment considers all contingencies applicable to category D.</p>	
<p><b>Audit Notes:</b></p>		
<p><b>R2.</b></p>	<p>The Planning Authority and Transmission Planner shall each document the results of its reliability assessments and shall annually provide the results to its entities' respective NERC Regional Reliability Organization(s), as required by the Regional Reliability Organization.</p>	<p>Yes</p>
<p><b>RSAW</b></p>	<p>_____(R2.): Review the evidence provided to determine if documentation of the results of reliability Assessments and Corrective Plans per TPL-004-0_R2 exists</p> <p>_____(R2.): Review the evidence provided to determine if documentation has been submitted to the entity's RRO per the RRO's submission requirements.</p>	
<p><b>Audit Notes:</b></p>		



## **Attachment b**

# **Settlement Agreement by and between Brazos and Texas RE**

**SETTLEMENT AGREEMENT  
OF  
TEXAS REGIONAL ENTITY  
AND  
BRAZOS ELECTRIC POWER COOPERATIVE, INC (NCR04015)**

**I. INTRODUCTION**

1. Texas Regional Entity (Texas RE) and Brazos Electric Power Cooperative (Brazos) enter into this Settlement Agreement (Agreement) to resolve all outstanding issues arising from Texas RE's determination and findings, pursuant to the North American Electric Reliability Corporation (NERC) Rules of Procedure, of preliminary alleged violations by Brazos of NERC Reliability Standards PRC-005-1, Requirement 2 (R2), and PRC-008-0, R2 from Texas RE's February 27-28, 2008 audit of Brazos.

**II. STIPULATION**

2. Facts stipulated herein are solely for the purpose of resolving matters between Texas RE and Brazos associated with the aforementioned alleged violations and do not constitute stipulations or admissions for any other purpose. Texas RE and Brazos hereby stipulate and agree to the following:

**A. Background**

3. Brazos is a nonprofit, cooperative wholesale power supplier to sixteen (16) member-owned distribution cooperatives serving retail customers in sixty-eight (68) Texas counties. Brazos' headquarters are located in Waco, Texas.
4. Brazos was registered on the NERC Compliance Registry as a Transmission Owner (TO) and Transmission Planner (TP) on June 28, 2007, and has been continuously registered as such through the date of this Agreement.
5. Texas RE scheduled and implemented a TO and TP audit of Brazos beginning on February 27, 2008, and concluding on February 28, 2008 (the Audit). As a registered TO, Brazos was subject to the Requirements of NERC Reliability Standards PRC-005-1, R2 and PRC-008-0, R2 from June 28, 2007, the date Brazos became registered on the NERC Compliance, through the date of the Audit.
6. Texas RE sent Brazos a pre-audit questionnaire and Reliability Standard Audit Work Sheets (RSAWs) for the list of actively monitored NERC Reliability Standards approximately sixty (60) days prior to the Audit. Prior to and during the Audit, Texas RE reviewed Brazos' responses to the pre-audit questionnaire and RSAWs with Brazos' management, supervisors and subject matter experts. As part of the Audit, the Texas RE audit team interviewed Brazos' operations personnel and reviewed documents to substantiate that those operational personnel were trained and capable of following the procedures to ensure reliable operations from that entity. The audit

team also interviewed information technology, communications, and planning personnel to resolve questions and verify Brazos' documentation.

