

November 27, 2013

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

**Re: NERC Full Notice of Penalty regarding Public Service Company of Colorado,  
FERC Docket No. NP14-\_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding Public Service Company of Colorado (PSCO), NERC Registry ID# NCR05521,<sup>2</sup> 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)).<sup>3</sup>

PSCO is a corporation organized under the laws of the state of Colorado and its principal offices are located in Denver, Colorado. PSCO is a wholly-owned utility operating company subsidiary of Xcel Energy Inc. PSCO engages in the generation, purchase, transmission, distribution, and sale of electricity in Colorado. The company provides electric utility services to approximately 1.4 million customers.

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<sup>1</sup> *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards* (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); *Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation*, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2011). *Mandatory Reliability Standards for the Bulk-Power System*, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), *reh'g denied*, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

<sup>2</sup> The Western Electricity Coordinating Council (WECC) confirmed that PSCO was included on the NERC Compliance Registry as a Balancing Authority (BA), Distribution Provider (DP), Generator Owner (GO), Generator Operator (GOP), Load Serving Entity (LSE), Planning Authority (PA), Purchasing-Selling Entity (PSE), Resource Planner (RP), Transmission Owner (TO), Transmission Operator (TOP), Transmission Planner (TP), and Transmission Service Provider (TSP) on August 23, 2007. As a DP, GO, and TO, PSCO is subject to PRC-005-1 R2.

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

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This Notice of Penalty is being filed with the Commission because the Western Electricity Coordinating Council (WECC) and PSCO have entered into a Settlement Agreement to resolve all outstanding issues arising from WECC's determination and findings of the violation<sup>4</sup> of PRC-005-1 R2. According to the Settlement Agreement, PSCO agrees and stipulates to the terms of the Settlement Agreement and has agreed to the assessed penalty of two hundred fifteen thousand dollars (\$215,000), in addition to other remedies and actions to mitigate the instant violations and facilitate future compliance under the terms and conditions of the Settlement Agreement. Accordingly, the violation identified as NERC Violation Tracking Identification Number WECC2012009202 is being filed in accordance with the NERC Rules of Procedure and the CMEP.

### Statement of Findings Underlying the Violation

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on March 12, 2013, by and between WECC and PSCO, which is included as Attachment a. The details of the findings and basis for the penalty are set forth in the Settlement Agreement and herein. This Notice of Penalty filing contains the basis for approval of the Settlement Agreement by the NERC Board of Trustees Compliance Committee (NERC BOTCC). In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2013), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement, as discussed in greater detail below.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty
Western Electricity Coordinating Council	Public Service Company of Colorado	NOC-1864	WECC2012009202	PRC-005-1 <sup>5</sup>	2	High	\$215,000

<sup>4</sup> 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.

<sup>5</sup> WECC applied Version 1 of this Standard, which was enforceable at the time the violation began.

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#### PRC-005-1 R2

The purpose statement of Reliability Standard PRC-005-1 R2 provides: “To ensure all transmission and generation Protection Systems<sup>6</sup> affecting the reliability of the Bulk Electric System (BES) are maintained and tested.”

PRC-005-1 R2 provides:

R2. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program implementation shall include:

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

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

PRC-005-1 R2 has a “High” Violation Risk Factor (VRF) and a “Lower” Violation Severity Level (VSL). The subject violation applies to PSCO’s Distribution Provider, Generator Owner, and Transmission Owner functions.

On January 19 2012, PSCO self-certified noncompliance with PRC-005-1 R2, which was discovered when PSCO was performing generation plant engineering reviews of its Protection Systems in preparation for implementation of Standard PRC-005 Version 2. During this internal review, PSCO identified six relays installed in four generating plants that did not have documentation of testing within the defined interval. PSCO’s energy supply Protection System maintenance and testing program (Generation Program) prescribed a testing interval and required testing to be complete by March 12, 2011. Each of these generating facilities is 100 MVA or less. PSCO’s Generation Program specifies a four-year interval beginning March 12, 2007. Based on that interval, on or before March 12, 2011, the six relays should have been maintained and tested, but they were missed. The six relays are as follows:

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<sup>6</sup> *The NERC Glossary of Terms Used in Reliability Standards* defines Protection System as “Protective relays, associated communication systems, voltage and current sensing devices, station batteries and DC control circuitry.”

