

April 28, 2016

VIA ELECTRONIC FILING

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

**Re: NERC Full Notice of Penalty regarding Westar Energy, Inc.,
FERC Docket No. NP16-_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding Westar Energy, Inc. (Westar), NERC Registry ID# NCR00658,² with information and details regarding the nature and resolution of the violations³ discussed in detail in the Settlement Agreement attached hereto (Attachment A), in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC's Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).⁴

NERC is filing this Notice of Penalty with the Commission because Southwest Power Pool Regional Entity (SPP RE) and Westar have entered into a Settlement Agreement to resolve all outstanding issues

¹ *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards* (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); *Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation*, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2016). *Mandatory Reliability Standards for the Bulk-Power System*, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), *reh'g denied*, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

² Westar was included on the NERC Compliance Registry as a Balancing Authority (BA) from May 31, 2007 to March 11, 2014, and as a Distribution Provider, Generator Owner, Generator Operator, Resource Planner, Transmission Owner, Transmission Operator (TOP), and Transmission Planner on May 31, 2007.

³ For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

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

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arising from SPP RE's determination and findings of the violations of TOP-002-2 R6, TOP-004-1 R2, TOP-004-2 R3, and TOP-004-1 R4.

According to the Settlement Agreement, Westar neither admits nor denies the violations and has agreed to the assessed penalty of two hundred and twenty thousand dollars (\$220,000), in addition to other remedies and actions to mitigate the instant violations and facilitate future compliance under the terms and conditions of the Settlement Agreement.

Statement of Findings Underlying the Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement, by and between SPP RE and Westar. 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).

SPP RE initiated a Compliance Investigation following an August 19, 2009 event involving Westar's Wolf Creek Nuclear Power Station (Wolf Creek).⁵ At the time, NERC managed most Compliance Investigations, and it proceeded to assume management of the Compliance Investigation in 2010. NERC's Investigation staff identified potential noncompliance in 2012. NERC transferred enforcement responsibility for the noncompliance to SPP RE in 2013. None of the violations resolved in the Settlement Agreement caused or contributed to the event.

The violations included in the Settlement Agreement resulted from Westar's failure to perform stability studies consistent with the intended operation of Wolf Creek.⁶ In addition, Westar did not amend its transmission operating directives to reflect the results of its stability studies. As a result, Wolf Creek operated above proven system operating limits for extended times during a four-year period.

⁵ The event began when a suspected lightning strike tripped the first of three 345 kV transmission lines connected to the Wolf Creek substation. A second line tripped when a protective relay overreached, and the third line tripped because of generator output swings induced by the loss of the first two lines. Westar's system operators restored power to Wolf Creek and to the 69 kV loads served by the Wolf Creek substation within one minute of the initial trip of the first transmission line. Only 11 megawatts of load were lost during the event, and the Westar system returned to a normal operating condition within 15 minutes.

⁶ Wolf Creek began commercial operation in 1985 with a capacity rating of 1170 megawatts electric (MWe) gross. In 1993, a stretch power uprate of the reactor increased Wolf Creek's generating capacity to 1236 MWe gross/1185 MWe net.

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In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2016), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement. Further information on the subject violations is set forth in the Settlement Agreement.

*SR = Self-Report / SC = Self-Certification / CA = Compliance Audit / SPC = Spot Check / CI = Compliance Investigation

NERC Violation ID	Standard	Req	VRF/ VSL	Applicable Function(s)	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
SPP2013012077	TOP-002-2	R6	Medium/ Severe	BA, TOP	CI 6/8/2012	9/16/2007-3/17/2011*	Serious	\$220,000
SPP2013011995	TOP-004-1	R2	High/ Severe	TOP		2/17/2009-12/22/2010	Moderate	
SPP2013011997	TOP-004-2	R3				9/16/2007-3/17/2011*	Serious	
SPP2013011999	TOP-004-1	R4						

*Operation of Wolf Creek above the operating limit evaluated in its stability studies was not continuous during the violation duration and was limited to off-peak system conditions.

SPP2013012077 TOP-002-2 R6 OVERVIEW

SPP RE determined that on multiple occasions between September 16, 2007, and December 22, 2010, Westar failed to implement operating guides and/or establish operating limits for the operation of Wolf Creek that were consistent with the results of its stability studies. Notwithstanding an uprate of Wolf Creek net generation to 1,185 MWe in 1993, Westar failed to ensure that its stability studies accurately reflected the intended operation of Wolf Creek at or above 1,185 MWe net. Additionally, Westar operated Wolf Creek above 1,185 MWe net generation for substantial periods during those times when Wolf Creek was most susceptible to instability.

SPP RE determined that this violation posed a serious or substantial risk to the reliability of the bulk power system (BPS). Attachment B includes the facts regarding the violation that SPP RE considered in its risk assessment.

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Westar submitted its Mitigation Plan designated SPPMIT011843 to address the referenced violation on November 13, 2015. Attachment B includes a description of the mitigation activities Westar took to address this violation. A copy of the Mitigation Plan is included as Attachment C-1.

SPP RE verified on November 18, 2015, that Westar had completed all mitigation activities on March 17, 2011. Attachments B and C-3 provide specific information on SPP RE's verification of Westar's completion of the activities.

SPP2013011995 TOP-004-1 R2 OVERVIEW

SPP RE determined that on multiple occasions between September 2007 and March 2011, Westar operated Wolf Creek in excess of the net generation output validated in its stability studies for the most severe single contingency.

SPP RE determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts regarding the violation that SPP RE considered in its risk assessment.

Westar submitted its Mitigation Plan designated SPPMIT011840 to address the referenced violation on November 12, 2015. Attachment B includes a description of the mitigation activities Westar took to address this violation. A copy of the Mitigation Plan is included as Attachment D-1.

SPP RE verified on November 18, 2015, that Westar had completed all mitigation activities on March 17, 2011. Attachments B and D-3 provide specific information on SPP RE's verification of Westar's completion of the activities.

SPP2013011997 TOP-004-2 R3 OVERVIEW

SPP RE determined that on multiple occasions between February 17, 2009, and December 22, 2010, Westar failed to amend its operating directives to incorporate mitigating measures for Wolf Creek that were consistent with the results of stability studies for loss of one of the Wolf Creek 345 kV transmission lines.

SPP RE determined that this violation posed a moderate and not a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts regarding the violation that SPP RE considered in its risk assessment.

Westar submitted its Mitigation Plan designated SPPMIT011841 to address the referenced violation on November 13, 2015. Attachment B includes a description of the mitigation activities Westar took to address this violation. A copy of the Mitigation Plan is included as Attachment E-1.

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SPP RE verified on November 18, 2015, that Westar had completed all mitigation activities on December 22, 2010. Attachments B and E-3 provide specific information on SPP RE's verification of Westar's completion of the activities.

SPP2013011999 TOP-004-1 R4 OVERVIEW

SPP RE determined that on multiple occasions between September 2007 and March 2011, Westar operated Wolf Creek in excess of the net generation output validated in its stability studies, thereby entering a state for which valid operating limits had not been determined. Additionally, upon entering an unknown state, Westar failed to restore operation of Wolf Creek to proven reliable power system limits within 30 minutes.

SPP RE determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts regarding the violation that SPP RE considered in its risk assessment.

Westar submitted its Mitigation Plan designated SPPMIT011842 to address the referenced violation on November 13, 2015. Attachment B includes a description of the mitigation activities Westar took to address this violation. A copy of the Mitigation Plan is included as Attachment F-1.

SPP RE verified on November 18, 2015, that Westar had completed all mitigation activities on March 17, 2011. Attachments B and F-3 provide specific information on SPP RE's verification of Westar's completion of the activities.

Regional Entity's Basis for Penalty

According to the Settlement Agreement, SPP RE has assessed a penalty of two hundred and twenty thousand dollars (\$220,000) for the referenced violations. In reaching this determination, SPP RE considered the following factors:

1. the instant violations constitute Westar's first occurrence of violations of the subject NERC Reliability Standards.
2. Westar had an internal compliance program (ICP) at the time of the violations which SPP RE considered a mitigating factor, as discussed in Attachment B;
3. Westar was cooperative throughout the compliance enforcement process;
4. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;

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5. three violations posed a serious risk, and one violation posed a moderate and not a serious or substantial risk, to the reliability of the BPS, as discussed in Attachment B;
6. notwithstanding affirmative indications of potential instability, Westar continued to operate Wolf Creek above the generation level where instability was indicated and failed to revise its operating directives to ensure Wolf Creek stability for a multiple outage scenario. SPP RE considers such actions to be an aggravating factor in its penalty determination because they indicate a lack of due diligence by Westar to ensure the safe and reliable operation of its transmission system; and
7. there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

After consideration of the above factors, SPP RE determined that, in this instance, the penalty amount of two hundred and twenty thousand dollars (\$220,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violations.

NERC Enforcement Review

NERC Enforcement staff considered the risk posed by the violations to the reliability of the BPS and supports SPP RE's determination of "serious" for three of the violations, and "moderate" for one violation. Westar operated Wolf Creek above its validated stability limits for substantial periods over the course of four years. The lack of valid stability studies to confirm Wolf Creek's ability to operate reliably above 1185 MWe net generation and the transmission system's ability to support that operation posed a serious risk to the reliability of the bulk power system.

Even with this serious risk assessment, several factors partially reduced the overall seriousness of the violations and affected the penalty determination. While an event led to the Compliance Investigation and the discovery of the violations, the violations were not associated with the event. Although Westar violated the Reliability Standards in this case by operating Wolf Creek at generation levels unsubstantiated by stability studies, historical operating data indicated that maintaining Wolf Creek's output marginally above 1185 MWe did not lead to instability. Westar's operating data showed that for a broad spectrum of system load conditions, with Wolf Creek operating above 1185 MWe net generation, Wolf Creek would remain stable following the most severe single contingency, the loss of one of the Wolf Creek substation 345 kV transmission lines. For the periods that Westar operated Wolf Creek above 1185 MWe net generation, the average net generation was 1189 MWe, or 0.34% above the known stability limit. The maximum net generation for those periods was 1207.8 MWe, or 1.4% above 1185 MWe net generation. In sum, Westar's variances were relatively small, and no harm resulted from the violations in this case.

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The NERC Sanction Guidelines permit a single aggregate penalty for violations related to a single act or common incidence of noncompliance, provided the penalty bears a reasonable relationship to the aggregate of the violations. SPP RE applied a single aggregate penalty for the violations of TOP-002-2 R6, TOP-004-1 R2, and TOP-004-1 R4. In reviewing the penalty in this case, NERC Enforcement staff determined that those three violations related to a single act or common incidence of noncompliance, in that Westar failed to perform accurate stability studies and to update its operating directives in accordance with the results of the existing stability studies. NERC Enforcement staff concluded that when Westar operated above the studied limits for Wolf Creek, those actions concurrently violated TOP-002-2 R6, TOP-004-1 R2, and TOP-004-1 R4.

Under the Sanction Guidelines, the highest penalty among the aggregated violations should apply. In this case, the violation of TOP-004-1 R2 resulted in the highest penalty, so NERC Enforcement staff added that amount to the penalty for the TOP-004-2 R3 violation to produce the total penalty range for use in evaluating SPP RE's determined penalty.

In evaluating SPP RE's aggravation of the penalty, NERC Enforcement staff considered Westar's lack of due diligence regarding stability studies to be a significant disregard for the requirements of the NERC Reliability Standards. NERC Enforcement staff determined that level of disregard warranted an increase in the financial penalty. Based on this behavior, NERC Enforcement staff applied an aggravating factor.

SPP RE highlighted Westar's ICP in the Settlement Agreement, especially employee training, software for education and tracking of annual compliance assessments, and the active involvement of senior management. NERC Enforcement staff applied a lower than average mitigating credit for Westar's ICP because of the lack of due diligence described above.

After applying the above aggravating and mitigating factors, NERC Enforcement staff determined that SPP RE's assessed penalty of two hundred and twenty thousand dollars (\$220,000) is appropriate.

NERC Enforcement staff also compares penalties from prior cases to assess the reasonableness of determined penalties. For example, NERC Enforcement staff considered previous cases involving violations of TOP-002 and TOP-004 to assess the consistency of this Settlement Agreement with prior dispositions. The two most relevant cases were a NERC agreement with Sacramento Municipal Utility District (SMUD) for one hundred thousand dollars (\$100,000) and an SPP RE agreement with Kansas City Power and Light (KCPL) for four hundred thousand dollars (\$400,000). In the SMUD case, over 58,000 customers lost electricity for approximately 30 minutes while SMUD operated in an unknown state. NERC (as the Compliance Enforcement Authority) afforded significant "above and beyond" credit to SMUD for its investment in redundant protections. Absent such credit, the penalty would

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likely have been three or four times larger. In the KCPL case, 48,000 customers lost power for over 90 minutes because KCPL operated the system such that an outage resulted from the most severe single contingency. KCPL also violated several other Reliability Standards by failing to plan for scheduled outages and maintain sufficient reactive resources to support voltage under normal or contingency conditions.

In the SMUD and KCPL cases, the Transmission Operators did not maintain reliable operations during stressed system conditions. The violations in those cases resulted in loss of load, which factored into the penalty determinations. The violations in the instant case did pose a serious risk to reliability, but Westar's operations were not as far from the expected norms as those of SMUD and KCPL. NERC Enforcement staff concluded based on these factors that Westar's violations were not as serious as those in SMUD and KCPL and therefore justified the two hundred and twenty thousand dollars (\$220,000) penalty in this case.

Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed⁷

Basis for Determination

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008, October 26, 2009 and August 27, 2010 Guidance Orders,⁸ the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on April 7, 2016, and approved the Settlement Agreement. In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violations at issue.

For the foregoing reasons, the NERC BOTCC approved the Settlement Agreement and believes that the assessed penalty of two hundred and twenty thousand dollars (\$220,000) is appropriate for the violations and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

⁷ See 18 C.F.R. § 39.7(d)(4).

⁸ *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); *North American Electric Reliability Corporation*, "Further Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009); *North American Electric Reliability Corporation*, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).

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

Attachments to be Included as Part of this Notice of Penalty

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

- a) Settlement Agreement by and between SPP RE and Westar executed December 10, 2015, included as Attachment A.
- b) Disposition of Violation Document, dated November 3, 2015, included as Attachment B.
- c) Record documents for the violation of TOP-002-2 R6 (SPP2013012077), included as Attachment C:
 - 1. Westar's Mitigation Plan designated as SPPMIT011843 submitted November 13, 2015, included as Attachment C-1;
 - 2. Westar's Certification of Mitigation Plan SPPMIT011843 Completion dated November 13, 2015, included as Attachment C-2; and
 - 3. SPP RE's Verification of Mitigation Plan SPPMIT011843 Completion dated November 18, 2015, included as Attachment C-3.
- d) Record documents for the violation of TOP-004-1 R2 (SPP2013011995), included as Attachment D:
 - 1. Westar's Mitigation Plan designated as SPPMIT011840 submitted November 12, 2015, included as Attachment D-1;
 - 2. Westar's Certification of Mitigation Plan SPPMIT011840 Completion dated November 12, 2015, included as Attachment D-2; and
 - 3. SPP RE's Verification of Mitigation Plan SPPMIT011840 Completion dated November 18, 2015, included as Attachment D-3.
- e) Record documents for the violation of TOP-004-2 R3 (SPP2013011997), included as Attachment E:
 - 1. Westar's Mitigation Plan designated as SPPMIT011841 submitted November 12, 2015, included as Attachment E-1;

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2. Westar's Certification of Mitigation Plan SPPMIT011841 Completion dated November 12, 2015, included as Attachment E-2; and
 3. SPP RE's Verification of Mitigation Plan SPPMIT011841 Completion dated November 18, 2015, included as Attachment E-3.
- f) Record documents for the violation of TOP-004-1 R4 (SPP2013011999), included as Attachment F:
1. Westar's Mitigation Plan designated as SPPMIT011842 submitted November 13, 2015, included as Attachment F-1;
 2. Westar's Certification of Mitigation Plan SPPMIT011842 Completion dated November 13, 2015, included as Attachment F-2; and
 3. SPP RE's Verification of Mitigation Plan SPPMIT011842 Completion dated November 18, 2015, included as Attachment F-3.

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

<p>Mr. Ron Ciesiel* General Manager, Southwest Power Pool Regional Entity 201 Worthen Drive Little Rock, AR 72223 rciesiel.re@spp.org 501-614-3265</p> <p>Mr. Joe Gertsch* Manager of Enforcement, Southwest Power Pool Regional Entity 201 Worthen Drive Little Rock, AR 72223 jgertsch.re@spp.org 501-688-1672</p> <p>Mr. Larry Irick* VP, General Counsel and Corporate Secretary Westar Energy, Inc. 818 South Kansas Avenue Topeka, Kansas 66612 Larry.Irick@WestarEnergy.com 785-575-1625</p> <p>Mr. Jeff Martin* VP, Regulatory Affairs Westar Energy, Inc. 818 South Kansas Avenue Topeka, Kansas 66612 jeff.martin@westarenergy.com 785-575-6362</p>	<p>Sonia C. Mendonça* Vice President of Enforcement and Deputy General Counsel North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile sonia.mendonca@nerc.net</p> <p>Edwin G. Kichline* Senior Counsel and Associate Director, Enforcement North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile edwin.kichline@nerc.net</p>
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Mr. Bo Jones*
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785-575-1680

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

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Conclusion

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

Respectfully submitted,

/s/ Edwin G. Kichline

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Vice President of Enforcement and Deputy
Edwin G. Kichline
Senior Counsel and Associate Director,
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cc: Westar Energy, Inc.
Southwest Power Pool Regional Entity

Attachments

Attachment A

**Settlement Agreement by and between
SPP RE and Westar executed
December 10, 2015.**

**SETTLEMENT AGREEMENT
OF
SOUTHWEST POWER POOL REGIONAL ENTITY
AND
WESTAR ENERGY, INC.**

I. INTRODUCTION

1. The Southwest Power Pool Regional Entity ("SPP RE") and Westar Energy, Inc. ("Westar") (hereinafter referred to individually as "Party" and collectively as the "Parties") enter into this Settlement Agreement ("Agreement") to resolve all outstanding issues arising from the non-public determination by SPP RE, pursuant to the North American Electric Reliability Corporation ("NERC") Rules of Procedure, of the violation by Westar of the following NERC Reliability Standards ("Violations")¹.