## **B. Preliminary Alleged Violations**

7. During the Audit, Texas RE discovered two possible violations of NERC Reliability Standards and Requirements: PRC-005-1, R2 – Transmission and Generation Protection System Maintenance and Testing; and PRC-008-0, R2 – Implementation and Documentation of Under Frequency Load Shedding (UFLS) Equipment Maintenance Program. On March 5, 2008, Texas RE sent Brazos a Preliminary Notice of Alleged Violation (“PNAV”) notifying Brazos that Texas RE compliance staff had determined that there was sufficient basis for finding that Brazos may not have been in compliance with these standards. A copy of the letter is attached hereto as Exhibit A.
8. On April 16, 2008, Texas RE sent Brazos a Confirmation of Settlement Discussions letter confirming that Brazos had requested settlement negotiations. A copy of the letter is attached hereto as Exhibit B.
9. PRC-005-1, R2 requires that each Transmission Owner and Distribution Provider that owns a transmission Protection System shall provide documentation of its maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program shall include: (R2.1) evidence Protection System devices were maintained and tested within the defined intervals, and (R2.2) the date each Protection System device was last tested/maintained. PRC-005-1, R2 has a “Lower” Violation Risk Factor (VRF).
10. PRC-008-0, R2 requires that each Transmission Owner and Distribution Provider with a UFLS program shall implement its UFLS equipment maintenance and testing program. This requirement has a “Medium” VRF.
11. During the Audit, Texas RE determined that Brazos' scheduled interval testing was not met for four 138kV panels, as observed in 2007 maintenance records. Further, Texas RE determined that scheduled interval testing was not met for six UFLS relays as observed in the 2007 maintenance records.
12. During a meeting on April 4, 2008 between Brazos and Texas RE, Brazos explained that the scheduled interval testing had been deferred pursuant to 2006 and prior years' maintenance program and testing procedures. Such program and procedures allowed the deferral of 15% of scheduled maintenance and testing at the discretion of the Transmission Manager. At the beginning of 2007, Brazos explained that its maintenance program and procedures changed to eliminate this 15% discretionary deferred maintenance for protection systems and efforts were launched to bring all previous years' deferred maintenance current. This work was completed during 2007 but was not fully completed prior to June 28, 2007, the effective date for mandatory compliance with NERC Reliability Standards. The alleged violations of both PRC-005-1, R2 and PRC-008-0, R2 existed from June 28, 2007 until November 14, 2007.

13. Based on the documentation provided to Texas RE and the on-site interviews of Brazos personnel, Texas RE determined that: (a) significant effort in preparation of the audit was evident, (b) Brazos was cooperative with the audit team, (c) no misrepresentations or concealment of facts or programs was evident, and (d) Brazos maintained an acceptable compliance culture.
14. Texas RE has decided to assess no monetary penalty against Brazos for the alleged violation of Reliability Standard PRC-005-1, R2, based upon the following factors: (a) the basis for the preliminary alleged violation was determined to have occurred while Brazos was transitioning its 2006 maintenance program and procedures to be compliant with mandatory Reliability Standards, (b) maintenance programs for 2007 and beyond allow no deferred maintenance, (c) by the end of 2007 all subject relays were tested and found to be operating properly, (d) the subject relays comprised 2% of 207 relay panels, (e) the subject relays, though not formally tested for the entire audit period, operated correctly during the audit period and Brazos demonstrated evidence of internal programs to validate all relay operations during system events as correct, or its ability to initiate expedited maintenance if not correct, (f) failure of any of the relays would not have impacted system reliability and thus there was minimal potential adverse impact on the bulk power system (BPS) for this alleged violation, (g) the alleged violation is a first time alleged violation, (h) no misrepresentation or concealment of facts was evident, (i) Brazos had an appropriate culture of compliance, and (j) Brazos cooperated fully in the investigation. Texas RE also considered the fact that Brazos is a cooperative (not-for-profit) entity that did not act irresponsibly.
15. Texas RE has decided to assess no monetary penalty against Brazos for the alleged violation of Reliability Standard PRC-008-0, R2 based upon the following factors: (a) the basis for the preliminary alleged violation was determined to have occurred while Brazos was transitioning its 2006 maintenance program and procedures to be compliant with mandatory Reliability Standards, (b) maintenance programs and procedures for 2007 and beyond allow no deferred maintenance, (c) by the end of 2007 all subject relays were tested and found to be operating properly, (d) the subject relays comprised 2.6% of 228 relay panels, (e) failure of any one of the relays would not have impacted Brazos' ability to meet its share of ERCOT Region's mandated load shed MW in the Regional UFLS program to support system reliability and thus there was minimal potential adverse impact on the BPS for this alleged violation, (f) the alleged violation is a first time alleged violation, (g) no misrepresentation or concealment of facts was evident, (h) Brazos had an appropriate culture of compliance; and (i) Brazos cooperated fully in the investigation. Texas RE also considered the fact that Brazos is a cooperative (not-for-profit) entity that did not willfully act irresponsibly.