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two relays at Ft. Lupton (59E); one relay at Valmont 6 (59E); and three relays on Alamosa 2 (59E, 27B-1, and 27B-2).

PSCO committed to completing an extent of condition review by August 28, 2012, which encompassed 29 generating units and 13 associated start-up systems. Following the supposed completion of this review, WECC issued, and PSCO did not contest, a Notice of Alleged Violation (NOAV) and proposed penalty based on a violation scope limited to six relays.<sup>7</sup>

On November 21, 2012, PSCO notified WECC that it had identified additional instances of noncompliance. PSCO identified 173 additional Protection System elements that had not been tested and maintained per PRC-005-1 R2. These additional elements were not included in the January 19, 2012 Self-Certification of noncompliance.

PSCO determined that a total of 179 generation Protection System elements were not included in its original PRC-005 Generation Program. In addition, three transmission Protection System components had not been completely tested within the required interval set forth by the PSCO transmission Protection System maintenance and testing program (Transmission Program) by December 31, 2012.

The total of 182 untested generation and transmission devices included 81 relays (79 generation and 2 transmission), 72 voltage and current sensing devices (all generation), and 29 DC circuitry elements (28 generation and 1 transmission).

A WECC subject matter expert (SME) reviewed the Self-Certification, conducted interviews with PSCO's compliance and operations personnel, and submitted data requests for additional information. The SME reviewed the submittals and determined that PSCO had a violation of PRC-005-1 R2 for a failure to provide evidence that 182 generation and transmission Protection System devices were maintained and tested within the defined intervals and the date each Protection System device was last maintained and tested.

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<sup>7</sup> On September 21, 2012, WECC issued a Notice of Alleged Violation (NOAV) notifying PSCO of the violation of PRC-005-1 R2. On October 9, 2012, PSCO responded to the NOAV indicating that it did not contest the violation and accepted the proposed penalty. On November 21, 2012, PSCO compliance and operations personnel notified WECC that the extent of condition review conducted part PSCO's Mitigation Plan activities had revealed additional instances of noncompliance with PRC-005-1 R2. On December 4, 2012, WECC issued a Notice of Withdrawal of Notice of Alleged Violation (Withdrawal Notice). The Withdrawal Notice withdrew the original NOAV issued on September 21, 2012.

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WECC Enforcement reviewed the Self-Certification, the SME's findings, and additional information provided in response to the data requests. Based on its review, WECC Enforcement determined that PSCO had missed maintenance and testing of 182 devices as follows: 1) 81 of 4,389 relays (1.85%); 2) 72 of 5,502 (1.31%) voltage and current sensing devices; and: 3) 29 of 3,779 (0.77%) DC circuitry elements.

Thereafter, WECC withdrew the earlier NOAV and proposed penalty and determined that PSCO had a violation of PRC-005-1 R2 for a failure to provide evidence that 182 generation and transmission Protection System devices were maintained and tested within the defined intervals included in PSCO's Protection System maintenance and testing generation and transmission programs.

WECC determined the duration of the violation to be from June 18, 2007, the date the Standard became mandatory and enforceable, through August 13, 2013, when PSCO completed its Mitigation Plan.