NERC Violation Identification No.	Reliability Standard	Requirement(s)	Discovery Method	Date of Violation
SPP2013012077	TOP-002-2	R6	Investigation	9/16/07
SPP2013011995	TOP-004-1	R2	Investigation	9/16/07
SPP2013011997	TOP-004-2	R3	Investigation	2/17/09
SPP2013011999	TOP-004-1	R4	Investigation	9/16/07

2. Westar neither admits nor denies the Violations and has agreed to the proposed penalty of **\$220,000** to be assessed by SPP RE for the purpose of resolving all outstanding issues relating to the Violations pursuant to the terms and conditions of this Agreement.

II. STIPULATIONS

3. The Parties enter into this Agreement and agree to the facts stipulated herein in order to avoid uncertainty and to effectuate a complete and final resolution of the Violations. The facts stipulated herein are stipulated solely for the purpose of resolving the Violations and do not represent stipulations or admissions, by either Party, for any other purpose. In consideration of the terms set forth herein, SPP RE and Westar hereby stipulate and agree to the following:

A. BACKGROUND

4. See Section I of the Disposition Document, Attachment 1 for a description of Westar.

B. VIOLATION(S)

5. See Section II of the Disposition Document, Attachment 1 for a description of the Violations.

¹ For purposes of this document and attachments hereto, the violations at issue are described as a "violation," regardless of their procedural posture and whether they are a possible, alleged, or confirmed violation.



III. PARTIES' SEPARATE REPRESENTATIONS

A. STATEMENT OF SPP RE

6. As a result of SPP RE's assessment of the Alleged Violations, SPP RE has established sufficient facts to reasonably support the Westar Violations.
7. SPP RE has determined that Westar has completed a Mitigation Plan for each of the Violations.
8. SPP RE agrees that this Agreement is in the best interest of the Parties and Bulk Power System ("BPS") reliability.

B. STATEMENT OF WESTAR

9. Westar neither admits nor denies that the facts set forth and agreed to by the Parties for purposes of this Agreement constitute violations of the identified NERC Reliability Standards.
10. Westar has agreed to enter into this Agreement with SPP RE to avoid extended litigation with respect to this matter, to avoid uncertainty, and to effectuate a complete and final resolution of the Violations.
11. Westar agrees that this Agreement is in the best interest of the Parties and BPS reliability.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

12. SPP RE and Westar agree that Westar has completed and SPP RE has verified completion of the mitigating actions set forth in Section IV of the Disposition Documents, Attachment 1.
13. SPP RE considered the specific facts and circumstances of the Violations, including Westar's actions in mitigation thereof, in determining a penalty satisfying the requirement in Section 215 of the Federal Power Act that "[a]ny penalty imposed under this section shall bear a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of the Registered Entity to remedy the violation in a timely manner." The factors considered by SPP RE Staff in the determination of an appropriate penalty are set forth in Section V of Disposition Document, Attachment 1.
14. In settlement of all outstanding issues related to the Violations, the Parties agree that Westar shall pay a civil penalty in the amount of **\$220,000** ("Penalty") to SPP RE via wire transfer or cashier's check payable to a SPP RE account that will be outlined in a Notice of Payment sent to Westar upon approval or acceptance of this Agreement by the NERC Board of Trustees and by the Federal Energy Regulatory Commission ("FERC" or the "Commission"), either by order or by operation of law. Payment to SPP RE shall be made within thirty (30) days after the receipt of the Notice of Payment. SPP RE shall inform NERC if the payment is not timely received.

Attachment B

**Disposition of Violation Document, dated
November 3, 2015.**

DISPOSITION OF VIOLATION¹

November 3, 2015

REGISTERED ENTITY
Westar Energy, Inc. (Westar)

NERC REGISTRY ID
NCR00658

REGIONAL ENTITY
Southwest Power Pool Regional Entity (SPP RE)

I. REGISTRATION INFORMATION

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

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
5/31/07 ²	5/31/07	5/31/07	5/31/07		5/31/07		5/31/07		5/31/07		5/31/07	5/31/07	5/31/07	5/31/07 ³

* VIOLATIONS APPLY TO SHADED FUNCTIONS⁴

DESCRIPTION OF THE REGISTERED ENTITY

Westar is an investor owned, vertically integrated electric utility, with headquarters in Topeka, Kansas. The electric utility employs 2,400 people and serves more than 679,000 electric customers in eastern Kansas. Westar has a generating capacity of more than 6,800 megawatts and operates approximately 35,000 miles of transmission and distribution lines.

Westar, Kansas City Power and Light, and the Kansas Electric Power Cooperative are the owners of the Wolf Creek Nuclear Power Station (Wolf Creek), a 1200 MW nuclear generating station located near Burlington, Kansas.⁵ The Wolf Creek Nuclear Operating Corporation operates Wolf Creek on behalf of Westar and the other owners.

Wolf Creek is interconnected to the Bulk Power System (BPS) at the 345 kV Wolf Creek substation, located adjacent to Wolf Creek.⁶ Because Westar is the Transmission

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

² Westar was registered as a Balancing Authority from May 31, 2007 to March 11, 2014.

³ Westar was registered as a Transmission Service Provider from May 31, 2007 to March 1, 2011.

⁴ The TOP-002-2 R6 violation applies to the Balancing Authority and Transmission Operator functions. The TOP-004-1 R2, R4 and TOP-004-2 R3 violations apply to the Transmission Operator function.

⁵ Westar's ownership interest in Wolf Creek is 47%, Kansas City Power and Light – 47% and Kansas Electric Power Cooperative – 6%.

⁶ See Appendix A for a one line diagram of the Wolf Creek substation.

Operator for the Wolf Creek substation and the three interconnecting 345 kV transmission lines, it has responsibility for the Transmission Operator functions for the Wolf Creek substation.⁷

Westar performed the Balancing Authority function until March 11, 2014, when the Southwest Power Pool, Inc. (SPP) assumed all of Westar's Balancing Authority responsibilities. The SPP is the Reliability Coordinator for Westar.

II. VIOLATION INFORMATION

NERC Violation Identification Number	RELIABILITY STANDARD	REQ	VRF	VSL
SPP2013012077	TOP-002-2 ⁸	R6	Medium	Severe
SPP2013011995	TOP-004-1 ⁹	R2	High	Severe
SPP2013011997	TOP-004-2	R3	High	Severe
SPP2013011999	TOP-004-1 ⁹	R4	High	Severe

PURPOSE AND TEXT OF THE RELIABILITY STANDARD AND REQUIREMENT(S)

The Purpose Statement of TOP-002-2 states: "Current operations plans and procedures are essential to being prepared for reliable operations, including response for unplanned events."

Requirement 6 of TOP-002-2 states: "Each Balancing Authority and Transmission Operator shall plan to meet unscheduled changes in system configuration and generation dispatch (at a minimum N-1 Contingency planning) in accordance with NERC, Regional Reliability Organization¹⁰, subregional, and local reliability requirements."

The Purpose Statement of TOP-004-1 states: "To ensure that the transmission system is operated so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single Contingency and specified multiple Contingencies."¹¹

⁷ By mutual agreement of the owners of Wolf Creek, Westar is solely responsible for the Generator Operator and Generator Owner functions of Wolf Creek.

⁸ Westar's violation of TOP-002-2 began on 9/16/07 and ended on 3/17/11 thereby implicating TOP-002-2a which became mandatory and enforceable on 12/2/09.

⁹ Westar's violation of TOP-004-1 R2 and R4 began on 9/16/07 and ended on 3/17/11 thereby implicating TOP-004-2 which became mandatory and enforceable on 1/22/09.

¹⁰ The transmission system shall be planned to withstand all single element contingencies and maintenance outages over the load conditions of all seasonal models as developed by MDWG [Model Development Working Group]. Southwest Power Pool Criteria, § 3.1 Regional Transmission Planning Concepts, pg. 3-2, (2008).

¹¹ Contingency is defined in the *Glossary of Terms Used in NERC Reliability Standards* as "[t]he unexpected failure or outage of a system component, such as a generator, transmission line, circuit breaker, switch or other electrical element."

Requirement 2 of TOP-004-1 states: “Each Transmission Operator shall operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency.”

Requirement 4 of TOP-004-1 states: “If a Transmission Operator enters an unknown operating state (i.e. any state for which valid operating limits have not been determined), it will be considered to be in an emergency and shall restore operations to respect proven reliable power system limits within 30 minutes.”

The Purpose Statement of TOP-004-2 states: “To ensure that the transmission system is operated so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single Contingency and specified multiple Contingencies.”

Requirement 3 of TOP-004-2 states: “Each Transmission Operator shall, when practical, operate to protect against instability, uncontrolled separation, or cascading outages resulting from multiple outages, as specified by Regional Reliability Organization policy.”¹²

II. VIOLATION DESCRIPTION

Initiating Event

On August 19, 2009, at 15:49 hours, Wolf Creek tripped off-line following the loss of all three 345 kV transmission lines at the Wolf Creek substation. The event was initiated when the LaCygne to Wolf Creek 345 kV transmission line tripped due to a suspected lightning strike. At approximately the same time, the Rose Hill to Wolf Creek 345 kV transmission line tripped due to a failed capacitance coupled voltage transformer, which allowed a protective relay to over-reach. Within half a second of the trip of the LaCygne and Rose Hill transmission lines, the Benton to Wolf Creek 345 kV transmission line tripped due to generator output swings induced by the loss of the LaCygne and Rose Hill transmission lines. Wolf Creek subsequently tripped offline following loss of all offsite power. The event, hereinafter “Wolf Creek Event,” also resulted in the loss of two radial 69 kV transmission lines serving local loads from the Wolf Creek substation.

Westar’s system operators restored power to Wolf Creek and to the 69 kV loads within one minute of the initial trip of the Wolf Creek to LaCygne transmission line. Only 11 megawatts of load were lost during the event and the Westar system was restored to a normal operating condition within 15 minutes.

Procedural History

¹²Southwest Power Pool Criteria, § 3.4.1.3 Loss of Two or More Elements (TPL-003), pg. 3-6 (2008), requiring power flow models comply with NERC Table 1 – Category C System Performance Standards for multiple outages.

On August 28, 2009, SPP RE initiated a Compliance Inquiry of the Wolf Creek Event. Subsequent to Westar's response to a series of information requests, SPP RE issued a *Compliance Inquiry Summary Report*, therein finding that a Compliance Violation Investigation (CVI) was warranted. Exhibit A. On May 14, 2010, the SPP RE initiated a CVI for the Wolf Creek Event. On June 16, 2010, the North American Electric Reliability Corporation (NERC) informed SPP RE that it was assuming management of the CVI.

In its investigation of the Wolf Creek Event, the NERC Compliance Investigation Team examined a broad scope of NERC Reliability Standards. In its *Notice of Preliminary Findings and Analysis, Non-Public Compliance Investigation of Westar Energy Inc. – NERC0017CVI*, issued June 8, 2012, the NERC Compliance Investigation Team identified twenty-two (22) instances of potential noncompliance involving twelve (12) NERC Reliability Standards. Exhibit B.

On August 22, 2012, Westar delivered its *Response to Notice of Preliminary Findings and Analysis, Non-Public Compliance Investigation of Westar Energy Inc. – NERC0017CVI*, disputing all but three (3) of the NERC Compliance Investigation Team's findings. Exhibit C. The NERC Compliance Investigation Team performed a review of the evidence and arguments presented by Westar and on October 3, 2012, issued a *Notice of Completion of Investigation Phase of Compliance Investigation NERC0012CI* (sic), hereinafter ("Investigation Report"). Exhibit D. Therein, the NERC Compliance Investigation Team dismissed three (3) of the twenty-two (22) instances of non-compliance originally identified in its preliminary notice. One instance of noncompliance originally identified as a FAC-008-1 R1.2.1 issue was changed to noncompliance with FAC-009-0 R1.

On February 26, 2013, NERC transferred the noncompliance issues discovered during its investigation to SPP RE for enforcement. SPP RE consolidated issues of noncompliance involving the same Reliability Standards and Requirements and on February 28, 2013, issued Westar a Notice of Possible Violation for fifteen (15) NERC Reliability Standards and Requirements. Subsequently, SPP RE consolidated two (2) of the possible violations with violations previously self-reported by Westar and one possible violation was dismissed based upon Westar's submission of exculpatory evidence. Eight (8) of the possible violations were processed via the Find, Fix, Track and Report disposition method with no monetary penalty attached. The violations of TOP-002-2 R6, TOP-004-1 R2, TOP-004-2 R3 and TOP-004-1 R4, described herein, represent the remaining issues of noncompliance discovered by the NERC Compliance Investigation Team.

Wolf Creek Capacity History

Wolf Creek began Commercial Operations on September 3, 1985. At start-up, the single nuclear generating unit at Wolf Creek was rated 3411 megawatts thermal (MWt) and 1170 megawatts electric (MWe) gross. On November 1, 1993, a stretch power uprate of the reactor was approved by the Nuclear Regulatory Commission, increasing the maximum allowable core power to 3565 MWt. The thermal uprate of the reactor

increased the Wolf Creek generating capacity to 1236 MWe gross and 1185 MWe net. On May 16, 2011, following an uprate of the steam turbine, the net generation capacity of Wolf Creek was increased from 1185 MWe to 1227 MWe.¹³

Wolf Creek Capacity for Stability Studies

The SPP Power Flow Model Development Procedure Manual states that the generator MW or PMAX¹⁴ should be set to “gross” generation if auxiliary load is modeled explicitly or “net” generation if auxiliary loads are not modeled.¹⁵ In the Wolf Creek stability studies performed by SPP and referenced herein, the auxiliary loads are not included in the models. Accordingly, PMAX in the stability studies performed by SPP should equal the maximum net generation of Wolf Creek for the relevant time period.

In addition to the stability studies performed by SPP, Westar has either performed or caused to be performed Wolf Creek stability studies, which are also relevant to the TOP violations described herein. Some of these studies include the auxiliary loads in the models. Accordingly, PMAX for these stability studies should equal the maximum gross generation of Wolf Creek for the relevant time period.

Wolf Creek Stability Studies

The purpose of the TPL Reliability Standards is to ensure that a Transmission Planner, such as Westar, performs periodic studies of its electrical system to ensure reliable operations under specific operating contingencies. The specific operating contingencies are grouped in categories in Table I of the TPL Reliability Standards. Category A is for no contingencies and all facilities in service (TPL-001). Category B includes multiple contingencies for the loss of a single Bulk Electric System (BES) element (TPL-002). Category C includes multiple contingencies involving the loss of two or more BES elements (TPL-003). Category D includes extreme events resulting in the loss of two or more BES elements or BES elements cascading out of service (TPL-004).

The TPL Reliability Standards complement the TOP Reliability Standards by ensuring that a Transmission Planner performs an annual study of its electric system to ensure it can operate within the parameters described in the TOP Reliability Standards. For example, TPL-002 requires a Transmission Planner to “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 (nonrecallable reserved) Transmission Services, at all demand levels over the range of forecast system demands, under the contingency conditions as defined in Category B of

¹³ In its Interconnection System Impact Request, Westar indicated the anticipated Maximum Turbine Power to be 1248 MWe Summer and 1283 MWe Winter following the uprate. Based on an auxiliary load of 56 MWe the net generation of Wolf Creek was anticipated to be 1192 MWe Summer and 1227 Winter.

¹⁴ In the Siemens Power System Simulation for Engineering (PSS/E) software PMAX represents the maximum active MW power that the generator can output.

¹⁵ Southwest Power Pool, Power Flow Model Development Procedure Manual, pg. 10, (2009).

Table I.” TPL-002 operates in tandem with TOP-004 R2, which provides that “each Transmission Operator shall operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency”, i.e., a Category B contingency. Similarly, TPL-003 operates in tandem with TOP-004 R3, which requires that “each Transmission Operator shall operate to protect against instability, uncontrolled separation, or cascading outages resulting from multiple outages, as specified by its Reliability Coordinator.”

Westar relied upon SPP, its Planning Authority, to perform the studies required by the TPL Reliability Standards in 2008, 2009, and 2010. These studies were accepted by the SPP RE for those years as evidence of Westar’s compliance with the TPL Reliability Standards. Additionally, Westar performed or had SPP perform stability studies for Wolf Creek unrelated to compliance with the TPL Reliability Standards. During the CVI, Westar provided these studies to the NERC Compliance Investigation Team. The results of these studies are indicative of and establish the basis for Westar’s violations of the TOP Reliability Standards.