### **III. PARTIES' SEPARATE REPRESENTATIONS**

#### **A. Statement of Texas RE and Summary of Findings**

16. During its Audit of Brazos, Texas RE found two preliminary alleged violations of NERC Reliability Standards. The first preliminary alleged violation was that scheduled interval testing was not met for four 138kV panels, as observed in 2007 maintenance records. This preliminary alleged violation of PRC-005-1, R2 occurred between June 28, 2007 and November 14, 2007, and was issued NERC Violation Tracking Identification Number TRE200800043.
17. The second alleged violation was that scheduled interval testing was not met for six under frequency relays as observed in the 2007 maintenance records. This alleged violation of PRC-008-0, R2 occurred between June 28, 2007 and November 14, 2007 and was issued NERC Violation Tracking Identification Number TRE200800044.
18. Brazos submitted formal mitigation plans for both alleged violations on October 6, 2008 and certified that it completed the plans on November 14, 2007. Texas RE determined that they were acceptable. The mitigation plan for PRC-005-1, R2 is attached hereto as Exhibit C. The mitigation plan for PRC-008-0, R2 is attached hereto as Exhibit D.
19. Texas RE agrees that this Agreement is in the best interest of the parties and in the best interest of BPS reliability.

#### **B. Statement of Brazos**

20. Brazos admits the facts set forth herein and admits, for purposes of this Agreement that these facts describe the alleged violations of PRC-005-1, R2 and PRC-008-0, R2.
21. Brazos does not contest the alleged violation of PRC-005-1, R2, and agreed to submit and implement a mitigation plan. Brazos submitted its formal mitigation plan on October 6, 2008 and certified that it completed the mitigation plan on November 14, 2007.
22. Brazos does not contest the alleged violation of PRC-008-0, R2 and agreed to submit and implement a mitigation plan. Brazos submitted its formal mitigation plan on October 6, 2008 and certified that it completed the mitigation plan on November 14, 2007.
23. Brazos enters into this Agreement with Texas RE to resolve the alleged violations, to eliminate penalties, and to avoid extended litigation and potential uncertainty regarding the matters described herein, and to effectuate a complete and final resolution of the issues set forth herein. Brazos agrees that this 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**

24. Brazos was cooperative and diligent in resolving the matters herein and completed acceptable mitigation plans prior to the audit. The basis for the preliminary alleged violations was founded in transition issues associated with the 2006 maintenance

program. Further, maintenance programs for 2007 and beyond allow no deferred maintenance. Relays not formally tested for the entire audit period were tested by the end of 2007 and were found to be operating properly. Therefore, Texas RE determined that failure of any one of the subject relays did not pose a risk to the reliability to the BPS.

25. In addition, Brazos offered and initiated efforts beyond its immediate mitigation of the alleged violations to enhance its ongoing maintenance program and procedures including those for protection systems. Specifically, a new staff position was created with the responsibility of updating the equipment maintenance database on a daily basis. The daily maintenance schedules are reviewed by the Manager of Transmission Maintenance on a weekly basis. The weekly maintenance schedules are reviewed by the Vice President – Transmission Division on a monthly basis. A report detailing adherence to the maintenance schedule is presented to the Transmission and Distribution Planning – Operations Committee of the Brazos Electric Board of Directors on a quarterly basis.
26. The parties agree, as discussed above, that Brazos will pay no (\$0) monetary penalty for the alleged violations of PRC-005-1, R2 or PRC-008-0, R2.