WECC determined that this violation posed a moderate risk to the reliability of the bulk power system (BPS), but did not pose a serious or substantial risk. Specifically, testing these Protection Systems helps to determine if the devices are reliable to limit the effects of disturbances in a system network. If the devices are not tested per PSCO's Transmission and Generation Programs, the risk increased that the devices would not operate as planned. PSCO has a large system with a 2012 summer peak of 8,549 MW and approximately 4,000 miles of transmission lines that range from 115 kV to 345 kV. The risk to the BPS was mitigated by the fact that the devices not affected by the violation were tested within the defined intervals. As described above, the violation affected only a small percentage of devices in each class. Finally, none of the 182 untested devices misoperated during the violation period.

#### Regional Entity's Basis for Penalty

According to the Settlement Agreement, WECC has assessed a penalty of two hundred fifteen thousand dollars (\$215,000) for the referenced violation. In reaching this determination, WECC considered the following factors:

1. PSCO's failure to complete the extent of condition review as originally anticipated resulted in a significant expansion of the violation's scope and WECC's withdrawal of the original NOAV. WECC considered this a significant aggravating factor when determining the appropriate penalty amount;
2. WECC considered PSCO's violation history as an aggravating factor in the penalty determination because this is PSCO's third violation of PRC-005 R2;

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3. PSCO identified the violation in the course of conducting proactive reviews to prepare for compliance with PRC-005 Version 2. The violation was voluntarily self-certified to WECC. WECC considered this to be a neutral factor in the penalty determination;
4. PSCO took prompt corrective actions to remediate this violation, which was considered a mitigating factor in the penalty determination;
5. PSCO had an internal compliance program (ICP) at the time of the violation, which was considered a mitigating factor in the penalty determination;<sup>8</sup>
6. There was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
7. WECC reported that PSCO was cooperative throughout the compliance enforcement process;
8. WECC determined that the violation posed a moderate risk to the reliability of the BPS but did not pose a serious or substantial risk, as discussed above; and
9. WECC reported that there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

After consideration of the above factors, WECC determined that, in this instance, the penalty amount of two hundred fifteen thousand dollars (\$215,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violation.

### **Status of Mitigation Plan<sup>9</sup>**

PSCO's Mitigation Plan to address its violation of PRC-005-1 R2 was submitted to WECC on June 20, 2012 with a proposed completion date of January 30, 2013. On July 18, 2012, WECC issued a Notice of Mitigation Plan Rejection and Request for Revised Mitigation Plan to PSCO. PSCO submitted a revised Mitigation Plan to WECC on August 1, 2012. The Mitigation Plan was accepted by WECC on August 8,

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<sup>8</sup> WECC reviewed PSCO's ICP at an on-site Audit on June 5, 2008. WECC found that: PSCO's ICP is documented; the ICP is disseminated throughout its operations staff; PSCO has ICP oversight staff; ICP oversight staff is supervised at a high level in the organization; the ICP oversight staff has independent access to the CEO and/or board of directors; PSCO operates the ICP such that it is independent of staff responsible for compliance with the Reliability Standards; PSCO has allocated sufficient resources to its ICP; the ICP has the support and participation of senior management; PSCO reviews and modifies its ICP regularly; PSCO's ICP includes formal, internal self-auditing for compliance with all Reliability Standards on a periodic basis; and PSCO's ICP includes disciplinary action for employees involved in violations of the Reliability Standards, when applicable and appropriate.

<sup>9</sup> See 18 C.F.R § 39.7(d)(7).

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2012 and approved by NERC on August 17, 2012. The Mitigation Plan was submitted to FERC on August 20, 2012.<sup>10</sup>

On December 4, 2012, WECC issued a Notice of Withdrawal of NOAV (Withdrawal Notice), which withdrew the original of alleged violation issued on September 21, 2012. The Withdrawal Notice directed PSCO to submit a revised Mitigation Plan addressing the additional violation communicated to WECC on November 21, 2012. On January 10, 2013, in response to the Withdrawal Notice, PSCO submitted a further revised Mitigation Plan (Version 3), to address the change in the scope of the violation. The Version 3 Mitigation Plan included a milestone, which was complete at the time of submission, to complete required testing and maintenance for all generation protection system elements discovered during the extent of condition review. This testing had been completed before December 31, 2012.