On **October 28, 1993**, KPL System Planning¹⁶ reran selected stability cases (Exhibit E) from a March 4, 1992, stability study (Exhibit F) in support of the proposed uprate of Wolf Creek. “The results of these rerun cases indicate that the increase in capacity at Wolf Creek Generating Station does not significantly alter the existing stability analysis results.”¹⁷ The original stability study performed on March 4, 1992, indicated that under Off-Peak conditions, Wolf Creek was unstable at 1015 MWe net generation, with *the Wolf Creek – LaCygne transmission line out of service and a three-phase fault on the Wolf Creek to Benton transmission line that cleared in 3.6 cycles*. As a result of the March 4, 1992, analysis, KG&E System Operations developed an operating directive calling for the reduction of Wolf Creek net generation to 950 MWe in the event of an outage of any one of the Wolf Creek substation 345 kV transmission lines. By implementing the operating directive, i.e., reducing the output of Wolf Creek to 950 MWe net, following the loss of one of the Wolf Creek substation 345 kV transmission lines, Wolf Creek could remain online and would remain stable should a second 345 kV transmission line trip. Subsequent to the KPL analysis, on November 1, 1993, a stretch power uprate of the Wolf Creek reactor was approved by the Nuclear Regulatory Commission increasing the maximum allowable reactor power to 3565 MWt. The thermal uprate of the reactor increased the Wolf Creek MWe generating capacity to 1236 MWe gross and 1185 MWe net.

During the CVI, Westar provided the NERC Compliance Investigation Team a stability analysis performed by SPP on **November 30, 2008**, i.e.,

¹⁶ In 1992, Kansas Power and Light Company (KPL) and Kansas Gas and Electric Company (KG&E) merged to become Western Resources which was renamed to Westar Energy in 2002.

¹⁷ Letter from Jim Useldinger, Senior Engineer, KPL, to Louis Solorio, Wolf Creek Nuclear Operating Corporation, October 28, 1993. Exhibit E.

SPP 2008 Stability Contingencies rev 11/30/2008.¹⁸ Exhibit G. Therein, the stability of Wolf Creek was analyzed for various contingencies utilizing the SPP 2009 Light Load model. Notwithstanding the uprate of Wolf Creek on November 1, 1993, to 1185 MWe net generation and Wolf Creek operating in excess of 1185 MWe net generation for more than 2,700 hours¹⁹ in 2008, the maximum Wolf Creek net generation analyzed in the *SPP 2008 Stability Contingencies rev 11/30/2008* stability study was 1154 MWe. In this stability study, with Wolf Creek modeled at 1154 MWe net generation, *a three-phase fault on the Wolf Creek to LaCygne transmission line with no reclosing* (Category B) was analyzed at fault clearing times between 5 and 3.6 cycles. Wolf Creek was found to be unstable for this Category B contingency with a fault clearing time of 5 cycles. No results were given for fault clearing times between 4.5 and 3.6 cycles. With a fault clearing time of 5 cycles, Wolf Creek was determined to be stable after net generation was reduced to 1100 MWe. The Category C contingency, *a three-phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line. No Reclosing*, was also analyzed at fault clearing times between 5 and 3.6 cycles. No results were given for fault clearing times between 4.5 and 3.6 cycles. The analysis for a fault clearing time of five cycles indicated that Wolf Creek was unstable. This SPP analysis did not conclusively support the stability of Wolf Creek for a Category B contingency when operating at 1185 net generation nor did the analysis support the stability for a Category C contingency when Wolf Creek net generation is reduced to 950 MWe.

On **February 17, 2009**, SPP published the results of its *2008 Stability Study*. Exhibit H. The study was performed utilizing the SPP 2008 MDWG Base Case – 2009 Light Load Stability model. Notwithstanding the uprate of Wolf Creek on November 1, 1993, to 1185 MWe net generation and Wolf Creek operating for significant periods of time above 1185MWe net generation, the maximum Wolf Creek output analyzed in the 2008 Stability Study was 1154 MWe net generation. Wolf Creek was found to be unstable at a 3.6 cycle clearing time for the Category C5 contingency, *three-phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line. No Reclosing*. The stability analysis indicated that stability could not be achieved for this Category C contingency until Wolf Creek output was reduced to 850 MWe net generation. In the *2008 Stability Study*, SPP

¹⁸ See Westar WRO008971.pdf.

¹⁹ Generation data provided by Westar indicates that Wolf Creek routinely operated above 1185 MWe net generation during the fall of 2007 and the spring, fall and winter of 2008. Between November 2007 and November 2008 Wolf Creek operated for 3,504 total hours or 44.5% of the time at greater than 1185 MWe net generation.

indicated that although Wolf Creek was found to be unstable in its initial evaluation, it was stable after applying the mitigation options described in Appendix A, i.e., reduction of Wolf Creek output to 850 MWe net generation following the outage of the Benton – Wolf Creek transmission line. Because SPP's 2008 *Stability Study* evaluated Wolf Creek at 1154 MWe and not the intended net generation for Wolf Creek, the study was inconclusive in determining Wolf Creek's stability for the Category B contingency analyzed. Nevertheless, the study determined that Wolf Creek was stable for the Category B contingency, *a three-phase fault on the Wolf Creek to LaCygne transmission line with no reclosing*, with Wolf Creek at 1154 MWe net generation and fault clearing times between 4.5 and 3.6 cycles. Westar did not revise its operating directives for Wolf Creek to reflect a reduction in Wolf Creek output to 850 MWe net generation following the loss of one of the Wolf Creek substation 345 kV transmission lines.

On **October 23, 2009**, SPP performed a stability analysis for various Wolf Creek contingencies utilizing its 2010 Light Load model.²⁰ Exhibit I. In the study, with Wolf Creek at 1185 MWe net generation, a three-phase fault on the Wolf Creek to LaCygne transmission line with no reclosing (Category B) was analyzed at fault clearing times between 5 and 3.5 cycles. Wolf Creek was found to be unstable for this Category B contingency at a fault clearing time of 4.0 cycles and above. Wolf Creek was found to be stable for this Category B contingency at a fault clearing time of 3.5 cycles, the fastest clearing time evaluated in the study. SPP's analysis also indicated that Wolf Creek was unstable for two Category C contingencies. Both scenarios involved the loss of a single Wolf Creek 345 kV transmission line; followed by the reduction of Wolf Creek output to 950 MWe; and the subsequent loss of a second Wolf Creek transmission line. SPP's October 2009 stability analysis mirrored the results of the 2008 *Stability Study*, concluding that a reduction of Wolf Creek output to 850 MWe net generation was necessary to ensure Wolf Creek stability for a Category C contingency. The SPP stability study also identified an instability issue for the Category B contingency. In previous studies, Westar had indicated that a fault clearing time of 3.6 cycles was achievable on its electrical system at Wolf Creek. Because a fault clearing time of 3.5 cycles was not identified as achievable on the Westar electric system at Wolf Creek,²¹ and the stability analysis was not performed at Wolf Creek's intended net generation,²² the stability of Wolf Creek for a Category B contingency could not be confirmed. Westar did not revise its

²⁰ See Westar WRI009704.pdf.

²¹ See Southwest Power Pool, Inc., 2009 *Stability Study*, pg.12, December 18, 2009 and Southwest Power Pool, Inc., *SPP 2009 TPL Compliance Report*, pg. 8, December 31, 2009.

²² From January 1, 2009 to October 1, 2009, Wolf Creek operated above 1185 MWe net generation for 2,936 hours or 44.9% of the time. During 2010, Wolf Creek operated above 1185 MWe net generation for 4605 hours or 52.5% of the time.

operating directives for Wolf Creek to reflect a reduction in Wolf Creek output to 850 MWe net generation following the loss of one of the Wolf Creek substation 345 kV transmission lines.

On **December 18, 2009**, SPP published the results of its *2009 Stability Study*. Exhibit J. The study was performed utilizing the SPP 2009 MDWG Series, 2010 Light Load model. Therein, SPP analyzed a fault on the Wolf Creek to LaCygne 345 kV transmission line, with no reclosing (Category B), at various fault clearing times and Wolf Creek generation. SPP's analysis again showed that under system light load conditions, Wolf Creek was unstable at a net output of 1185 MWe with a fault clearing time of 4.0 cycles. In the December 2009 stability study SPP stated:

After additional simulations, staff determined that the remaining event, B3, was stable for a 3.5 cycle clearing time with the existing generator dispatch. Coordination with Westar Energy System Protection staff has confirmed that clearing times of up to 3.6 cycles are achievable on the EHV system in that area with the current relay configurations. The transmission system became stable for a 3.6 cycle fault once the generation at Wolf Creek was lowered to 1100 MW.²³

Because a fault clearing time of 3.5 cycles was not identified as achievable on the Westar electric system at Wolf Creek,²⁴ and the stability analysis was not performed at Wolf Creek's intended net generation, the stability of Wolf Creek for a Category B contingency could not be confirmed.

Multiple Category C contingencies were also analyzed under system light load conditions in the *2009 Stability Study*. Similar to previous studies, Wolf Creek was found to be unstable for these Category C contingencies when Wolf Creek generation was reduced to 950 MWe. In the study, SPP stated:

After additional simulations, staff determined that the remaining events, C5 and C10, were stable for a 4 & 4.5 cycle clearing times respectively with the modified generation dispatch. Coordination with Westar Energy System Protection staff has demonstrated that clearing times of up to 3.6 cycles are achievable on the EHV system in that area with the current relay configurations. An operating guideline currently exists for the redispatch of the Wolf Creek Unit under certain system conditions that

²³ See Southwest Power Pool, Inc., *2009 Stability Study*, pg.12, December 18, 2009 and Southwest Power Pool, Inc., *SPP 2009 TPL Compliance Report*, pg. 8, December 31, 2009.

²⁴ Id.

reduces its output to 950 MWs. (sic) To ensure transmission system stability for events C5 and C10, the Transmission Operating Guideline redispatch to 950 MWs should be lowered to 900 MWs.²⁵

Westar did not revise its operating directives for Wolf Creek to reflect a reduction in Wolf Creek output to 900 MWe net generation following loss of one of the Wolf Creek substation 345 kV transmission lines.

On **January 11, 2010**, SPP posted the results of the *Impact Study for Generation Interconnection Request*. Exhibit K. The results addressed a request by Westar to increase the output of Wolf Creek to 1248 MWe gross (summer) and 1283 MWe gross (winter). Therein, the stability of Wolf Creek was analyzed utilizing modified versions of the SPP 2010 winter peak and the 2010 summer peak models. Wolf Creek was determined to be stable for the Category B contingencies: (1) a three-phase fault on the Wolf Creek to Benton 345 kV transmission line with a fault clearing time of 3.6 cycles; (2) a three-phase fault on the Wolf Creek to Rose Hill 345 kV transmission line with a fault clearing time of 3.6 cycles; and, (3) three-phase fault on the Wolf Creek to LaCygne 345 kV transmission line with a fault clearing time of 3.6 cycles. The stability of Wolf Creek was not analyzed under a light load condition, the condition in which Wolf Creek is most susceptible to instability. No voltage violations or overload conditions were identified in the interconnection study.

On **December 22, 2010**, SPP published the *2010 Stability Study*.²⁶ Exhibit L. The study was performed utilizing the SPP 2011 Light Load stability model. Therein, SPP found Wolf Creek to be stable at 1185 MWe net output, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at fault clearing times between 4.5 and 3.6 cycles. Because the stability analysis was not performed at Wolf Creek's intended net generation, the stability of Wolf Creek for a Category B contingency could not be confirmed. For the Category C5 contingency, *a three-phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line with no reclosing*) Wolf Creek was found to be unstable for fault clearing times between 5 and 3.6 cycles. When Wolf Creek output was reduced to 900 MWe net generation for the Category C5 contingency, Wolf Creek was found to be stable. Wolf Creek was found to be stable for the Category C10 contingency, *three-phase fault on Wolf Creek - LaCygne 345 kV line; Reduce Wolf Creek output to 950 MW (Transmission Operating*

²⁵ Id.

²⁶ Wolf Creek was not scheduled to be in service in the MDWG 2010 Series 2011 Light load case. SPP Staff worked with Westar to develop a case to simulate the unit being in service due to past results of dynamic simulations in the vicinity of the generation station.

Directive 302); three-phase fault on Wolf Creek - Benton 345 kV line; no reclosing, with fault clearing times between 4.5 and 3.6 cycles. SPP stated in the study under the 2011 Light Load Case:

After additional simulations, staff determined that the remaining events, C5 and C10, were stable for 4 & 4.5 cycle clearing times respectively with the modified generator dispatch. Coordination with Westar Energy System Protection staff has demonstrated that clearing times of up to 3.6 cycles are achievable on the EHV system in that area with the current relay configurations. An operating guideline currently exists for the redispatch of the Wolf Creek Unit under certain system conditions that reduces its output to 950 MWs. To ensure transmission system stability for events C5 and C10, the Transmission Operating Guideline redispatch to 950 MWs should be lowered to 900 MWs.

On December 22, 2010, Westar revised its operating directives for Wolf Creek to reflect a reduction in Wolf Creek generation to 900 MWe net following the loss of one of the Wolf Creek substation 345 kV transmission lines.

In April and May of 2011, Westar performed a series of stability studies to evaluate the stability of Wolf Creek at 1300 MWe, the anticipated gross generation output of Wolf Creek resulting from the 2011 spring outage turbine uprate.²⁷ Exhibit N. Westar analyzed a three phase fault and the loss of each of the Wolf Creek 345 kV transmission lines with a fault clearing time of 3.6 cycles. The stability studies were performed using the SPP 2010 series of dynamic models: 2011 Summer Peak; 2011 Summer Shoulder; 2011 Winter peak; 2016 Light Load; 2016 Summer Peak; 2016 Winter Peak; and 2021 Summer Peak. Additionally, Wolf Creek stability was analyzed using a 2010 case for 2011 Light Load conditions and a case simulating 2012 Light Load conditions. The results of these studies did not indicate any instability for Wolf Creek under the ascribed conditions and contingencies. Westar provided the NERC Compliance Investigation Team with an attestation that these studies: are valid stability studies showing the Westar system to be stable with Wolf Creek Generation at 1300 MWe gross generation. Further, Westar attested that the stability study conducted under 2011 Light Load conditions, reflects: light load conditions; 2011 system topology; generator dispatch appropriate for 2011 Light Load conditions, including the most severe output anticipated for any operation; and, a 3.6 cycle fault clearing time. Exhibit O.

²⁷ The anticipated net generation of Wolf Creek following the turbine uprate was 1227 MWe. For the purpose of the stability studies, Westar conservatively estimated Wolf Creek gross generation following the uprate would be 1300 MWe.

On December 19, 2011, SPP published its *2011 TPL Stability Study*. Exhibit P. The study was performed utilizing the SPP MDWG 2011 Series 2012 Light Load model. Therein, SPP found Wolf Creek to be stable at 1223 MWe output,²⁸ with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles. For the Category C5 contingency, *a three-phase fault on Benton – Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 900 MW (Transmission Operating Directive 300); three-phase fault on LaCygne - Wolf Creek 345kV line with no reclosing*, Wolf Creek was found to be stable at a fault clearing time of 3.6 cycles. Similarly, Wolf Creek was found to be stable for the Category C10 contingency, *three-phase fault on Wolf Creek - LaCygne 345 kV line; Reduce Wolf Creek output to 900 MW (Transmission Operating Directive 302); three-phase fault on Wolf Creek-Benton 345 kV line, no reclosing*, at a fault clearing time of 3.6 cycles. However, Wolf Creek was found to be unstable for the Category C23 contingency, *three-phase fault on Rose Hill – Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 900 MW (Transmission Operating Directive 300); three-phase fault on LaCygne - Wolf Creek 345kV line with no reclosing*, at a fault clearing time of 3.6 cycles. A further reduction of Wolf Creek output to 800 MWe net generation was necessary to achieve stability at a 3.6 cycle fault clearing time. SPP stated in the study:

After additional simulations, staff determined that the remaining event, C23, was stable with a modified generator dispatch. To ensure transmission system stability for events C5 and C10, the Transmission Operating Guideline redispatch of 900 MWs should remain the same. To ensure transmission system stability for event C23, the Transmission Operating Guideline redispatch of 900 MWs should be lowered to 800 MWs.

On December 19, 2011, Westar revised its operating directives for Wolf Creek to reflect a reduction in Wolf Creek output to 800 MWe net generation following the loss of a single Wolf Creek substation 345 kV transmission line.

Relevant Wolf Creek Generation History

In its August 6, 2011, response to the NERC Compliance Investigation Team's Request for Information #4, Westar provided the NERC Compliance Investigation Team with the gross and net generation of Wolf Creek, in one minute intervals, from June 18, 2007, to July 1, 2011. The data provided by Westar indicates that Wolf Creek operated in excess

²⁸ On May 16, 2011, following an uprate of the steam turbine the MWe net generation of Wolf Creek increased from 1185 MWe to 1227 MWe.

of 1185 MWe net generation for considerable periods of time during the fall, winter, and spring months from June 18, 2007, to July 1, 2011. For example, from October 2008 through May 2009, Wolf Creek operated at greater than 1185 MWe net generation for more than 4,900 hours or approximately 86% of the time. For those periods that Wolf Creek operated above 1185 MWe net generation, the average Wolf Creek net generation was 1189 MWe. The maximum Wolf Creek net generation during the 2007 - 2008 period was 1201.8 MWe. Similar output for Wolf Creek was noted from October 2007 through March 2008, October 2009 through May 2010, and October 2010 through March 2011.