## V. ADDITIONAL TERMS

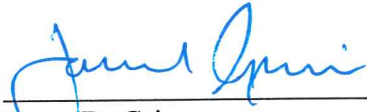
27. The signatories to the Agreement agree that they enter into the Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of Texas RE or Brazos has been made to induce the signatories or any other party to enter into the Agreement.
28. Texas RE shall report the terms of all compliance settlements matters to NERC. NERC will review the settlement for the purpose of evaluating its consistency with other settlements entered into for similar alleged 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 Brazos 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 the Texas RE will attempt to negotiate a revised settlement agreement with Brazos 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 Federal Energy Regulatory Commission (Commission) for the Commission's review and approval by order or operation of law and (ii) publicly post the alleged violation and the terms provided for in the settlement.
29. This Agreement shall become effective upon the Commission's approval of the Agreement by order or operation of law as submitted to it or as modified in a manner acceptable to the parties.
30. Brazos agrees that this Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein, and Brazos waives its right to further hearings and appeal, unless and only to the extent that Brazos



contends that any NERC or Commission action on the Agreement contains one or more material modifications to the Agreement. Texas RE reserves all rights to initiate enforcement, penalty or sanction actions against Brazos in accordance with the NERC Rules of Procedure in the event that Brazos fails to comply with the mitigation plan and compliance program agreed to in this Agreement. In the event Brazos fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this Agreement, Texas RE will initiate enforcement, penalty, or sanction actions against Brazos to the maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. Brazos shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.

31. 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 Agreement on the entity's behalf.
32. The undersigned representative of each party affirms that he or she has read the Agreement, that all of the matters set forth in the Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the 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 Agreement.
33. The Agreement may be signed in counterparts.
34. This Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

Agreed to and accepted:



\_\_\_\_\_  
Larry D. Grimm  
CEO & Chief Compliance Officer  
Texas Regional Entity, a division of  
Electric Reliability Council of Texas, Inc.

8/13/09

\_\_\_\_\_  
Date



\_\_\_\_\_  
Clifton Karnei  
Executive Vice President and General Manager  
Brazos Electric Power Cooperative, Inc.

7/31/09

\_\_\_\_\_  
Date

PRS  
99



**Attachment c**

**Brazos' Mitigation Plans designated as  
TRE200800043 and TRE200800044, and  
Certification of Completion therein, submitted  
October 6, 2008**

## Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: October 6, 2008

If this Mitigation Plan has already been completed:

- Check this box  and
- Provide the Date of Completion of the Mitigation Plan: 11/14/07

### Section A: Compliance Notices

- Section 6.2 of the CMEP<sup>1</sup> 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 2.0.
  - (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 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.
- This submittal form may be used to provide a required Mitigation Plan for review and approval by Texas Regional Entity (Texas RE) and NERC.
- The Mitigation Plan shall be submitted to the Texas RE and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

<sup>1</sup> "Uniform Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on NERC's website.

- This Mitigation Plan form may be used to address one or more related violations of one Reliability Standard. A separate mitigation plan is required to address violations with respect to each additional Reliability Standard, as applicable.
- If the Mitigation Plan is approved by Texas RE and NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- Texas RE 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.

**Section B: Registered Entity Information**

**B.1 Identify your organization:**

Company Name: Brazos Electric Power Cooperative, Inc.  
Company Address: 2404 LaSalle Avenue, Waco, Texas 76706  
NERC Compliance Registry ID: NCR04015

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

Name: Johnny A. York  
Title: Vice President - Transmission  
Email: jyork@brazoselectric.com  
Phone: 254-750-6377

**Section C: Identity of Reliability Standard Alleged Violations Associated with this Mitigation Plan**

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

**C.1 Standard: PRC 005-1**



**C.2 Requirement(s) alleged to have been violated and alleged violation dates:**  
*[Enter information in the following Table]*

NERC Violation ID # [if known]	Texas RE Violation ID # [if known ]	Requirement Violated (e.g. R3.2)	Violation Date <sup>(*)</sup>
	200800043	R2	06/17/07

(\*) Note: The Violation Date shall be: (i) the date the violation was alleged to have occurred; (ii) the date that the alleged violation was self-reported; or (iii) the date that the alleged violation has been deemed to have occurred on by Texas RE. Questions regarding the date to use should be directed to the Texas RE.