On January 17, 2013, while compiling documentation validating the elements in PSCO's Protection System maintenance and testing program, PSCO discovered three transmission Protection System elements that had not been completely tested within the required interval by December 31, 2012. Maintenance and testing of these three transmissions protection system elements was completed on January 18, 2013. On January 25, 2013, PSCO requested a Mitigation Plan extension and WECC agreed to an extension of the Mitigation Plan completion date. In the Extension Notice, WECC required PSCO to submit a revised Mitigation Plan (Version 4) with a completion date six months from the date of submittal of the revised Mitigation Plan.

PSCO's revised Version 4 Mitigation Plan to address its violation of PRC-005-1 R2 was submitted to WECC on February 15, 2013 with a proposed completion date of August 15, 2013. The Mitigation Plan was accepted by WECC on February 26, 2013 and approved by NERC on March 5, 2013. The Mitigation Plan for this violation is designated as WECCMIT007522 and was submitted as non-public information to FERC on March 5, 2013 in accordance with FERC orders.

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<sup>10</sup> In the Mitigation Plan, PSCO proposed to test the six generation relays it had found to be noncompliant by August 1, 2012; to perform an extent of condition review of PSCO generation plants and provide a current list of generation units that have undergone review by August 28, 2012 and November 28, 2012; to revise its procedure to address activities associated with any newly identified generation Protection System devices by November 30, 2012; and provide a final list of all generation units reviewed by January 30, 2013. As part of the extent of condition review, PSCO proposed to review its generation units to determine if any additional devices should be included in the PSCO energy supply Protection System maintenance and testing program. On August 20, 2012, as milestone evidence, PSCO confirmed final action for the original six relays in the scope of the Self-Certification. The last of the six originally reported relays was tested on December 27, 2011.

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PSCO's Mitigation Plan required PSCO to:

1. Test all devices found during the review;
2. Revise its energy supply relay maintenance standard to account for testing of new devices found during PSCO's review;
3. Provide information updates to WECC on progress toward establishing a cross-functional business unit (i.e. generation and transmission) for PRC-005 compliance programs;
4. Reinforce management expectations in the energy supply division of the organization for compliance through executive communication;
5. Modify its energy supply relay maintenance standard to clarify requirement that scheme reviews are to be conducted for Protection System device modifications;
6. Conduct a thorough third-party review of protection schemes for all PSCO BES generators to ensure that all Protection System elements are being identified and tested;
7. Conduct a thorough review of protection schemes for a sample of substations to ensure that all Protection System elements are being identified and tested;
8. Conduct a thorough review of testing and maintenance documentation for a sample of transmission protection schemes to ensure that all necessary information is being captured; and
9. Develop and implement an ongoing refresher training program on PRC-005 requirements, expectations, and standard changes.

PSCO certified on August 15, 2013 that the above requirements were completed on August 13, 2013. As evidence of completion of its Mitigation Plan, PSCO submitted the following:

1. Mitigation Plan Schedule and Progress 07-31-2012.doc;
2. Mitigation Plan Schedule and Progress Status.8.20.rev1.doc;
3. Mitigation Plan Schedule and Progress Status Submitted to WECC 11-28-12.doc;
4. EPR 5.714S V3.0 Protective Relay.doc;
5. PSC-EVD-PSCo Response to Jan 16 WECC Data Request PRC-005- due 01 22 2013.pdf;
6. PSC-EVD-PSCo Response to WECC Data Request 01222013 Q6-Startup Relays.xls;
7. PSC-EVD-PSCo Response to WECC DR Number 2.pdf;
8. PSC-EVD-PSCo Response to WECC DR#2-EPR 5 704S V18 Battery.pdf;