TOP-002-2 R6 (SPP2013012077)

In its Investigation Report, the NERC Compliance Investigation Team found that Westar was “in potential noncompliance with TOP-002-2 R6 in that it did not plan to meet unscheduled changes in system configuration and generation dispatch by not showing a stable condition at full output at various times since June 18, 2007.”

In a stability study performed in October 1993, Westar determined that Wolf Creek was stable during Off-Peak conditions (light load) when operating at 1185 MWe net generation,²⁹ with a three-phase fault on the Wolf Creek – LaCygne transmission line,³⁰ at a fault clearing time of 3.6 cycles. The stability of Wolf Creek for the same Category B contingency when operating at 1185 MWe net generation is not supported by the four Westar stability studies performed between November 30, 2008, and December 22, 2010.

In both the *SPP 2008 Stability Contingencies rev. 11/30/08* study and the February, 17 2009, *SPP 2008 Stability Study*, Wolf Creek stability was analyzed under light load conditions for various Category B contingencies, including *a three-phase fault on the Wolf Creek – LaCygne transmission line*. The Wolf Creek net generation in these stability studies for Category B contingencies ranged from 900 to 1154 MWe. Neither of these studies analyzed the stability of a Wolf Creek Category B contingency at the intended Wolf Creek net generation. Nevertheless, Westar operated Wolf Creek significantly above 1154 MWe net generation in 2008 and 2009.

In two stability studies performed by SPP in late 2009,³¹ the stability of Wolf Creek was again analyzed under light load conditions. The only Category B contingency analyzed was *a three-phase fault on the Wolf Creek – LaCygne transmission line*. The analysis was performed with Wolf Creek net generation between 1185 MWe and 900 MWe, at fault clearing times between 5 and 3.5 cycles. The stability analysis for these two studies indicated that Wolf Creek was unstable at 1185 MWe net generation for a three-phase fault on the Wolf Creek – LaCygne transmission line at fault clearing times greater than

²⁹ On November 1, 1993, a stretch power uprate of the Wolf Creek reactor was approved by the Nuclear Regulatory Commission thereby increasing the Wolf Creek MWe generating capacity to 1185 MWe net.

³⁰ A three-phase fault on the Wolf Creek – LaCygne transmission line is an N-1 and Category B contingency.

³¹ *2009 Stability Contingencies – WC Sensitivities Rev 10/23/09* and *SPP 2009 Stability Study* issued December 18, 2009.

3.5 cycles. In the *SPP 2009 Stability Study*, SPP staff indicated that Wolf Creek only became stable at a 3.6 cycle fault clearing time, the fault clearing time identified by the Westar System Protection staff as achievable on its EHV system,³² if Wolf Creek net generation was reduced to 1100 MW. Notwithstanding the results of these studies, Westar operated Wolf Creek significantly above 1100 MWe net generation during the fall of 2009 and spring of 2010.

In the *SPP 2010 Stability Study*, the stability of Wolf Creek was again analyzed under light load conditions at 1185 MWe net generation and various fault clearing times. The only Category B contingency analyzed was a three-phase fault on the Wolf Creek – LaCygne transmission line. SPP’s analysis indicated that Wolf Creek was stable following a *three-phase fault on the Wolf Creek – LaCygne transmission line* at 1185 net generation for fault clearing times of 4 and 3.6 cycles. However, Westar operated Wolf Creek in excess of 1185 MWe net generation during the winter of 2010 and thereafter.

It is SPP RE’s determination that:

- (1) On multiple occasions between September 16, 2007, and December 22, 2010, Westar failed to implement operating guides and/or establish operating limits for the operation of Wolf Creek that were consistent with the results of its stability studies;
- (2) Notwithstanding an uprate of Wolf Creek net generation to 1185 MWe in 1993, in the *SPP 2008 Stability Contingencies (rev 11/30/2008)* and *SPP 2008 Stability Study*, Westar failed to ensure that the stability studies accurately reflected the intended operation of Wolf Creek above 1185 MWe net; and
- (3) Notwithstanding an uprate of Wolf Creek net generation to 1185 MWe net in 1993 and subsequent evaluations of Wolf Creek’s stability at 1185 MWe or less net generation, Westar has operated Wolf Creek above 1185 MWe net generation for substantial periods of time during those times when Wolf Creek is most susceptible to instability.

TOP-004-1 R2 (SPP2013011995)

In its Investigation Report, the NERC Compliance Investigation Team found that Westar was “in potential non-Compliance with TOP-004-2 R2³³ in that it did not operate so that instability would not occur as a result of the most severe single contingency because Wolf Creek was operated above studied levels where the results were unknown.”

³² See Southwest Power Pool, *2008 Stability Study*, 6, (2009), Southwest Power Pool, *2009 Stability Study*, 12, (2009).

³³ Westar’s violation of TOP-004 began on 9/16/07 and ended on 3/17/11 thereby implicating TOP-004-1 which became mandatory and enforceable on 6/18/07.

Table II.A below provides a summary of the results of stability studies provided by Westar for the Category B contingency, *a three-phase fault on the Wolf Creek – LaCygne transmission line*.

Date	Stability Study Category B Contingency	TPL Study	Wolf Creek Net Generation MWe	Fault Clearing Time (cycles)
10/28/93	KPL System Planning for Wolf Creek Uprate	No	1185	Stable at 3.6 cycle fault clearing time
11/30/08	SPP 2008 Stability Contingencies rev 11/30/08	No	1100	Stable at 5.0 cycle fault clearing time
2/17/09	SPP 2008 Stability Study	Yes	1154	Stable at 3.6 cycle fault clearing time
12/18/09	SPP 2009 Stability Study	Yes	1100	Stable at 3.6 cycle fault clearing time
12/22/10	SPP 2010 Stability Study	Yes	1185	Stable at 3.6 cycle fault clearing time
4/22/11	Westar Analysis of Wolf Creek Stability w/ Turbine Power Uprate (2016 Light Load)	No	1243.5	Stable at 3.6 cycle fault clearing time
4/26/11	Westar Analysis of Wolf Creek Stability w/ Turbine Power Uprate – 2012 Light Load Supplement	No	1243.5	Stable at 3.6 cycle fault clearing time
5/9/11	Westar Analysis of Wolf Creek Stability w/ Turbine Power Uprate – 2011 Light Load Supplement	No	1243.5	Stable at 3.6 cycle fault clearing time
12/19/11	SPP TPL Stability Study	Yes	1223	Stable at 3.6 cycle fault clearing time

Table II.A – Wolf Creek Stability Analysis for the Most Severe Single Contingency – evaluated under light load conditions.

As noted in Table II.A, between November 30, 2008, and December 22, 2010, the stability analyses performed by Westar did not support the stable operation of Wolf Creek at 1185 MWe net generation, under light load conditions, for the Category B contingency, *a three-phase fault on the Wolf Creek – LaCygne transmission line at a fault clearing time of 3.6 cycles*. Nevertheless, from October 2008, through May 2009, Wolf Creek operated at greater than 1185 MWe net generation for more than 4,900 hours or approximately 86% of the time. Similarly, Wolf Creek operated at greater than 1185 MWe net generation for significant periods of time from October 2009 to May 2010 and from October 2010 to March 2011.

As to the stability studies supporting operation of Wolf Creek at 1185 MWe net generation under light load conditions and the aforementioned Category B contingency, Westar routinely operated Wolf Creek above 1185 MWe net generation during the fall, winter, and spring months between 2007 and 2011. Although the stability analysis performed in 1993 and 2010 supported operation of Wolf Creek at 1185 MWe net generation for a Category B contingency, hourly Wolf Creek Generation data provided by Westar indicates that between October 2007 and March 2011, Wolf Creek operated above 1185 MWe net generation for more than 15,000 hours.

It is SPP RE's determination that on multiple occasions between September 2007 and March 2011, Westar operated Wolf Creek in excess of the net generation output validated in its stability studies for *a three-phase fault on the Wolf Creek – LaCygne transmission line at a fault clearing time of 3.6 cycles* (Category B), the most severe single contingency.

TOP-004-2 R3 (SPP2013011997)

In its Investigation Report, the NERC Compliance Investigation Team found that Westar was “in potential noncompliance with TOP-004-2 R3 in that it did not operate to protect against instability resulting from multiple outages.”

In the stability study performed on March 4, 1992, Westar determined that under off-peak (light load) conditions, Wolf Creek was unstable above 1025 MWe net generation, for the double outage, *the Wolf Creek – Benton transmission line out of service and a three-phase fault on the Wolf Creek to LaCygne transmission line that cleared in 3.6 cycles*. Similar results were found for a double outage of the Benton and LaCygne 345 kV transmission lines.^{34,35} As a result of the March 4, 1992, stability study, Westar implemented an operating directive³⁶ calling for the reduction of Wolf Creek net generation to 950 MWe in the event of an outage of any one of the Wolf Creek 345 kV transmission lines. The results of the March 4, 1992, stability study were affirmed in October 1993, when Westar reran selected stability cases of the earlier stability study increasing Wolf Creek generating capacity by 50 MWe. Therein, Westar stated:

The results of these rerun cases indicate that the increase in capacity at Wolf Creek Generating Station does not significantly alter the existing stability analysis results. System Operations Contingency Directive No. 0025 remains valid and the rerun results do not require issuance of additional directives.

In stability studies performed by SPP between February 17, 2009, and December 22, 2010, Wolf Creek was found to be unstable under light load conditions for the Category C contingency, *a three-Phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line. No Reclosing*, at fault clearing times between 5.0 and 3.6 cycles.

In the *SPP 2008 Stability Study*, published February 17, 2009, SPP evaluated the stability of Wolf Creek utilizing its 2009 Light Load Stability model. Therein, Wolf Creek was

³⁴ With the Wolf Creek – Benton 345 kV transmission line out of service and a three-phase fault on the Wolf Creek – LaCygne 345 kV transmission line, cleared at a 3.6 cycle, Wolf Creek was unstable above 1005 MWe net generation.

³⁵ The double contingency for Wolf Creek – Benton 345 kV transmission line out of service and a three-phase fault on the Wolf Creek – Rose Hill 345 kV transmission line, cleared at a 3.6 cycle, was not evaluated under off-peak conditions.

³⁶ Contingency Directive No. 0025.

found to be unstable at a 3.6 cycle clearing time for the Category C5 contingency, *three-phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line. No Reclosing*. SPP indicated that although Wolf Creek was found to be unstable in its initial evaluation, it was found to be stable after applying the mitigation option described in Appendix A of the stability study. The mitigating option identified by SPP was reduction of Wolf Creek output to 850 MWe for an outage of the Benton – Wolf Creek transmission line. Westar did not change its operating directives to reflect a reduction of Wolf Creek output to 850 MWe following an outage of one of the Wolf Creek substation 345 kV transmission lines.

Similar results under light load conditions were identified in the *SPP 2009 Stability Study*, published December 18, 2009. Therein, Wolf Creek was again found to be unstable at a 3.6 cycle clearing time for the Category C5 contingency, *three-phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line. No Reclosing*. SPP stated in its report that “[t]o ensure transmission system stability for contingencies C5 and C10³⁷, the Transmission Operating Guide redispatch [of Wolf Creek] to 950 MWs should be lowered to 900 MWs.” (emphasis added) The identical mitigating measures were identified in the *SPP 2010 Stability Study*, published on December 22, 2010. On December 22, 2010, Westar revised its operating directives for Wolf Creek to reduce the output to 900 MWe following the outage of one of the Wolf Creek 345kV transmission lines. Westar’s Transmission Operating Directive No. 0300, which superseded an operating directive, issued on July 17, 2007, states:

If one of the 345 kV lines out of Wolf Creek is outaged and the Wolf Creek generator is above 900 MW net, the possibility exists that the Wolf Creek generator could go unstable and/or the remaining 345kV line could trip following an outage of a second Wolf Creek 345 kV line. In order to prevent an instability condition from occurring, the Wolf Creek Generator net output shall be reduced to 900 MW or less following any unscheduled outage (Lockout or Emergency) of one of the Wolf Creek 345 kV lines. For scheduled outages of one of the Wolf Creek 345 kV lines the generator net output shall be reduced to 900 MW or less before the line is removed from service.

It is SPP RE’s determination that on multiple occasions between February 17, 2009, and December 22, 2010, Westar failed to amend its operating directives to incorporate mitigating measures for Wolf Creek that were consistent with the results of stability studies for loss of one of the Wolf Creek 345 kV transmission lines.

TOP-004-1 R4 (SPP2013011999)

³⁷ The C10 contingency identified in the *SPP 2009 Stability Study* was a three-phase fault on Wolf Creek - LaCygne 345 kV line; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 302); three-phase fault on Wolf Creek - Benton 345 kV line; no reclosing with fault clearing times of 3.6 to 5.0 cycles.

In its Investigation Report, the NERC Compliance Investigation Team found that Westar was “in potential noncompliance with TOP-004-2 R4³⁸ in that it entered an unknown operating state and did not restore operations to respect proven reliable system limits within 30 minutes.”

In October 1993, Westar performed a stability study to support increasing the capacity of Wolf Creek from 1170 MWe gross to 1236 MWe gross. The stability study, i.e., an assessment to ensure that the Westar transmission system is reliable under the included cases, determined that for the N-1 contingencies evaluated, Wolf Creek was stable under light load conditions at 1185 MWe net generation, with a fault clearing time of 3.6 cycles. Thereafter, beginning in 2007, subsequent stability studies were performed by Westar to fulfill its requirement as a Transmission Planner to “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 (nonrecallable 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.”³⁹ Category B of Table I *Transmission System Standards – Normal and Emergency Conditions* provides in part that for a contingency resulting in the loss of a single Bulk Electric System element, i.e., (1) a single line ground (SLG) or three-phase (3Ø) fault, with normal clearing of a generator, transmission circuit, or transformer, or (2) loss of an element without a fault, the interconnected transmission system remains stable and both thermal and voltage limits are within applicable ratings.

As noted in Table II.A (more fully described in Wolf Creek Stability Studies herein), beginning in November 2008, SPP performed several stability studies for Westar to evaluate the stability of Wolf Creek under light load conditions for various Category B contingencies, net generation, and fault clearing times.

In both the *SPP 2008 Stability Contingencies (rev. 11/30/08)* study and the February, 17 2009, *SPP 2008 Stability Study*, Wolf Creek stability was analyzed under light load conditions for various Category B contingencies. The Wolf Creek net generation analyzed in the *SPP 2008 Stability Contingencies (rev. 11/30/08)* study and the February, 17 2009, *SPP 2008 Stability Study* ranged from 900 to 1154 MWe for the Category B contingencies studied. The stability of Wolf Creek for a Category B contingency at Wolf Creek’s intended net generation was not performed. Because Westar operated Wolf Creek in excess of the stability limit established in these stability studies, Wolf Creek was operated in an unknown operating state for extended periods of time in 2008 and 2009.

³⁸Westar’s violation of TOP-004 began on 9/16/07 and ended on 3/17/11 thereby implicating TOP-004-1 which became mandatory and enforceable on 6/18/07.

³⁹ North American Electric Reliability Corp., Standard TPL-002-0b, System Performance Following Loss of a Single BES Element, Requirement 1.

In two stability studies performed by SPP in late 2009,⁴⁰ the stability of Wolf Creek was again analyzed under light load conditions. The only Category B contingency analyzed was *a three-phase fault on the Wolf Creek – LaCygne transmission line*. The analysis was performed with Wolf Creek net generation between 1185 MWe and 900 MWe, at fault clearing times between 5 and 3.5 cycles. The stability analysis for these two studies indicated that Wolf Creek was unstable at 1185 MWe net generation for *a three-phase fault on the Wolf Creek – LaCygne transmission line at fault clearing times greater than 3.5 cycles*. In the *SPP 2009 Stability Study*, SPP staff indicated that Wolf Creek only became stable at a 3.6 cycle fault clearing time, if Wolf Creek net generation was reduced to 1100 MWe. Notwithstanding the results of the *SPP 2009 Stability Study*, Westar operated Wolf Creek in excess of 1100 MWe net generation for extended periods of time during 2010.

In the *SPP 2010 Stability Study*, published in December 2010, the stability of Wolf Creek was again analyzed under light load conditions at 1185 MWe net generation and various fault clearing times. The only Category B contingency analyzed was a three-phase fault on the Wolf Creek – LaCygne transmission line. SPP's analysis indicated that Wolf Creek was stable for *a three-phase fault on the Wolf Creek – LaCygne transmission line* at 1185 MWe net generation at fault clearing times between 4 and 3.6 cycles. During the winter of 2011, Westar operated Wolf Creek for extended periods of time at a net generation greater than 1185 MWe.

It is SPP RE's determination that on multiple occasions between September 2007 and March 2011, Westar:

- (1) Operated Wolf Creek in excess of the net generation output validated in its stability studies thereby entering a state for which valid operating limits had not been determined; and
- (2) Upon entering a state for which valid operating limits had not been determined, failed to restore operation of Wolf Creek to proven reliable power system limits within 30 minutes.