**C.3 Identify the cause of the alleged violation(s) identified above:**

Prior to 2007, Brazos Electric maintenance procedures allowed for carryover of a percentage of maintenance activities from the calendar year in which the maintenance was originally scheduled to the next succeeding calendar year. Beginning in 2007 Brazos Electric changed its maintenance procedures. Under the new maintenance procedures all scheduled relay maintenance activity is completed during the calendar year in which the maintenance is first scheduled to be performed.

The four relay panels in question originally were scheduled for testing during the 2006 calendar year. In accordance with the then effective maintenance procedures, the testing of these relay panels was carried over to the 2007 calendar year. The decision to reschedule the testing was made in 2006. Once that decision had been made, under Brazos Electric's then effective maintenance policies the effective schedule for testing of the facilities became calendar year 2007. All testing was completed in accordance with the new schedule by November 14, 2007 with no problems detected.

The alleged violation revolves on (i) the validity of Brazos Electric's interpretation of its own pre-2007 maintenance procedures as allowing a rescheduling of maintenance such that testing would be completed at any time during calendar year 2007, and (ii) whether an event subsequent (viz: the June 17, 2007 effective date of the Reliability Standards) could operate to invalidate or otherwise nullify a previously established and otherwise valid maintenance schedule. Brazos Electric believes that (i) its interpretation of its maintenance procedures in effect during 2006 was correct, (ii) its determination to carry certain scheduled maintenance over to calendar year 2007 was valid and effective, and (iii) the subsequent effectiveness of new Reliability Standards could not operate retroactively to invalidate the previously established maintenance schedule for calendar year 2007.

**C.4 [Optional] Provide any relevant additional information regarding the violations associated with this Mitigation Plan:**

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



**Section D: Details of Proposed Mitigation Plan**

**Mitigation Plan Contents**

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violations identified above in Part C.2 of this form:

As stated, the alleged violation was an alleged failure to test the subject relays as scheduled in accordance with Brazos Electric's maintenance plan, prior to June 17, 2007. All relays were tested by November 14, 2007 in accordance with the then effective Brazos Electric maintenance schedule. In view of the fact that the basis for the alleged violation was the interplay of Brazos Electric's pre-2007 maintenance procedures, that have now been superseded, and the effect of implementation of new Reliability Standards mid-year in calendar year 2007, a mitigation plan should be designed to prevent a recurrence of the alleged event. Given the change in Brazos Electric's maintenance procedures effective 2007, and given the "one time" nature of the effectiveness of new Reliability Standards mid-year 2007, Brazos Electric submits that the alleged violations cannot recur. Therefore, Mitigation Plan should be deemed to have been implemented and be complete.

**Check this box  and proceed to Section E of this form if this Mitigation Plan, as set forth in Part D.1, has already been completed; otherwise respond to Part D.2, D.3 and, optionally, Part D.4, below.**

**Mitigation Plan Timeline and Milestones**

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

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

Milestone Activity	Proposed Completion Date* (shall not be more than 3 months apart)

(\* Note: 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 for not completing work associated with accepted milestones.



[Note: Provide your response here; additional detailed information may be provided as an attachment as necessary]

**Additional Relevant Information (Optional)**

D.4 If you have any relevant additional information that you wish to include regarding the mitigation plan, milestones, milestones dates and completion date proposed above you may include it here:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



**Section E: Interim and Future Reliability Risk**

**Check this box  and proceed and respond to Part E.2 and E.3, below, if this Mitigation Plan, as set forth in Part D.1, has already been completed.**

**Abatement of Interim BPS Reliability Risk**

- E.1 While your organization is implementing the Mitigation Plan proposed in Part D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

**Prevention of Future BPS Reliability Risk**

- E.2 Describe how successful completion of the Mitigation Plan as laid out in Part D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

As stated, the alleged violation was corrected by completing the testing of such relays on or before November 14, 2007. All maintenance was completed prior to the TRE audit. Brazos Electric's pre-2007 maintenance procedures had already been modified to eliminate the previously authorized practice of deferring a limited amount of maintenance initially scheduled for one calendar year to the immediately following calendar year. Furthermore, the relay maintenance schedule now includes a target completion date for relay testing one (1) year prior to the scheduled due date to allow ample time for that testing to be completed prior to the scheduled due date.