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9. PSC-EVD-PSCo Response to WECC DR#2-EPR 5 704S V2 0 Battery Maintenance Standard \_2\_.pdf;
10. PSC-EVD-PSCo Response to WECC DR#2-EPR 5 714S V3 0 Protective Relay.pdf;
11. PSC-EVD-PSCo Response to WECC DR#2-XEL-POL-Relay Test and Maint Program.pdf;
12. PSC-EVD-PSCo Response to WECC DR#2-XEL-POLSubstation Battery Supply Maintenance & Test.pdf;
13. PSC-EVD-PSCo Response to WECC DR #2-EPR 5 714S V2 2 Protective Relay.pdf;
14. April 2013\_PSCo PRC-005 Mitigation Update on Peer Team.pdf;
15. Transmission Sample Review of Relay Schemes in PSCo.pdf; and
16. Transmission Sample Review of Relay Test Results in PSCo.pdf

On November 6, 2013, WECC issued a Notice of Completed Mitigation Plan Rejection letter to PSCo, rejecting the completed Mitigation Plan to allow PSCo to include three additional instances of non-compliance that were not previously included in its original Mitigation Plan. On November 11, 2013, PSCo requested an extension of the completion date until November 22, 2013, to ensure the accuracy of its maintenance and testing records.

On November 15, 2013, PSCo submitted a Certification of Mitigation Plan Completion, certifying completion on November 15, 2013. As evidence of completion of its Mitigation Plan, PSCo resubmitted the information sent on August 15, 2013 (outlined above) and the following additional evidence:

1. PSCo Nov 15 2013 Sched G Updated Gen PRC-005.xlsx; and
2. SignedCert\_MitPlanComplete\_PRC-005.pdf.

### **Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed<sup>11</sup>**

#### **Basis for Determination**

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008, October 26, 2009 and August 27, 2010 Guidance Orders,<sup>12</sup> the

<sup>11</sup> See 18 C.F.R. § 39.7(d)(4).

<sup>12</sup> *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

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NERC BOTCC reviewed the Settlement Agreement and supporting documentation on November 5, 2013. The NERC BOTCC approved the Settlement Agreement, including WECC's assessment of a two hundred fifteen thousand dollar (\$215,000) financial penalty against PSCO and other actions to facilitate future compliance required under the terms and conditions of the Settlement Agreement. In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violation at issue.

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

1. PSCO's failure to complete the extent of condition review as originally anticipated resulted in a significant expansion of the violation's scope and WECC's withdrawal of the original NOAV. WECC considered this a significant aggravating factor when determining the appropriate penalty amount;
2. WECC considered PSCO's violation history as an aggravating factor in the penalty determination because this is PSCO's third violation of PRC-005 R2;
3. PSCO identified the violation in the course of conducting proactive reviews to prepare for compliance with PRC-005 Version 2. The violation was voluntarily self-certified to WECC. WECC considered this to be a neutral factor in the penalty determination;
4. PSCO took prompt corrective actions to remediate this violation, which was considered a mitigating factor in the penalty determination;
5. PSCO had a compliance program at the time of the violation which WECC considered a mitigating factor, as discussed above;
6. There was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
7. WECC reported that PSCO was cooperative throughout the compliance enforcement process;
8. WECC determined that the violation posed a moderate risk to the reliability of the BPS but did not pose a serious or substantial risk, as discussed above; and
9. WECC reported that there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

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¶ 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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For the foregoing reasons, the NERC BOTCC approved the Settlement Agreement and believes that the assessed penalty of two hundred fifteen thousand dollars (\$215,000) is appropriate for the violation and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

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

#### **Attachments to be Included as Part of this Notice of Penalty**

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

- a) Settlement Agreement by and between WECC and PSCO executed March 12, 2013, included as Attachment a;
- b) PSCO's Self-Certification for 2011 submitted on January 20, 2012, included as Attachment b;
- c) PSCO's Mitigation Plan designated as WECCMIT007522 for PRC-005-1 R2 submitted August 1, 2012, included as Attachment c;
- d) PSCO's revised Mitigation Plan designated as WECCMIT007522 for PRC-005-1 R2 submitted February 15, 2013, included as Attachment d;
- e) PSCO's Certification of Mitigation Plan Completion for PRC-005-1 R2 submitted on August 15, 2013, included as Attachment e;
- f) WECC's Notice of Completed Mitigation Plan Rejection submitted on November 6, 2013;
- g) PSCO's request for Mitigation Plan extension, submitted on November 11, 2013; and
- h) PSCO's Certification of Mitigation Plan Completion for PRC-005-1 R2 submitted on November 15, 2013.