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

It is SPP RE's determination that Westar's violations of TOP-002-2 R6 (SPP2013012077), TOP-004-1 R2 (SPP2013011995), and TOP-004-1 R4 (SPP2013011999) posed a serious risk to the reliability of the BPS. Collectively, the purpose of the TOP-002 and TOP-004 NERC Reliability Standards is to ensure Transmission Operators, such as Westar, operate their transmission systems reliably. Reliable operation means "operating the elements of the Bulk-Power System within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such systems will not occur as a result of

⁴⁰ 2009 Stability Contingencies – WC Sensitivities (Rev 10/23/09) and SPP 2009 Stability Study issued December 18, 2009.

a sudden disturbance or unanticipated failure of system elements.”⁴¹ By operating Wolf Creek in excess of the stability limits, i.e., System Operating Limits⁴² identified in its stability studies, Westar increased the risk that an unanticipated failure of a single Westar transmission line, such as the loss of the Wolf Creek – LaCygne 345 kV transmission line, would cause Wolf Creek to become unstable. The likelihood that such operations would result in Wolf Creek instability is heightened considering Westar operated Wolf Creek in excess of the defined stability limits during those times when Wolf Creek was most susceptible to instability, i.e., the fall and spring months. Were Wolf Creek to become unstable it would result in the loss of the largest single generating unit in the SPP footprint. Nevertheless, Wolf Creek accounted for less than four percent of SPP generation during this timeframe.

The actual operating history of Wolf Creek indicates a reduced risk profile for operations above 1185 MWe. Westar has provided system operating data demonstrating that on numerous occasions between 2001 and 2014, with Wolf Creek operating above 1185 MWe net generation, Westar has experienced an outage of one of the 345 kV transmission lines at the Wolf Creek substation, with no resulting system instability. On five of these occasions, Westar experienced an outage of the Wolf Creek – LaCygne 345 kV transmission line, the most severe N-1 contingency, with Wolf Creek operating between 1186.3 MWe and 1196.1 MWe net generation, at or near system light load conditions. Following each transmission line outage, the Westar system remained stable. Westar’s operating data indicates that for a broad spectrum of system load conditions, with Wolf Creek operating above 1185 MWe net generation, Wolf Creek would remain stable following the loss of one of the Wolf Creek substation 345 kV transmission lines. While such operating experience portends the stability of Wolf Creek at net generation levels greater than 1185 MWe and is a mitigating factor as to the potential risk of such operations, it does not eliminate the risk altogether, nor is it a substitute for an accurate stability study finding such operations are stable.

It is SPP RE’s determination that because no loss of load or other negative system impact can be attributed to the operation of Wolf Creek above 1185 net generation, no actual harm resulted from Westar’s violations of TOP-002-2 R6 (SPP2013012077), TOP-004-1 R2 (SPP2013011995), and TOP-004-1 R4 (SPP2013011999).

As to the violation of TOP-004-2 R3 (SPP2013011997), it is SPP RE’s determination that Westar’s violation posed a moderate risk to the reliability of the BPS. By failing to update its operating directives to accurately reflect the results of its stability studies,

⁴¹ North American Electric Reliability Corporation, Glossary of Terms Used in NERC Reliability Standards (2015).

⁴² *Id.* at 84. The value (such as MW, MVar, Amperes, Frequency or Volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. System Operating Limits are based upon certain operating criteria. These include, but are not limited to Transient Stability Ratings (Applicable pre- and post-Contingency Stability Limits). (emphasis added) See also Southwest Power Pool Criteria, §12.3 System Operating Limits (SOLs), pg. 12-24, (2008).

Westar increased the risk that an outage of two of the Wolf Creek substation 345 kV transmission lines could result in the instability of Wolf Creek. Although the risks to the BPS are substantial should Wolf Creek become unstable, the historical operating data provided by Westar indicates the probability of a double contingency resulting in Wolf Creek instability is remote.

Westar has utilized operating directives to ensure Wolf Creek stability following the loss of a Wolf Creek substation 345 kV transmission line since 1992. These operating directives called for the reduction of Wolf Creek net generation to 950 MWe following the loss of a single Wolf Creek 345 kV transmission line. Instability for this contingency, at 950 MWe, only became an issue in stability studies beginning in 2008. In 2009, Westar experienced two double outages of the Wolf Creek substation 345 kV transmission lines. In March and May of that year, Westar experienced an outage of the Wolf Creek – Benton and Wolf Creek – Rose Hill 345 kV transmission lines respectively. On both occasions, Westar reduced Wolf Creek net output to 950 MWe and a second transmission line outage occurred. Wolf Creek remained stable following the loss of the second transmission line. The results of stability studies and these double outages indicates that Wolf Creek instability at 950 MWe is limited to those double outages involving the Wolf Creek – LaCygne 345 kV transmission line. Thus, a narrow set of conditions must exist, i.e., light load conditions and an outage of the Wolf Creek – LaCygne transmission line, before the threat of Wolf Creek instability for a double outage exists. Because the potential for instability was limited to those times when the BPS is lightly loaded and to an outage of the Wolf Creek – LaCygne transmission line, SPP RE finds the probability of Wolf Creek becoming unstable for a double outage to be remote. It is SPP RE's determination that no actual harm resulted from Westar's violation of TOP-004-2 R3 (SPP2013011997).

IS THERE A SETTLEMENT AGREEMENT YES ☒ NO ☐

WITH RESPECT TO THE VIOLATION(S), REGISTERED ENTITY

NEITHER ADMITS NOR DENIES IT (SETTLEMENT ONLY) YES ☒
ADMITS TO IT YES ☐
DOES NOT CONTEST IT (INCLUDING WITHIN 30 DAYS) YES ☐

**WITH RESPECT TO THE ASSESSED PENALTY OR SANCTION,
REGISTERED ENTITY**

ACCEPTS IT/ DOES NOT CONTEST IT YES ☒

III. DISCOVERY INFORMATION

METHOD OF DISCOVERY

SELF-REPORT ☐
SELF-CERTIFICATION ☐
COMPLIANCE AUDIT ☐

COMPLIANCE VIOLATION INVESTIGATION
SPOT CHECK
COMPLAINT
PERIODIC DATA SUBMITTAL
EXCEPTION REPORTING

☒
☐
☐
☐
☐

DURATION DATE(S)

SPP2013012077: Westar's violation of **TOP-002-2 R6** began on **September 16, 2007**, (the first occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output after the NERC Reliability Standards became enforceable on June 18, 2007) and ended on **March 17, 2011**, (the last occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output before entering the 2011 refueling outage. On **May 9, 2011**, Wolf Creek was determined to be stable in the Westar stability study, *Analysis of Wolf Creek Stability With Turbine Power Uprate*, under 2011 Light Load conditions at 1300 MWe gross output, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles. Westar's violation of TOP-002-2 R6 was not continuous and was generally limited to those times Wolf Creek operated above 1185 MWe net output during the fall and spring months.

SPP2013011995: Westar's violation of **TOP-004-1 R2** began on **September 16, 2007**, (the first occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output after the NERC Reliability Standards became enforceable on June 18, 2007) and ended on **March 17, 2011**, (the last occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output before entering the 2011 refueling outage). On **May 9, 2011**, Wolf Creek was determined to be stable in the Westar stability study, *Analysis of Wolf Creek Stability With Turbine Power Uprate*, under 2011 Light Load conditions at 1300 MWe gross output, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles. Westar's violation of TOP-004-1 R2 was not continuous and was generally limited to those times Wolf Creek operated above 1185 MWe net output during the fall and spring months.

SPP2013011997: Westar's violation of **TOP-004-2 R3** began on **February 17, 2009**, (the date Westar failed to amend its operating directive subsequent to the determination in a stability study performed by SPP that Wolf Creek was unstable under light load conditions for the Category C contingency, *a three-phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 950 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line. No Reclosing*, at a fault clearing time of five cycles) and ended **December 22, 2010**, (the date Westar revised its operating directives to reflect a reduction in Wolf Creek output to 900 MWe net generation following loss of a single Wolf Creek substation 345 kV transmission line).

SPP2013011999: Westar's violation of **TOP-004-1 R4** began on **September 16, 2007**, (the first occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output after the NERC Reliability Standards became enforceable on June 18, 2007) and ended on **March 17, 2011**, (the last occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output before entering the 2011 refueling outage). On **May 9, 2011**, Wolf Creek was determined to be stable in the Westar stability study, *Analysis of Wolf Creek Stability With Turbine Power Uprate*, under 2011 Light Load conditions at 1300 MWe gross output, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles. Westar's violation of TOP-004-1 R4 was not continuous and was generally limited to those times Wolf Creek operated above 1185 MWe net output during the fall and spring months.

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY

June 8, 2012, the date NERC issued its *Notice of Preliminary Findings and Analysis, Non-Public Compliance Investigation of Westar Energy Inc. – NERC0017CVI*.

IS THE VIOLATION STILL OCCURRING **YES** ☐ **NO** ☒
IF YES, EXPLAIN

REMEDIAL ACTION DIRECTIVE ISSUED **YES** ☐ **NO** ☒
PRE TO POST JUNE 18, 2007 VIOLATION **YES** ☐ **NO** ☒

IV. MITIGATION INFORMATION

TOP-004-1 R2 (SPP2013011995)

FOR FINAL ACCEPTED MITIGATION PLAN:

MITIGATION PLAN NO.	SPPMIT011840
DATE SUBMITTED TO REGIONAL ENTITY	11/12/15
DATE ACCEPTED BY REGIONAL ENTITY	11/17/15
DATE APPROVED BY NERC	12/4/15
DATE PROVIDED TO FERC	12/4/15

IDENTIFY AND EXPLAIN ALL PRIOR VERSIONS THAT WERE ACCEPTED OR REJECTED, IF APPLICABLE

N/A

MITIGATION PLAN COMPLETED **YES** ☒ **NO** ☐

EXPECTED COMPLETION DATE 3/17/11
EXTENSIONS GRANTED N/A

ACTUAL COMPLETION DATE 3/17/11⁴³

DATE OF CERTIFICATION LETTER 11/12/15
CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF 3/17/11

DATE OF VERIFICATION LETTER 11/18/15
VERIFIED COMPLETE BY REGIONAL ENTITY AS OF 11/18/15

ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT RECURRENCE

Westar evaluated the stability of Wolf Creek in a stability study performed on May 9, 2011. Wolf Creek was determined to be stable under 2011 Light Load conditions at 1,300 MWe gross generation, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles. Thereafter, the stability of Wolf Creek is analyzed in the annual Southwest Power Pool, Inc. TPL Stability Study under light load conditions for the contingencies, Rose Hill to Wolf Creek 345 kV 3-phase fault, no reclosing; Benton to Wolf Creek 345 kV 3-phase fault, no reclosing; and Wolf Creek to LaCygne 345 kV 3-phase fault, no reclosing.

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE COMPLETION OF MITIGATION PLAN (FOR CASES IN WHICH MITIGATION IS NOT YET COMPLETED, LIST EVIDENCE REVIEWED FOR COMPLETED MILESTONES)

WC - SPP Dispatch Instruction History

Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement
 20110509

SPP2013011997 (TOP-004-2 R3)

FOR FINAL ACCEPTED MITIGATION PLAN:

MITIGATION PLAN NO.	SPPMIT011841
DATE SUBMITTED TO REGIONAL ENTITY	11/13/15
DATE ACCEPTED BY REGIONAL ENTITY	11/17/15
DATE APPROVED BY NERC	12/4/15
DATE PROVIDED TO FERC	12/4/15

IDENTIFY AND EXPLAIN ALL PRIOR VERSIONS THAT WERE ACCEPTED OR REJECTED, IF APPLICABLE

⁴³ Wolf Creek entered a refueling outage in March 2011, effectively ending the violation. Westar did not complete the Stability Study validating the stability of Wolf Creek at 1,300 MWe gross generation until May 9, 2011.

N/A

MITIGATION PLAN COMPLETED**YES** ☒ **NO** ☐**EXPECTED COMPLETION DATE** 12/22/10**EXTENSIONS GRANTED** N/A**ACTUAL COMPLETION DATE** 12/22/10**DATE OF CERTIFICATION LETTER** 11/12/15**CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF** 12/22/10**DATE OF VERIFICATION LETTER** 11/12/15**VERIFIED COMPLETE BY REGIONAL ENTITY AS OF** 12/22/10**ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT RECURRENCE**

Westar modified its Transmission Operating Directives, 0300, 0301, and 0302 to reflect a reduction in Wolf Creek output to 900 MWe net generation following loss of a single Wolf Creek substation 345 kV transmission line. Thereafter, the stability of Wolf Creek is analyzed in the annual Southwest Power Pool, Inc. TPL Stability Study under light load conditions for the contingencies: C5 - 3-phase fault on Benton - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 900 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line with no reclosing; C10 - 3-phase fault on Wolf Creek-LaCygne 345 kV line; Reduce Wolf Creek output to 900 MW (Transmission Operating Directive 302); 3-Ø fault on Wolf Creek-Benton 345 kV line, no reclosing; and C23 - 3-phase fault on Rose Hill - Wolf Creek 345 kV line with no reclosing; Reduce Wolf Creek output to 900 MW (Transmission Operating Directive 300); 3-phase fault on LaCygne - Wolf Creek 345 kV line with no reclosing.

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE COMPLETION OF MITIGATION PLAN (FOR CASES IN WHICH MITIGATION IS NOT YET COMPLETED, LIST EVIDENCE REVIEWED FOR COMPLETED MILESTONES)

Westar Transmission Operating Directive 0300 (Outage of the Benton to Wolf Creek 345 kV Line)

Westar Transmission Operating Directive 0301 (Outage of the Rose Hill to Wolf Creek 345 kV Line)

Westar Transmission Operating Directive 0302 (Outage of the LaCygne to Wolf Creek 345 kV Line)

TOP-004-1 R4 (SPP2013011999)**FOR FINAL ACCEPTED MITIGATION PLAN:**

MITIGATION PLAN NO.	SPPMIT011842
DATE SUBMITTED TO REGIONAL ENTITY	11/13/15
DATE ACCEPTED BY REGIONAL ENTITY	11/17/15
DATE APPROVED BY NERC	12/4/15
DATE PROVIDED TO FERC	12/4/15

IDENTIFY AND EXPLAIN ALL PRIOR VERSIONS THAT WERE ACCEPTED OR REJECTED, IF APPLICABLE

N/A

MITIGATION PLAN COMPLETED	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
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EXPECTED COMPLETION DATE	3/17/11
EXTENSIONS GRANTED	N/A
ACTUAL COMPLETION DATE	3/17/11 ⁴⁴

DATE OF CERTIFICATION LETTER	11/13/15
CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF	3/17/11

DATE OF VERIFICATION LETTER	11/18/15
VERIFIED COMPLETE BY REGIONAL ENTITY AS OF	11/18/15

ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT RECURRENCE

Westar evaluated the stability of Wolf Creek in a stability study performed on May 9, 2011. Wolf Creek was determined to be stable under 2011 Light Load conditions at 1,300 MWe gross generation, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles. Thereafter, the stability of Wolf Creek is analyzed in the annual Southwest Power Pool, Inc. TPL Stability Study under light load conditions for the contingencies, Rose Hill to Wolf Creek 345 kV 3-phase fault, no reclosing; Benton to Wolf Creek 345 kV 3-phase fault, no reclosing; and Wolf Creek to LaCygne 345 kV 3-phase fault, no reclosing.

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE COMPLETION OF MITIGATION PLAN (FOR CASES IN

⁴⁴ Wolf Creek entered a refueling outage in March 2011, effectively ending the violation. Westar did not complete the Stability Study validating the stability of Wolf Creek at 1,300 MWe gross generation until May 9, 2011.

**WHICH MITIGATION IS NOT YET COMPLETED, LIST EVIDENCE
REVIEWED FOR COMPLETED MILESTONES)**

WC - SPP Dispatch Instruction History

Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement
20110509

TOP-002-2 R6 (SPP2013012077)

FOR FINAL ACCEPTED MITIGATION PLAN:

MITIGATION PLAN NO.	SPPMIT11483
DATE SUBMITTED TO REGIONAL ENTITY	11/13/15
DATE ACCEPTED BY REGIONAL ENTITY	11/17/15
DATE APPROVED BY NERC	12/4/15
DATE PROVIDED TO FERC	12/4/15

**IDENTIFY AND EXPLAIN ALL PRIOR VERSIONS THAT WERE ACCEPTED
OR REJECTED, IF APPLICABLE**

N/A

MITIGATION PLAN COMPLETED YES ☒ NO ☐

EXPECTED COMPLETION DATE	3/17/11
EXTENSIONS GRANTED	N/A
ACTUAL COMPLETION DATE	3/17/11 ⁴⁵

DATE OF CERTIFICATION LETTER	11/13/15
CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF	3/17/11

DATE OF VERIFICATION LETTER	11/18/15
VERIFIED COMPLETE BY REGIONAL ENTITY AS OF	3/17/11

**ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT
RECURRENCE**

Westar evaluated the stability of Wolf Creek in a stability study performed on May 9, 2011. Wolf Creek was determined to be stable under 2011 Light Load conditions at 1,300 MWe gross generation, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles. Thereafter, the stability of Wolf Creek is analyzed in the annual Southwest Power Pool, Inc. TPL Stability Study under light load conditions for

⁴⁵ Wolf Creek entered a refueling outage in March 2011, effectively ending the violation. Westar did not complete the Stability Study validating the stability of Wolf Creek at 1,300 MWe gross generation until May 9, 2011.

the contingencies, Rose Hill to Wolf Creek 345 kV 3-phase fault, no reclosing; Benton to Wolf Creek 345 kV 3-phase fault, no reclosing; and Wolf Creek to LaCygne 345 kV 3-phase fault, no reclosing.