- E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Part D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Part C.2, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Brazos Electric is implementing the following amendments to its written procedures for PRC 005-1 to assure comprehensive documentation of its compliance with its maintenance schedules

- A new position was created with the responsibility to update the equipment maintenance database on a daily basis. The position has been filled (as of 7/14/08) and the new employee is in training

- Maintenance schedules will be reviewed by the Mgr. Transmission Maintenance on a **weekly basis**
- Maintenance schedules will be reviewed by the Vice President – Transmission Division on a **monthly basis**
- A report on compliance with the maintenance schedules will be presented to the Transmission and Distribution Planning – Operations Committee of the Brazos Electric Board of Directors on a **quarterly basis**

Additionally, Brazos Electric has, at considerable expense, retained an independent consultant to assist Brazos Electric in the specification, evaluation and implementation of systems, processes and procedures for monitoring to assure compliance with maintenance schedules and the Reliability Requirements.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

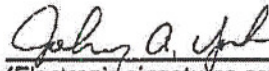


**Section F: Authorization**

An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

- a) Submits the Mitigation Plan, as laid out in Section D of this form, Texas RE for acceptance by Texas RE and approval by NERC, and
- b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
  1. I am Vice President - Transmission of Brazos Electric Power Cooperative, Inc.
  2. I am qualified to sign this Mitigation Plan on behalf of Brazos Electric Power Cooperative, Inc.
  3. I have read and understand Brazos Electric Power Cooperative, Inc obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure, including Appendix 4(C) (Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation" (NERC CMEP)).
  4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  5. Brazos Electric Power Cooperative, Inc agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by Texas RE and approved by NERC.

**Authorized Individual Signature**



(Electronic signatures are acceptable; see CMEP)

Name (Print): Johnny A. York  
Title: Brazos Electric Power Cooperative, Inc.  
Date: October 6, 2008



## Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: October 6, 2008

If this Mitigation Plan has already been completed:

- Check this box  and
- Provide the Date of Completion of the Mitigation Plan: 11/14/07

### Section A: Compliance Notices

- Section 6.2 of the CMEP<sup>1</sup> 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 2.0.
  - (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 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.
- This submittal form may be used to provide a required Mitigation Plan for review and approval by Texas Regional Entity (Texas RE) and NERC.
- The Mitigation Plan shall be submitted to the Texas RE and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

<sup>1</sup> "Uniform Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on NERC's website.





- This Mitigation Plan form may be used to address one or more related violations of one Reliability Standard. A separate mitigation plan is required to address violations with respect to each additional Reliability Standard, as applicable.
- If the Mitigation Plan is approved by Texas RE and NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- Texas RE 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.

**Section B: Registered Entity Information**

**B.1 Identify your organization:**

Company Name: Brazos Electric Power Cooperative, Inc.  
Company Address: 2404 LaSalle Avenue, Waco, Texas 76706  
NERC Compliance Registry ID: NCR04015

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

Name: Johnny A. York  
Title: Vice President - Transmission  
Email: jyork@brazoselectric.com  
Phone: 254-750-6377

**Section C: Identify of Reliability Standard Violations Associated with this Mitigation Plan**

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

- C.1 Standard: PRC 008-0**  
*[Identify by Standard Acronym (e.g. FAC-001-1)]*

**C.2 Requirement(s) alleged to have been violated and alleged violation dates:**  
*Enter information in the following Table*

NERC Violation ID # [if known]	Texas RE Violation ID # [if known]	Requirement Violated (e.g. R3.2)	Violation Date <sup>(*)</sup>
	200800044	R2	6/17/07

(\*) Note: The Violation Date shall be: (i) the date the violation was alleged to have occurred; (ii) the date that the alleged violation was self-reported; or (iii) the date that the alleged violation has been deemed to have occurred on by Texas RE. Questions regarding the date to use should be directed to the Texas RE.

**C.3 Identify the cause of the alleged violation(s) identified above:**

Prior to 2007, Brazos Electric maintenance procedures allowed for carryover of a percentage of maintenance activities from the calendar year in which the maintenance was originally scheduled to the next succeeding calendar year. Beginning in 2007 Brazos Electric changed its maintenance procedures. Under the new maintenance procedures all scheduled relay maintenance activity is completed during the calendar year in which the maintenance is first scheduled to be performed.

The under-frequency relay panels in question originally were scheduled for testing during the 2006 calendar year. In accordance with the then effective maintenance procedures, the testing of these under-frequency relay panels was carried over to the 2007 calendar year. The decision to reschedule the testing was made in 2006. Once that decision had been made, under Brazos Electric's then effective maintenance policies the effective schedule for testing of the facilities became calendar year 2007. All testing was completed in accordance with the new schedule by November 14, 2007 with no problems detected.

The alleged violation revolves on (i) the validity of Brazos Electric's interpretation of its own pre-2007 maintenance procedures as allowing a rescheduling of maintenance such that testing would be completed at any time during calendar year 2007, and (ii) whether an event subsequent (viz: the June 17, 2007 effective date of the Reliability Standards) could operate to invalidate or otherwise nullify a previously established and otherwise valid maintenance schedule. Brazos Electric believes that (i) its interpretation of its maintenance procedures in effect during 2006 was correct, (ii) its determination to carry certain scheduled maintenance over to calendar year 2007 was valid and effective, and (iii) the subsequent effectiveness of new Reliability Standards could not operate retroactively to invalidate the previously established maintenance schedule for calendar year 2007.

**C.4 [Optional] Provide any relevant additional information regarding the violations associated with this Mitigation Plan:**

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



**Section D: Details of Proposed Mitigation Plan**

**Mitigation Plan Contents**

**D.1** Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violations identified above in Part C.2 of this form:

As stated, the alleged violation was an alleged failure to test the subject under-frequency relays as scheduled in accordance with Brazos Electric's maintenance plan, prior to June 17, 2007. All under-frequency relays were tested by November 14, 2007 in accordance with the then effective Brazos Electric maintenance schedule. In view of the fact that the basis for the alleged violation was the interplay of Brazos Electric's pre-2007 maintenance procedures, that have now been superseded, and the effect of implementation of new Reliability Standards mid-year in calendar year 2007, a mitigation plan should be designed to prevent a recurrence of the alleged event. Given the change in Brazos Electric's maintenance procedures effective 2007, and given the "one time" nature of the effectiveness of new Reliability Standards mid-year 2007, Brazos Electric submits that the alleged violations cannot recur. Therefore, Mitigation Plan should be deemed to have been implemented and be complete.

**Check this box  and proceed to Section E of this form if this Mitigation Plan, as set forth in Part D.1, has already been completed; otherwise respond to Part D.2, D.3 and, optionally, Part D.4, below.**

**Mitigation Plan Timeline and Milestones**

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

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

Milestone Activity	Proposed Completion Date* (shall not be more than 3 months apart)

(\* Note: 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 for not completing work associated with accepted milestones.



[Note: Provide your response here; additional detailed information may be provided as an attachment as necessary]

**Additional Relevant Information (Optional)**

D.4 If you have any relevant additional information that you wish to include regarding the mitigation plan, milestones, milestones dates and completion date proposed above you may include it here:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



**Section E: Interim and Future Reliability Risk**

**Check this box  and proceed and respond to Part E.2 and E.3, below, if this Mitigation Plan, as set forth in Part D.1, has already been completed.**

**Abatement of Interim BPS Reliability Risk**

- E.1 While your organization is implementing the Mitigation Plan proposed in Part D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

**Prevention of Future BPS Reliability Risk**

- E.2 Describe how successful completion of the Mitigation Plan as laid out in Part D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