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE COMPLETION OF MITIGATION PLAN (FOR CASES IN WHICH MITIGATION IS NOT YET COMPLETED, LIST EVIDENCE REVIEWED FOR COMPLETED MILESTONES)

WC - SPP Dispatch Instruction History

Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement
20110509

V. PENALTY INFORMATION

TOTAL ASSESSED PENALTY OR SANCTION OF \$220,000 FOR FOUR VIOLATIONS OF RELIABILITY STANDARDS.

(1) REGISTERED ENTITY'S COMPLIANCE HISTORY

PREVIOUSLY FILED VIOLATIONS OF ANY OF THE INSTANT RELIABILITY STANDARD(S) OR REQUIREMENT(S) THEREUNDER

YES ☐ NO ☒

LIST VIOLATIONS AND STATUS

ADDITIONAL COMMENTS

PREVIOUSLY FILED VIOLATIONS OF OTHER RELIABILITY STANDARD(S) OR REQUIREMENTS THEREUNDER

YES ☒ NO ☐

LIST VIOLATIONS AND STATUS

A Find, Fix, Track and Report (FFT) informational posting addressing remediated issues for certain registered entities including Westar's noncompliance with TPL-004-0 R2 (SPP2013011987), TPL-003-0 R1 (SPP2013011993), and TPL-002-0 R1 (SPP2013011994) was posted to the NERC website on August 30, 2013. The 60-day review period passed on October 29, 2013.

A FFT informational posting addressing remediated issues for certain registered entities including Westar's noncompliance with TPL-003-0 R3 (SPP2013011991) and TPL-003-0 R2 (SPP2013011992) was posted to the NERC website on December 30, 2013. The 60-day review period passed on February 28, 2014.

A FFT informational posting addressing remediated issues for certain registered entities including Westar's noncompliance with PRC-005-1 R1 (SPP2013011996), PRC-018-1 R6 (SPP2013012007), and FAC-008-1 R1 (SPP2013011988) was posted to the NERC website on July 31, 2013. The 60-day review period passed on September 29, 2013.

On June 28, 2013, SPP RE administratively dismissed Westar's violations of FAC-009-1 R1 (SPP2013011989) and PRC-005-1 R2 (SPP2013011998) consolidating the violations respectively with violation of FAC-009-1 R1 (SPP201000418) self-reported on October 1, 2010 and violation of PRC-005-1 R2 (SPP2011008071) self-reported on September 6, 2011. Westar and SPP RE entered into a settlement agreement for NERC Violations SPP201000418 and SPP2011008071 on October 23, 2013. NERC filed the violations with the Federal Energy Regulatory Commission (Commission) as a Spreadsheet Notice of Penalty (NP-14-14-000) on December 30, 2013. The Commission issued an Order on January 29, 2014, stating that it will not seek further review of the violations.

ADDITIONAL COMMENTS

The violations noted above were discovered during the CVI and are considered to have occurred concurrently with Westar's violations of TOP-002-2 R6 (SPP2013012077), TOP-004-1 R2 (SPP2013011995), TOP-004-2 R3 (SPP2013011997) and TOP-004-1 R4 (SPP2013011999). The monetary penalty assessed herein was not aggravated based on these violations.

(2) THE DEGREE AND QUALITY OF COOPERATION BY THE REGISTERED ENTITY (IF THE RESPONSE TO FULL COOPERATION IS "NO," THE ABBREVIATED NOP FORM MAY NOT BE USED.)

FULL COOPERATION
IF NO, EXPLAIN

YES ☒ **NO** ☐

(3) THE PRESENCE AND QUALITY OF THE REGISTERED ENTITY'S COMPLIANCE PROGRAM

IS THERE A DOCUMENTED COMPLIANCE PROGRAM
YES ☒ **NO** ☐ **UNDETERMINED** ☐
EXPLAIN

In 2010, Westar Energy established a comprehensive internal compliance program to ensure compliance with the NERC Reliability Standards. To ensure a

strong culture of compliance, Westar requires the active involvement of senior management in the development, implementation, and monitoring of its internal compliance program.

Overall management of Westar's internal compliance program is vested in a Steering Committee, which is responsible for monitoring the status of the internal compliance program; annually reviewing the program for effectiveness; encouraging compliance; and providing sufficient funding and resources. Additionally, the Steering Committee provides oversight to ensure violations are reported timely and remediated completely. The Steering Committee is made up of five Westar officers who individually are responsible for internal audit, legal, regulatory, transmission, and generation. The VP, Regulatory Affairs serves as the chair of the Steering Committee.

Westar's Regulatory Compliance Committee is made up of employees who are directly and indirectly responsible for compliance with NERC Reliability Standards. The Committee meets on a quarterly basis with the Steering Committee to discuss the status of the compliance efforts and communicate compliance issues or concerns.

Westar's Regulatory Department facilitates and coordinates the implementation of and adherence to applicable regulatory requirements. The Regulatory Department monitors the development of new and revised operating protocols and guidelines, and in coordination with the impacted departments, works to ensure compliance with regulatory requirements. Regulatory also leads the preparation for compliance audits, and with the Legal Department, interfaces directly with regulatory agencies on issues pertaining to reliability standards and compliance enforcement.

The Director of NERC Compliance is responsible for coordinating, administering, and supporting all aspects of the Westar's NERC compliance efforts.

Westar's "Corporate Compliance and Internal Audit" is responsible for independently evaluating Westar's compliance with the internal compliance program annually.

Within Westar, various operational areas are responsible for the day-to-day responsibility of operating reliably and ensuring compliance with the NERC Reliability Standards. These operational areas include: Transmission, Generation, Bulk Power Marketing, Substation Engineering and Maintenance, Distribution Power Delivery, Information Technology, Accounting, Finance, Human Resources, Customer and Community Relations, and Strategy.

In support of its internal compliance program Westar Energy has implemented training programs. These training programs reinforce that compliance with

regulatory requirements is mandatory and a priority. The training also reiterates that Westar does not tolerate retaliation for good faith reports of any complaints or concerns regarding potential or actual compliance issues. Training requirements are monitored to ensure all employees receive necessary training. Employees that are part of the compliance effort meet regularly to review regulatory requirements.

Software systems are utilized by Regulatory and Corporate Compliance and Internal Audit to document annual compliance assessments, compliance evidence and regulatory requirements. Employees have access to the software systems as necessary, and receive training as needed, regarding their responsibilities for compliance and the steps that need to be followed.

Westar has set up an Integrity Hotline to report complaints or concerns regarding compliance. An independent third party manages the Hotline. Complaints and concerns can be made anonymously and are routed to Corporate Compliance and Internal Audit for review and investigation.

Finally, compliance with regulatory requirements is incorporated into employee goals to ensure compliance is a top priority. A company-wide disciplinary policy (Human Resources Policy Manual – Policy to Effect Constructive Corrective Action) is followed to address violations.

EXPLAIN SENIOR MANAGEMENT’S ROLE AND INVOLVEMENT WITH RESPECT TO THE REGISTERED ENTITY’S COMPLIANCE PROGRAM, INCLUDING WHETHER SENIOR MANAGEMENT TAKES ACTIONS THAT SUPPORT THE COMPLIANCE PROGRAM, SUCH AS TRAINING, COMPLIANCE AS A FACTOR IN EMPLOYEE EVALUATIONS, OR OTHERWISE.

Westar requires senior management’s active involvement in the Compliance Program to ensure that compliance remains a cornerstone of Westar’s culture. Management oversight of the Compliance Program is vested in the Steering Committee, which is directly and extensively engaged in implementation of the Compliance Program. The Steering Committee is made up of five members of senior management. Two additional senior management representatives from operations and IT business units regularly attend the meetings, while the Director or NERC Compliance and the Director of FERC Compliance attend the meetings as needed. The VP, Regulatory Affairs serves as the chair of the Steering Committee. The Executive Director Corporate Compliance and Internal Audit is identified as the Chief Audit Executive (CAE) for the company and reports independently to the Audit Committee of the Board of Directors. The primary purpose of the Steering Committee is to oversee and guide compliance with FERC and NERC requirements. The Steering Committee provides directional guidance and strategic reliability coordination to facilitate overall compliance and

operational excellence. The Steering Committee provides oversight for the implementation of Westar's plans and actions for compliance with new or revised standards. The Steering Committee may provide guidance and direction on any reliability related issue that it deems appropriate.

SPP RE reviewed Westar's internal compliance program and considered it to be a mitigating factor in the penalty determination.

(4) ANY ATTEMPT BY THE REGISTERED ENTITY TO CONCEAL THE VIOLATION(S) OR INFORMATION NEEDED TO REVIEW, EVALUATE OR INVESTIGATE THE VIOLATION.

YES ☐ NO ☒
IF YES, EXPLAIN

(5) ANY EVIDENCE THE VIOLATION(S) WERE INTENTIONAL (IF THE RESPONSE IS "YES," THE ABBREVIATED NOP FORM MAY NOT BE USED.)

YES ☐ NO ☒
IF YES, EXPLAIN

(6) ANY OTHER MITIGATING FACTORS FOR CONSIDERATION

YES ☐ NO ☒
IF YES, EXPLAIN

(7) ANY OTHER AGGRAVATING FACTORS FOR CONSIDERATION

YES ☒ NO ☐
IF YES, EXPLAIN

On four occasions between February 27, 2009, and December 22, 2010, stability studies performed by SPP indicated that for a multiple outage of the Wolf Creek substation transmission lines, Wolf Creek was subject to instability if Wolf Creek net generation was not reduced to less than 950 MWe. On two occasions in 2009, stability studies performed by SPP indicated that Wolf Creek was subject to instability following loss of the Wolf Creek – LaCygne 345 kV transmission line, the most severe N-1 contingency. Notwithstanding these affirmative indications of potential instability, Westar continued to operate Wolf Creek above the generation level where instability was indicated and failed to revise its operating directives to ensure Wolf Creek stability for a multiple outage. SPP RE considers such actions to be an aggravating factor in its penalty determination because they

indicate a lack of due diligence by Westar to ensure the safe and reliable operation of its transmission system.

(8) ANY OTHER EXTENUATING CIRCUMSTANCES

YES ☐ NO ☒
IF YES, EXPLAIN

EXHIBITS:

SOURCE DOCUMENTS

Exhibit A. *Compliance Inquiry Summary Report*, May 18, 2010.

Exhibit B. *NERC Notice of Preliminary Findings and Analysis, Non-Public Compliance Investigation of Westar Energy Inc. – NERC0017CVI*, June 8, 2012.

Exhibit C. *Westar Response to Notice of Preliminary Findings and Analysis, Non-Public Compliance Investigation of Westar Energy Inc. – NEC0017CVI*, August 22, 2012.

Exhibit D. *NERC Notice of Completion of Investigation Phase of Compliance Investigation NERC000012CI* (sic), October 3, 2012.

Exhibit E. Letter from Jim Useldinger, Senior Engineer, KPL, to Louis Solorio, Wolf Creek Nuclear Operating Corporation, October 28, 1993.

Exhibit F. Letter from Jim Useldinger, Senior Engineer, KPL, to Jim Zell, Supervisor Design Basis, Wolf Creek Nuclear Operating Corporation, March 4, 1992.

Exhibit G. *Southwest Power Pool, 2008 Stability Contingencies*, (rev. November 30, 2008).

Exhibit H. *Southwest Power Pool, 2008 Stability Study*, February 17, 2009.

Exhibit I. *Southwest Power Pool 2009 Stability Contingencies – WC Sensitivities*, (rev. October 23, 2009).

Exhibit J. *Southwest Power Pool 2009 Stability Study*, December 18, 2009.

Exhibit K. *Generator Interconnection Impact Study for DISIS-2009-001 Group 8*, January 11, 2010.

Exhibit L. Southwest Power Pool *2010 Stability Study*, December 22, 2010.

Exhibit M. Westar – Wolf Creek Stability Studies, May 9, 2011, April 22, 2011, & April 26, 2011.

Exhibit N. Westar attestation, May 17, 2011.

Exhibit O. Southwest Power Pool, *2011 TPL Stability Study*, December 19, 2011.

Exhibit P1. Mitigation Plan 2013011995, November 12, 2015.

Exhibit P2. Westar Certification of Mitigation Plan Completion 201311995, November 12, 2015.

Exhibit P3. SPP RE Verification of Mitigation Plan Completion 201311995, November 18, 2015.

Exhibit Q1. Mitigation Plan 2013011997, November 12, 2015.

Exhibit Q2. Westar Certification of Mitigation Plan Completion 201311997, November 12, 2015.

Exhibit Q3. SPP RE Verification of Mitigation Plan Completion 201311997, November 18, 2015.

Exhibit R1. Mitigation Plan 2013011999, November 13, 2015.

Exhibit R2. Westar Certification of Mitigation Plan Completion 201311999, November 13, 2015.

Exhibit R3. SPP RE Verification of Mitigation Plan Completion 201311999, November 18, 2015.

Exhibit S1. Mitigation Plan 2013012077, November 13, 2015.

Exhibit S2. Westar Certification of Mitigation Plan Completion 2013012077, November 13, 2015.

Exhibit S3. SPP RE Verification of Mitigation Plan Completion 2013012077, November 18, 2015.

OTHER RELEVANT INFORMATION:

**NOTICE OF ALLEGED VIOLATION AND PROPOSED PENALTY OR
SANCTION ISSUED**

DATE: **OR N/A** ☒

SETTLEMENT DISCUSSIONS COMMENCED

DATE: 9/27/15 **OR N/A** ☐

NOTICE OF CONFIRMED VIOLATION ISSUED

DATE: **OR N/A** ☒

SUPPLEMENTAL RECORD INFORMATION

DATE(S) **OR N/A** ☒

REGISTERED ENTITY RESPONSE CONTESTED

FINDINGS ☐ **PENALTY** ☐ **BOTH** ☐ **DID NOT CONTEST** ☒

HEARING REQUESTED

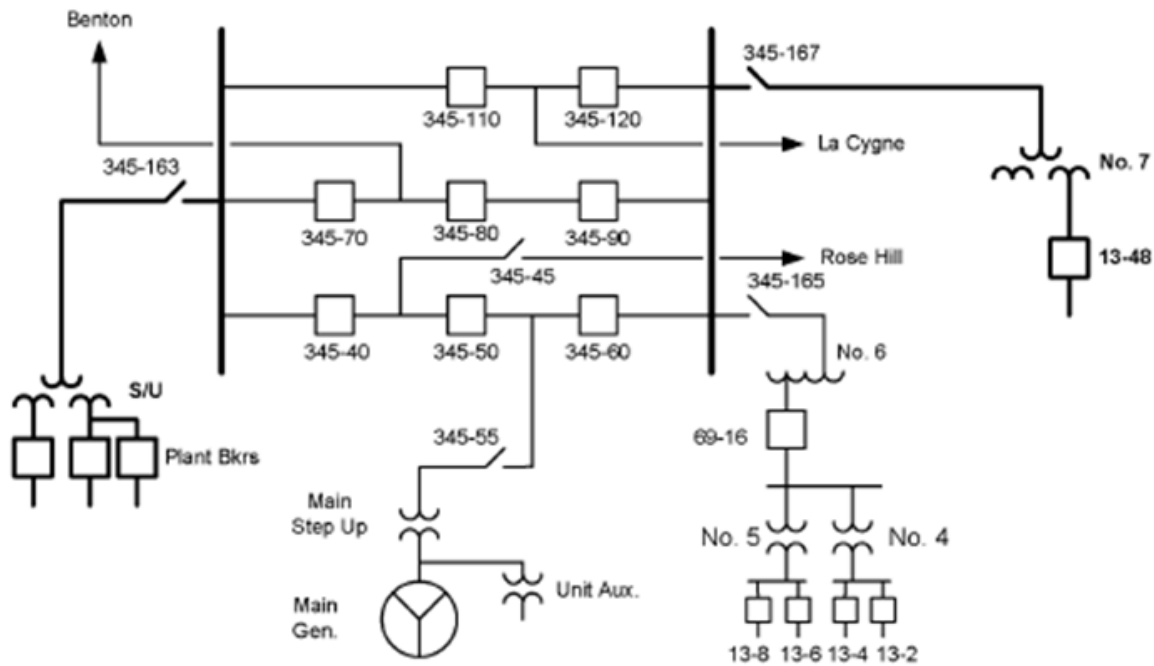
YES ☐ **NO** ☒

DATE

OUTCOME

APPEAL REQUESTED

Appendix A.



**Wolf Creek
ONE LINE DIAGRAM**

Attachment C

**Record documents for the violation of
TOP-002-2 R6 (SPP2013012077):**

**C-1. Westar's Mitigation Plan designated
as SPPMIT011843 submitted November
13, 2015.**

**C-2. Westar's Certification of Mitigation
Plan SPPMIT011843 Completion dated
November 13, 2015.**

**C-3. SPP RE's Verification of Mitigation
Plan SPPMIT011843 Completion dated
November 18, 2015.**



Mitigation Plan

Mitigation Plan Summary

Registered Entity: Westar Energy, Inc.

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
SPPMIT011843	SPP2013012077	TOP-002-2 R6.		1

Mitigation Plan Submitted On: November 13, 2015

Mitigation Plan Accepted On: November 17, 2015

Mitigation Plan Proposed Completion Date: March 17, 2011

Actual Completion Date of Mitigation Plan: March 17, 2011

Mitigation Plan Certified Complete by WR On: November 13, 2015

Mitigation Plan Completion Verified by SPPRE On: November 18, 2015

Mitigation Plan Completed? (Yes/No): Yes



Certification of Mitigation Plan Completion

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

Registered Entity Name: Westar Energy, Inc.

NERC Registry ID: NCR00658

NERC Violation ID(s): SPP2013012077

Mitigated Standard Requirement(s): TOP-002-2 R6.

Scheduled Completion as per Accepted Mitigation Plan: March 17, 2011

Date Mitigation Plan completed: March 17, 2011

SPPRE Notified of Completion on Date: November 13, 2015

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	WC - SPP Dispatch Instruction History 20150518.xlsx		1,144,977
Entity	Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement 20110509.pdf		257,972

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785 (575) 168-0

Authorized Signature _____ Date _____

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

From: noreply@oati.net
Sent: 11/18/2015 11:23:43
To: Megan.Wagner@westarenergy.com;bo.jones@westarenergy.com
Subject: Mitigation Plan has been Completed: Westar Energy, Inc. SPP2013012077/ SPP RE RESTRICTED
CONFIDENTIAL NON-PUBLIC

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

Note: This is a webCDMS application generated message. Please Do NOT reply to this email. If you have questions, please contact sppremitigationplan@spp.org.

Entity: Westar Energy, Inc. - NCR00658

NERC Violation ID: **SPP2013012077**
Standard and Requirement: TOP-002-2 R6.
Discovery Method: Investigation
Proposed Completion Date: 03/17/2011
Mitigation Plan Submitted: 11/13/2015
Mitigation Plan Verified: 11/18/2015

Southwest Power Pool Regional Entity (SPP RE) received Westar Energy, Inc.'s Certification of Completion for the subject Mitigation Plan. The SPP RE Enforcement Staff has completed its review of the evidence in support of the mitigation plan completion. The SPP RE Enforcement Staff finds Westar Energy, Inc. has successfully completed the subject mitigation plan on 03/17/2011.

Questions regarding this matter should be directed to Bob Reynolds.

Thank you, OATI

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[OATI Information - Email Template: MitPlan_Completed]



Mitigating Activities/Mitigation Plan Milestone/Completion Review

☐

Mitigating Activities

☒

Mitigation Plan

Registered Entity: **Westar Energy, Inc.**

Registry ID: **NCR00658**

NERC Violation ID: **SPP2013012077**

Reliability Standards and Requirement addressed by the plan:

TOP-002-2b

R6. Each Balancing Authority and Transmission Operator shall plan to meet unscheduled changes in system configuration and generation dispatch (at a minimum N-1 Contingency planning) in accordance with NERC, Regional Reliability Organization, subregional, and local reliability requirements.

NERC Mitigation Plan No: **SPPMIT011843**

Has the entity provided its Certification of Completion? **Yes**

Date of Registered Entity's Certification of Completed Mitigating Activities: **11/13/2015**

Date Certification Received by SPP RE: **11/13/2015**

Has the entity supplied data or information sufficient for the Enforcement Staff to independently verify that all required actions described in the Mitigation have been completed? **Yes**

Statement of Mitigating Activities: **N/A**

Date Final Installment of Evidence Received: **11/13/2015**

Completion Date entered by Entity: **03/17/2011**

Mitigation Plan Milestone Review and Evidence of Completion Review:

Milestones (if applicable)	Evidence Under Review (Document title, file name, date of documentation, and document revision number) (Ex. Facilities Methodology, 101112_MPEVD_Entity, 11/12/10, Rev. 2)	Proposed Completion Date	Completion Date	Review Date	Comments or Suggestions (Applicable to Mitigation Plan)
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N/A	WC - SPP Dispatch Instruction History 20150518.xlsx	03/19/2011	03/19/2011	11/18/2015	Applicable
N/A	Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement 20110509.pdf	03/19/2011	03/19/2011	11/18/2015	Applicable

Actual Final Completion Date of Mitigating Activities/ Mitigation Plan *(the date in time that the reviewer can actually verify the mitigation was complete based on the supplied evidence and the receipt of a mitigation plan completion certification/ please explain why date was chosen):*

SPP RE received the Certification of a Completed Mitigation Plan and supporting evidence on November 12, 2015. The Actual Final Completion Date of the Mitigation Plan is June 29, 2015.

Actual Violation End Date *(the date in time that the Entity resolved the Issue of Non-Compliance):*

The Actual Violation End Date is March 17, 2011 based on the completion date to the refueling outage start date.

Has the Violation End Date been entered into the Violation Detail on webCMDS? **Yes**

Any other comments for suggested changes or requests for additional evidence *(please denote the specific item of evidence or milestone being requested):* **No**

Statement by SPP RE verifying completion of the Mitigating Activities/ Mitigation Plan / Milestone *(In essence, detail what actions were taken by the entity to demonstrate compliance):*

SPP RE reviewed the Entity's Analysis of Wolf Creek Stability With Turbine Power Uprate 2011 Light Load Supplement and the completion date of the refueling outage start date.

SPP has concluded that on the basis of the evidence presented that the entity has completed the mitigation activities associated with TOP-002-2 R6.

Have all required actions described in the Mitigating Activities/ Mitigation Plan been completed? **Yes**

Review Performed by: **Bob Reynolds**

Date Review Performed: **November 18, 2015**

Compliance Notices

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

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

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

Entity Information

Identify your organization:

Entity Name: Westar Energy, Inc.

NERC Compliance Registry ID: NCR00658

Address: 818 South Kansas Avenue
Topeka KS 66612

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785-575-1680

Violation(s)

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

Violation ID	Date of Violation	Requirement
Requirement Description		
SPP2013012077	08/19/2009	TOP-002-2 R6.
Each Balancing Authority and Transmission Operator shall plan to meet unscheduled changes in system configuration and generation dispatch (at a minimum N-1 Contingency planning) in accordance with NERC, Regional Reliability Organization, subregional, and local reliability requirements.		

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

It has been alleged that:

(1) On multiple occasions between September 16, 2007, and December 22, 2010, Westar failed to implement operating guides and/or establish operating limits for the operation of Wolf Creek that were consistent with the results of its stability studies;

(2) Notwithstanding an uprate of Wolf Creek net generation to 1185 MWe in 1993, in the SPP 2008 Stability Contingencies (rev 11/30/2008) and SPP 2008 Stability Study, Westar failed to ensure that the stability studies accurately reflected the intended operation of Wolf Creek above 1185 MWe net; and

(3) Notwithstanding an uprate of Wolf Creek net generation to 1185 MWe net in 1993 and subsequent evaluations of Wolf Creek's stability at 1185 MWe or less net generation, Westar has operated Wolf Creek above 1185 MWe net generation for substantial periods of time during those times when Wolf Creek is most susceptible to instability.

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

This possible violation was identified during a Compliance Investigation.

Plan Details

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

Westar's alleged violation of TOP-002-2b R6 began on September 16, 2007 which was the first occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output after the NERC Reliability Standards became enforceable on June 18, 2007 and ended on March 17, 2011 which was the last occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output before entering the 2011 refueling outage. On May 9, 2011, Wolf Creek was determined to be stable in the Westar stability study, Analysis of Wolf Creek Stability With Turbine Power Uprate, under 2011 Light Load conditions at 1300 MWe gross output, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles.

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

Proposed Completion date of Mitigation Plan: March 17, 2011

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

Additional Relevant Information

Reliability Risk

Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

Reliability risk was minimal. Westar's violation of TOP-002-2b R6 was not continuous and was generally limited to those times Wolf Creek operated above 1185 MWe net output during the fall and spring months. None of the outages that Wolf Creek experienced through March 17, 2011, when operating above 1185 MWe, resulted in any instability.

Prevention

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

Westar performed a series of stability studies to evaluate the stability of Wolf Creek at 1300 MWe, a value greater than the anticipated gross generation output of Wolf Creek resulting from the 2011 spring outage turbine uprate. Westar analyzed a three phase fault and the loss of each of the Wolf Creek 345 kV transmission lines with a fault clearing time of 3.6 cycles. For the purpose of the stability studies, Westar conservatively estimated Wolf Creek gross generation following the uprate would be 1300 MWe.

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

No such action is needed.

Authorization

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

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

Acknowledges:

1. I am qualified to sign this mitigation plan on behalf of my organization.
2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Westar Energy, Inc. Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature: _____

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

Authorized Individual

Name: Bo Jones

Title: Director, NERC Compliance

Authorized On: November 13, 2015

Attachment D

**Record documents for the violation of
TOP-004-1 R2 (SPP2013011995):**

**D-1. Westar's Mitigation Plan designated
as SPPMIT011840 submitted November
12, 2015.**

**D-2. Westar's Certification of Mitigation
Plan SPPMIT011840 Completion dated
November 12, 2015.**

**D-3. SPP RE's Verification of Mitigation
Plan SPPMIT011840 Completion dated
November 18, 2015.**



Mitigation Plan

Mitigation Plan Summary

Registered Entity: Westar Energy, Inc.

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
SPPMIT011840	SPP2013011995	TOP-004-2 R2.		1

Mitigation Plan Submitted On: November 12, 2015

Mitigation Plan Accepted On: November 17, 2015

Mitigation Plan Proposed Completion Date: March 17, 2011

Actual Completion Date of Mitigation Plan: March 17, 2011

Mitigation Plan Certified Complete by WR On: November 12, 2015

Mitigation Plan Completion Verified by SPPRE On: November 18, 2015

Mitigation Plan Completed? (Yes/No): Yes



Certification of Mitigation Plan Completion

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

Registered Entity Name: Westar Energy, Inc.

NERC Registry ID: NCR00658

NERC Violation ID(s): SPP2013011995

Mitigated Standard Requirement(s): TOP-004-2 R2.

Scheduled Completion as per Accepted Mitigation Plan: March 17, 2011

Date Mitigation Plan completed: March 17, 2011

SPPRE Notified of Completion on Date: November 12, 2015

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	WC - SPP Dispatch Instruction History 20150518.xlsx		1,144,977
Entity	Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement 20110509.pdf		257,972

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785 (575) 168-0

Authorized Signature _____ Date _____

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

From: noreply@oati.net
Sent: 11/18/2015 11:02:09
To: Megan.Wagner@westarenergy.com;bo.jones@westarenergy.com
Subject: Mitigation Plan has been Completed: Westar Energy, Inc. SPP2013011995/ SPP RE RESTRICTED
CONFIDENTIAL NON-PUBLIC

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Note: This is a webCDMS application generated message. Please Do NOT reply to this email. If you have questions, please contact sppremitigationplan@spp.org.

Entity: Westar Energy, Inc. - NCR00658

NERC Violation ID: **SPP2013011995**
Standard and Requirement: TOP-004-2 R2.
Discovery Method: Investigation
Proposed Completion Date: 03/17/2011
Mitigation Plan Submitted: 11/12/2015
Mitigation Plan Verified: 11/18/2015

Southwest Power Pool Regional Entity (SPP RE) received Westar Energy, Inc.'s Certification of Completion for the subject Mitigation Plan. The SPP RE Enforcement Staff has completed its review of the evidence in support of the mitigation plan completion. The SPP RE Enforcement Staff finds Westar Energy, Inc. has successfully completed the subject mitigation plan on 03/17/2011.

Questions regarding this matter should be directed to Bob Reynolds.

Thank you, OATI

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[OATI Information - Email Template: MitPlan_Completed]



Mitigating Activities/Mitigation Plan Milestone/Completion Review

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Mitigating Activities

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Mitigation Plan

Registered Entity: [Westar Energy, Inc.](#)

Registry ID: [NCR00658](#)

NERC Violation ID: [SPP2013011995](#)

Reliability Standards and Requirement addressed by the plan:

[TOP-004-2](#)

[R2. Each Transmission Operator shall operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency.](#)

NERC Mitigation Plan No: [SPPMIT011840](#)

Has the entity provided its Certification of Completion? [Yes](#)

Date of Registered Entity's Certification of Completed Mitigating Activities: [11/12/2015](#)

Date Certification Received by SPP RE: [11/12/2015](#)

Has the entity supplied data or information sufficient for the Enforcement Staff to independently verify that all required actions described in the Mitigation have been completed? [Yes](#)

Statement of Mitigating Activities: [N/A](#)

Date Final Installment of Evidence Received: [11/12/2015](#)

Completion Date entered by Entity: [03/17/2011](#)

Mitigation Plan Milestone Review and Evidence of Completion Review:

Milestones (if applicable)	Evidence Under Review (Document title, file name, date of documentation, and document revision number) (Ex. Facilities Methodology, 101112_MPEVD_Entity, 11/12/10, Rev. 2)	Proposed Completion Date	Completion Date	Review Date	Comments or Suggestions (Applicable to Mitigation Plan)
N/A	WC - SPP Dispatch Instruction History 20150518.xlsx	03/19/2011	03/19/2011	11/18/2015	Applicable



N/A	Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement 20110509.pdf	03/19/2011	03/19/2011	11/18/2015	Applicable
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Actual Final Completion Date of Mitigating Activities/ Mitigation Plan *(the date in time that the reviewer can actually verify the mitigation was complete based on the supplied evidence and the receipt of a mitigation plan completion certification/ please explain why date was chosen):*

[SPP RE received the Certification of a Completed Mitigation Plan and supporting evidence on November 12, 2015. The Actual Final Completion Date of the Mitigation Plan is June 29, 2015](#)

Actual Violation End Date *(the date in time that the Entity resolved the Issue of Non-Compliance):*

[The Actual Violation End Date is March 17, 2011 based on the completion date to the refueling outage start date.](#)

Has the Violation End Date been entered into the Violation Detail on webCMDS? [Yes](#)

Any other comments for suggested changes or requests for additional evidence *(please denote the specific item of evidence or milestone being requested):*

Statement by SPP RE verifying completion of the Mitigating Activities/ Mitigation Plan / Milestone *(In essence, detail what actions were taken by the entity to demonstrate compliance):*

[SPP RE reviewed the Entity's Analysis of Wolf Creek Stability With Turbine Power Uprate 2011 Light Load Supplement and the completion date of the refueling outage start date.](#)

[SPP has concluded that on the basis of the evidence presented that the entity has completed the mitigation activities associated with TOP-004-2 R2](#)

Have all required actions described in the Mitigating Activities/ Mitigation Plan been completed? [Yes](#)

Review Performed by: [Bob Reynolds](#)

Date Review Performed: [November 18, 2015](#)



Compliance Notices

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

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

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

Entity Information

Identify your organization:

Entity Name: Westar Energy, Inc.

NERC Compliance Registry ID: NCR00658

Address: 818 South Kansas Avenue
Topeka KS 66612

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785-575-1680

Violation(s)

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

Violation ID	Date of Violation	Requirement
Requirement Description		
SPP2013011995	08/19/2009	TOP-004-2 R2.
Each Transmission Operator shall operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency.		

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

It has been alleged that on multiple occasions between September 2007 and March 2011, Westar operated Wolf Creek in excess of the net generation output validated in its stability studies for a three-phase fault on the Wolf Creek – LaCygne transmission line at a fault clearing time of 3.6 cycles (Category B), the most severe single contingency.

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

This possible violation was identified during a Compliance Investigation.

Plan Details

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

Westar's alleged violation of TOP-004-2 R2 began on September 16, 2007, which was the first occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output after the NERC Reliability Standards became enforceable on June 18, 2007, and ended on March 17, 2011, which was the last occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output before entering the 2011 refueling outage. On May 9, 2011, Wolf Creek was determined to be stable in the Westar stability study, Analysis of Wolf Creek Stability With Turbine Power Uprate, under 2011 Light Load conditions at 1300 MWe gross output, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles.

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

Proposed Completion date of Mitigation Plan: March 17, 2011

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

Additional Relevant Information

Reliability Risk

Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

Reliability risk was minimal. The alleged violation of TOP-004-2 R2 was not continuous and was generally limited to those times Wolf Creek operated above 1185 MWe net output at light load during the fall and spring months. None of the outages that Wolf Creek experienced through March 17, 2011, when operating above 1185 MWe, resulted in any instability.

Prevention

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

Westar performed a series of stability studies to evaluate the stability of Wolf Creek at 1300 MWe, a value greater than the anticipated gross generation output of Wolf Creek resulting from the 2011 spring outage turbine uprate. Westar analyzed a three phase fault and the loss of each of the Wolf Creek 345 kV transmission lines with a fault clearing time of 3.6 cycles. For the purpose of the stability studies, Westar conservatively estimated Wolf Creek gross generation following the uprate would be 1300 MWe.

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

No such action is needed.

Authorization

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

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

Acknowledges:

1. I am qualified to sign this mitigation plan on behalf of my organization.
2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Westar Energy, Inc. Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature: _____

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

Authorized Individual

Name: Bo Jones

Title: Director, NERC Compliance

Authorized On: November 12, 2015

Attachment E

**Record documents for the violation of
TOP-004-2 R3 (SPP2013011997):**

**E-1. Westar's Mitigation Plan designated
as SPPMIT011841 submitted November
12, 2015.**

**E-2. Westar's Certification of Mitigation
Plan SPPMIT011841 Completion dated
November 12, 2015.**

**E-3. SPP RE's Verification of Mitigation
Plan SPPMIT011841 Completion dated
November 18, 2015.**



Mitigation Plan

Mitigation Plan Summary

Registered Entity: Westar Energy, Inc.