As stated, the alleged violation was corrected by completing the testing of such under-frequency relays on or before November 14, 2007. All maintenance was completed prior to the TRE audit. Brazos Electric's pre-2007 maintenance procedures had already been modified to eliminate the previously authorized practice of deferring a limited amount of maintenance initially scheduled for one calendar year to the immediately following calendar year. Furthermore, the relay maintenance schedule now includes a target completion date for relay testing one (1) year prior to the scheduled due date to allow ample time for that testing to be completed prior to the scheduled due date.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

- E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Part D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Part C.2, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

Brazos Electric is implementing the following amendments to its written procedures for PRC 008-0 to assure comprehensive documentation of its compliance with its maintenance schedules



- A new position was created with the responsibility to update the equipment maintenance database on a daily basis. The position has been filled (as of 7/14/08) and the new employee is in training
- Maintenance schedules will be reviewed by the Mgr. Transmission Maintenance on a **weekly basis**
- Maintenance schedules will be reviewed by the Vice President – Transmission Division on a **monthly basis**
- A report on compliance with the maintenance schedule will be presented to the Transmission and Distribution Planning – Operations Committee of the Brazos Electric Board of Directors on a **quarterly basis**

Additionally, Brazos Electric has, at considerable expense, retained an independent consultant to assist Brazos Electric in the specification, evaluation and implementation of systems, processes and procedures for monitoring to assure compliance with maintenance schedules and the Reliability Requirements.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]





**Section F: Authorization**

An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

- a) Submits the Mitigation Plan, as laid out in Section D of this form, Texas RE for acceptance by Texas RE and approval by NERC, and
- b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
  - 1. I am Vice President - Transmission of Brazos Electric Power Cooperative, Inc.
  - 2. I am qualified to sign this Mitigation Plan on behalf of Brazos Electric Power Cooperative, Inc.
  - 3. I have read and understand Brazos Electric Power Cooperative, Inc. obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure, including Appendix 4(C) (Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation" (NERC CMEP)).
  - 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  - 5. Brazos Electric Power Cooperative, Inc. agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by Texas RE and approved by NERC.

Authorized Individual Signature

A handwritten signature in black ink, appearing to read "Johnny A. York", written over a horizontal line.

(Electronic signatures are acceptable; see CMEP)

Name (Print): Johnny A. York  
Title: Vice President - Transmission  
Date: October 6, 2008



**Section G: Comments and Additional Information**

You may use this area to provide comments or any additional relevant information not previously addressed in this form.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

Submit completed and signed forms to [mitigation@texasre.org](mailto:mitigation@texasre.org)

Please direct any questions regarding completion of this form to:

Texas Regional Entity  
Rashida Williams  
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## **Attachment d**

### **Texas RE's Verification of Completion of the Mitigation Plans, dated February 5, 2009**

February 5, 2009

Re: Texas Regional Entity (Texas RE) Mitigation Plan Verification of Completion

Registered Entity: Brazos Electric Power Cooperative (Brazos)

Violation Number(s): TRE200800043, TRE200800044

It was discovered during a February 28, 2008 audit that Brazos scheduled interval testing was not met for four 138 KV panels (TRE200800043) and six UFLS relays (TRE200800044). This work was completed during 2007 but was not fully completed prior to June 28, 2007.

Brazos identified in their mitigation plan that maintenance procedures would be changed and that untested relays would be tested in accordance with the effective maintenance schedule.

Relays not formally tested for the entire audit period were tested by the end of 2007 and were found to be operating properly. During the audit, Texas RE verified that the testing of the panel and UFLS relays had been completed.

Based on evidence presented by Brazos and reviewed by Texas RE, this letter confirms the above mentioned mitigation plans are complete.

**Attachment e**

**Notice of Filing**

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Brazos Electric Power Cooperative, Inc.

Docket No. NP09-\_\_\_\_-000

NOTICE OF FILING  
September 25, 2009, 2009

Take notice that on September 25, 2009, 2009, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Brazos Electric Power Cooperative, Inc. in the Texas Regional Entity region.

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

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

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

Comment Date: [BLANK]

Kimberly D. Bose,  
Secretary