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
SPPMIT011841	SPP2013011997	TOP-004-2 R3.		1

Mitigation Plan Submitted On: November 12, 2015

Mitigation Plan Accepted On: November 17, 2015

Mitigation Plan Proposed Completion Date: December 22, 2010

Actual Completion Date of Mitigation Plan: December 22, 2010

Mitigation Plan Certified Complete by WR On: November 12, 2015

Mitigation Plan Completion Verified by SPPRE On: November 18, 2015

Mitigation Plan Completed? (Yes/No): Yes



Certification of Mitigation Plan Completion

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

Registered Entity Name: Westar Energy, Inc.

NERC Registry ID: NCR00658

NERC Violation ID(s): SPP2013011997

Mitigated Standard Requirement(s): TOP-004-2 R3.

Scheduled Completion as per Accepted Mitigation Plan: December 22, 2010

Date Mitigation Plan completed: December 22, 2010

SPPRE Notified of Completion on Date: November 12, 2015

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	0300.pdf		69,491
Entity	0301.pdf		74,480
Entity	0302.pdf		69,655
Entity	0306.pdf		56,684

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785 (575) 168-0

Authorized Signature _____ Date _____

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

From: noreply@oati.net
Sent: 11/18/2015 09:34:38
To: Megan.Wagner@westarenergy.com;Tiffany.Lake@westarenergy.com;bo.jones@westarenergy.com
Subject: Mitigation Plan has been Completed: Westar Energy, Inc. SPP2013011997/ SPP RE RESTRICTED
CONFIDENTIAL NON-PUBLIC

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Entity: Westar Energy, Inc. - NCR00658

NERC Violation ID: **SPP2013011997**
Standard and Requirement: TOP-004-2 R3.
Discovery Method: Investigation
Proposed Completion Date: 12/22/2010
Mitigation Plan Submitted: 11/12/2015
Mitigation Plan Verified: 11/18/2015

Southwest Power Pool Regional Entity (SPP RE) received Westar Energy, Inc.'s Certification of Completion for the subject Mitigation Plan. The SPP RE Enforcement Staff has completed its review of the evidence in support of the mitigation plan completion. The SPP RE Enforcement Staff finds Westar Energy, Inc. has successfully completed the subject mitigation plan on 12/22/2010.

Questions regarding this matter should be directed to Bob Reynolds.

Thank you, OATI

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[OATI Information - Email Template: MitPlan_Completed]



Mitigating Activities/Mitigation Plan Milestone/Completion Review

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Mitigating Activities

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Mitigation Plan

Registered Entity: **Westar Energy, Inc. (WR)**

Registry ID: **NCR00658**

NERC Violation ID: **SPP2013011997**

Reliability Standards and Requirement addressed by the plan:

TOP-004-2

R3. Each Transmission Operator shall operate to protect against instability, uncontrolled separation, or cascading outages resulting from multiple outages, as specified by its Reliability Coordinator.

NERC Mitigation Plan No: **SPPMIT011841**

Has the entity provided its Certification of Completion? **Yes**

Date of Registered Entity's Certification of Completed Mitigation Plan: **11/12/2015**

Date Certification Received by SPP RE: **11/12/2015**

Has the entity supplied data or information sufficient for the Enforcement Staff to independently verify that all required actions described in the Mitigation Plan have been completed? **Yes**

Statement of Mitigating Activities: **N/A**

Date Final Installment of Evidence Received: **11/12/2015**

Completion Date entered by Entity: **03/17/2011**

Mitigation Plan Milestone Review and Evidence of Completion Review:

Milestones (if applicable)	Evidence Under Review (Document title, file name, date of documentation, and document revision number) (Ex. Facilities Methodology, 101112_MPEVD_Entity, 11/12/10, Rev. 2)	Proposed Completion Date	Completion Date	Review Date	Comments or Suggestions (Applicable to Mitigation Plan)
N/A	0300.pdf	12/22/2010	12/22/2010	11/18/2015	Applicable



N/A	0301.pdf	12/22/2010	12/22/2010	11/18/2015	Applicable
N/A	0302.pdf	12/22/2010	12/22/2010	11/18/2015	Applicable
N/A	0306.pdf	12/22/2010	12/22/2010	11/18/2015	Applicable

Actual Final Completion Date of Mitigating Activities/ Mitigation Plan *(the date in time that the reviewer can actually verify the mitigation was complete based on the supplied evidence and the receipt of a mitigation plan completion certification/ please explain why date was chosen):*

SPP RE received the Certification of a Completed Mitigation Plan and supporting evidence on November 12, 2015. The Actual Final Completion Date of the Mitigation Plan is December 22, 2010 based on the effective date of the Operating Directives.

Actual Violation End Date *(the date in time that the Entity resolved the Issue of Non-Compliance):*

The Actual Violation End Date is December 22, 2010 based on the effective date of the Operating Directives.

Has the Violation End Date been entered into the Violation Detail on webCMDS? **Yes**

Any other comments for suggested changes or requests for additional evidence *(please denote the specific item of evidence or milestone being requested):*

Statement by SPP RE verifying completion of the Mitigating Activities/ Mitigation Plan / Milestone *(In essence, detail what actions were taken by the entity to demonstrate compliance):*

SPP RE reviewed the three Transmission Operating Directives for the Wolf Creek Plant for an outage of each of their transmission lines.

SPP has concluded that on the basis of the evidence presented that the entity has completed the mitigation activities associated with TOP-004-2 R3.

Have all required actions described in the Mitigating Activities/ Mitigation Plan been completed? **Yes**

Review Performed by: **Bob Reynolds**

Date Review Performed: **October 12, 2015**

Compliance Notices

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

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

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

Entity Information

Identify your organization:

Entity Name: Westar Energy, Inc.

NERC Compliance Registry ID: NCR00658

Address: 818 South Kansas Avenue
Topeka KS 66612

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785-575-1680

Violation(s)

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

Violation ID	Date of Violation	Requirement
Requirement Description		
SPP2013011997	08/19/2009	TOP-004-2 R3.
Each Transmission Operator shall operate to protect against instability, uncontrolled separation, or cascading outages resulting from multiple outages, as specified by its Reliability Coordinator.		

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

It has been alleged that between February 17, 2009, and December 22, 2010, Westar failed to amend its operating directives to incorporate mitigating measures for Wolf Creek that were consistent with the results of stability studies for loss of one of the Wolf Creek 345 kV transmission lines.

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

This possible violation was identified during a compliance investigation.

Plan Details

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

Westar's alleged violation of TOP-004-2 R3 began on February 17, 2009, when Westar failed to amend its operating directive(s) subsequent to the determination in a stability study performed by SPP that Wolf Creek was unstable under light load conditions for the Category C contingencies at a fault clearing time of 3.6 cycles, and ended December 22, 2010, when Westar revised its operating directives to reflect a reduction in Wolf Creek output to 900 MWe net generation following loss of a single Wolf Creek substation 345 kV transmission line.

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

Proposed Completion date of Mitigation Plan: December 22, 2010

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

Additional Relevant Information

Reliability Risk

Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

The 2008 SPP Stability Study, published February 17, 2009, recommended that Westar amend its long standing Wolf Creek Operating Directives which are in place in the event of a loss of one of the 345 kV lines connected to Wolf Creek. Because the 2008 Study was at odds with a number of earlier studies and 23 years of operational experience, Westar elected to see whether subsequent studies reached the same conclusion as the 2008 Study. When the SPP 2010 Stability Study, published December 22, 2010, confirmed the results of the 2008 Study, Westar immediately amended appropriate Wolf Creek Operating Directives. The amended Directives were issued on December 22, 2010.

Risk to the BPS prior to the completion of the mitigation plan was minimized by the fact that there were only a few occasions that one Wolf Creek line was outaged and the targeted dispatch level for the unit was above 900 MW net.

Prevention

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

While in force, the Operating Directive ensured that a single outage of a 345 kV transmission line would not cause Wolf Creek to become unstable.

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

Westar has worked and will continue to work collaboratively with the SPP Planning Authority on Transmission Planning studies. Transmission Operating Directives are modified as appropriate subsequent analysis indicate.

Authorization

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

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

Acknowledges:

1. I am qualified to sign this mitigation plan on behalf of my organization.
2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Westar Energy, Inc. Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

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

Authorized Individual

Name: Bo Jones

Title: Director, NERC Compliance

Authorized On: November 12, 2015

Attachment F

**Record documents for the violation of
TOP-004-1 R4 (SPP2013011999):**

**F-1. Westar's Mitigation Plan designated
as SPPMIT011842 submitted November
13, 2015.**

**F-2. Westar's Certification of Mitigation
Plan SPPMIT011842 Completion dated
November 13, 2015.**

**F-3. SPP RE's Verification of Mitigation
Plan SPPMIT011842 Completion dated
November 18, 2015.**



Mitigation Plan

Mitigation Plan Summary

Registered Entity: Westar Energy, Inc.

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
SPPMIT011842	SPP2013011999	TOP-004-2 R4.		1

Mitigation Plan Submitted On: November 13, 2015

Mitigation Plan Accepted On: November 17, 2015

Mitigation Plan Proposed Completion Date: March 17, 2011

Actual Completion Date of Mitigation Plan: March 17, 2011

Mitigation Plan Certified Complete by WR On: November 13, 2015

Mitigation Plan Completion Verified by SPPRE On: November 18, 2015

Mitigation Plan Completed? (Yes/No): Yes



Certification of Mitigation Plan Completion

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

Registered Entity Name: Westar Energy, Inc.

NERC Registry ID: NCR00658

NERC Violation ID(s): SPP2013011999

Mitigated Standard Requirement(s): TOP-004-2 R4.

Scheduled Completion as per Accepted Mitigation Plan: March 17, 2011

Date Mitigation Plan completed: March 17, 2011

SPPRE Notified of Completion on Date: November 13, 2015

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	WC - SPP Dispatch Instruction History 20150518.xlsx		1,144,977
Entity	Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement 20110509.pdf		257,972

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785 (575) 168-0

Authorized Signature _____ Date _____

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

From: noreply@oati.net
Sent: 11/18/2015 11:17:18
To: Megan.Wagner@westarenergy.com;bo.jones@westarenergy.com
Subject: Mitigation Plan has been Completed: Westar Energy, Inc. SPP2013011999/ SPP RE RESTRICTED
CONFIDENTIAL NON-PUBLIC

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Note: This is a webCDMS application generated message. Please Do NOT reply to this email. If you have questions, please contact sppremitigationplan@spp.org.

Entity: Westar Energy, Inc. - NCR00658

NERC Violation ID: **SPP2013011999**
Standard and Requirement: TOP-004-2 R4.
Discovery Method: Investigation
Proposed Completion Date: 03/17/2011
Mitigation Plan Submitted: 11/13/2015
Mitigation Plan Verified: 11/18/2015

Southwest Power Pool Regional Entity (SPP RE) received Westar Energy, Inc.'s Certification of Completion for the subject Mitigation Plan. The SPP RE Enforcement Staff has completed its review of the evidence in support of the mitigation plan completion. The SPP RE Enforcement Staff finds Westar Energy, Inc. has successfully completed the subject mitigation plan on 03/17/2011.

Questions regarding this matter should be directed to Bob Reynolds.

Thank you, OATI

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[OATI Information - Email Template: MitPlan_Completed]



Mitigating Activities/Mitigation Plan Milestone/Completion Review

☐

Mitigating Activities

☒

Mitigation Plan

Registered Entity: **Westar Energy, Inc.**

Registry ID: **NCR00658**

NERC Violation ID: **SPP2013011999**

Reliability Standards and Requirement addressed by the plan:

TOP-004-2

R4. If a Transmission Operator enters an unknown operating state (i.e. any state for which valid operating limits have not been determined), it will be considered to be in an emergency and shall restore operations to respect proven reliable power system limits within 30 minutes.

NERC Mitigation Plan No: **SPPMIT011842**

Has the entity provided its Certification of Completion? **Yes**

Date of Registered Entity's Certification of Completed Mitigating Activities: **11/13/2015**

Date Certification Received by SPP RE: **11/13/2015**

Has the entity supplied data or information sufficient for the Enforcement Staff to independently verify that all required actions described in the Mitigation have been completed? **Yes**

Statement of Mitigating Activities: **N/A**

Date Final Installment of Evidence Received: **11/13/2015**

Completion Date entered by Entity: **03/17/2011**

Mitigation Plan Milestone Review and Evidence of Completion Review:

Milestones (if applicable)	Evidence Under Review (Document title, file name, date of documentation, and document revision number) (Ex. Facilities Methodology, 101112_MPEVD_Entity, 11/12/10, Rev. 2)	Proposed Completion Date	Completion Date	Review Date	Comments or Suggestions (Applicable to Mitigation Plan)
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N/A	WC - SPP Dispatch Instruction History 20150518.xlsx	03/19/2011	03/19/2011	11/18/2015	Applicable
N/A	Wolf Creek Generating Station 2011 Stability Studies 2011 L Supplement 20110509.pdf	03/19/2011	03/19/2011	11/18/2015	Applicable

Actual Final Completion Date of Mitigating Activities/ Mitigation Plan *(the date in time that the reviewer can actually verify the mitigation was complete based on the supplied evidence and the receipt of a mitigation plan completion certification/ please explain why date was chosen):*

SPP RE received the Certification of a Completed Mitigation Plan and supporting evidence on November 12, 2015. The Actual Final Completion Date of the Mitigation Plan is June 29, 2015

Actual Violation End Date *(the date in time that the Entity resolved the Issue of Non-Compliance):*

The Actual Violation End Date is March 17, 2011 based on the completion date to the refueling outage start date.

Has the Violation End Date been entered into the Violation Detail on webCMDS? **Yes**

Any other comments for suggested changes or requests for additional evidence *(please denote the specific item of evidence or milestone being requested):*

Statement by SPP RE verifying completion of the Mitigating Activities/ Mitigation Plan / Milestone *(In essence, detail what actions were taken by the entity to demonstrate compliance):*

SPP RE reviewed the Entity's Analysis of Wolf Creek Stability With Turbine Power Uprate 2011 Light Load Supplement and the completion date of the refueling outage start date.

SPP has concluded that on the basis of the evidence presented that the entity has completed the mitigation activities associated with TOP-004-2 R4

Have all required actions described in the Mitigating Activities/ Mitigation Plan been completed? **Yes**

Review Performed by: **Bob Reynolds**

Date Review Performed: **November 18, 2015**

Compliance Notices

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

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

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

Entity Information

Identify your organization:

Entity Name: Westar Energy, Inc.

NERC Compliance Registry ID: NCR00658

Address: 818 South Kansas Avenue
Topeka KS 66612

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

Name: Bo Jones

Title: Director, NERC Compliance

Email: bo.jones@westarenergy.com

Phone: 785-575-1680

Violation(s)

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

Violation ID	Date of Violation	Requirement
Requirement Description		
SPP2013011999	08/19/2009	TOP-004-2 R4.
If a Transmission Operator enters an unknown operating state (i.e. any state for which valid operating limits have not been determined), it will be considered to be in an emergency and shall restore operations to respect proven reliable power system limits within 30 minutes.		

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

It has been alleged that on multiple occasions between October 2007 and March 2011, Westar:

- (1) Operated Wolf Creek in excess of the net generation output validated in its stability studies thereby entering a state for which valid operating limits had not been determined; and
- (2) Upon entering a state for which valid operating limits had not been determined, failed to restore operation of Wolf Creek to proven reliable power system limits within 30 minutes.

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

This possible violation was identified during a Compliance Investigation.

Plan Details

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

Westar's alleged violation of TOP-004-2 R4 began on September 16, 2007 which was the first occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output after the NERC Reliability Standards became enforceable on June 18, 2007 and ended on March 17, 2011 which was the last occurrence of Westar operating Wolf Creek at greater than 1185 MWe net output before entering the 2011 refueling outage. On May 9, 2011, Wolf Creek was determined to be stable in the Westar stability study, Analysis of Wolf Creek Stability With Turbine Power Uprate, under 2011 Light Load conditions at 1300 MWe gross output, with loss of the Wolf Creek – LaCygne 345 kV transmission line (Category B3) at a fault clearing time of 3.6 cycles.

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

Proposed Completion date of Mitigation Plan: March 17, 2011

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

Additional Relevant Information

Reliability Risk

Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

Reliability risk was minimal. The violation of TOP-004-2 R4 was not continuous and was generally limited to those times Wolf Creek operated above 1185 MWe net output during the fall and spring months. None of the outages that Wolf Creek experienced through March 17, 2011, when operating above 1185 MWe, resulted in any instability.

Prevention

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

Westar performed a series of stability studies to evaluate the stability of Wolf Creek at 1300 MWe, a value greater than the anticipated gross generation output of Wolf Creek resulting from the 2011 spring outage turbine uprate. Westar analyzed a three phase fault and the loss of each of the Wolf Creek 345 kV transmission lines with a fault clearing time of 3.6 cycles. For the purpose of the stability studies, Westar conservatively estimated Wolf Creek gross generation following the uprate would be 1300 MWe.

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

No such action is needed.

Authorization

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

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

Acknowledges:

1. I am qualified to sign this mitigation plan on behalf of my organization.
2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Westar Energy, Inc. Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

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

Authorized Individual

Name: Bo Jones

Title: Director, NERC Compliance

Authorized On: November 13, 2015