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

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<p>Western Electricity Coordinating Council 155 North 400 West, Suite 200 Salt Lake City, UT 84103 (801) 819-7674 (801) 883-6894 – facsimile rarredando@wecc.biz</p> <p>David Harkness* CIO &amp; VP Business Systems Public Service Company of Colorado 250 Marquette Plaza Minneapolis, MN 55401 (612) 330-7878 David.c.harkness@xcelenergy.com</p> <p>Alice Ireland* Manager, Reliability Standard Compliance Public Service Company of Colorado 1800 Larimer St. Suite 1400 Denver, CO 80202 303-571-7868 alice.ireland@xcelenergy.com</p> <p>*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.</p>	<p>Frank.Prager@xcelenergy.com</p> <p>Teresa Mogensen* Vice President, Transmission &amp; Operation Services Public Service Company of Colorado 250 Marquette Plaza Minneapolis, MN 55401 (612) 330-7947 (612) 330-6357- facsimile Teresa.M.Mogensen@xcelenergy.com</p>
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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/ Sonia Mendonça

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cc: Public Service Company of Colorado  
Western Electricity Coordinating Council

Attachments

**Attachment a**

**Settlement Agreement by and between  
WECC and PSCO  
executed March 12, 2013**

**SETTLEMENT AGREEMENT  
OF  
WESTERN ELECTRICITY COORDINATING COUNCIL  
AND  
PUBLIC SERVICE COMPANY OF COLORADO**

Western Electricity Coordinating Council ("WECC") and Public Service Company of Colorado ("PSCO") (collectively the "Parties") hereby enter into this Settlement Agreement ("Agreement") on this 12<sup>th</sup> day of March, 2013.

**RECITALS**

A. The Parties desire to enter into this Agreement to resolve all outstanding issues between them arising from a non-public, preliminary assessment of PSCO by WECC that resulted in certain WECC determinations and findings regarding one PSCO Alleged Violation of the following North American Electric Reliability Corporation ("NERC") Reliability Standard ("Reliability Standard" or "Standard"):

*NERC ID: WECC2012009202 - PRC-005-1 Requirement 2:  
Transmission and Generation Protection System Maintenance and Testing*

B. PSCO is a corporation organized under the laws of the state of Colorado. Its principal offices are located in Denver, Colorado. PSCO is a wholly-owned utility operating company subsidiary of Xcel Energy Inc. PSCO engages in, inter alia, the generation, purchase, transmission, distribution and sale of electricity in Colorado. The company provides electric utility services to approximately 1.4 million customers. PSCO was registered on the NERC Compliance Registry on June 17, 2007, as a Balancing Authority, Distribution Provider, Generator Owner, Generator Operator, Load-Serving Entity, Planning Authority, Purchasing-Selling Entity, Resource Planner, Transmission Operator, Transmission Owner, Transmission Planner, and Transmission Service Provider (NCR05521).

C. WECC was formed on April 18, 2002 by the merger of the Western Systems Coordinating Council, Southwest Regional Transmission Association, and Western Regional Transmission Association. WECC is one of eight Regional Entities in the United States responsible for coordinating and promoting electric system reliability and enforcing the mandatory Reliability Standards created by NERC under the authority granted in Section 215 of the Federal Power Act. In addition, WECC supports efficient competitive power markets, assures open and non-discriminatory transmission access among members, provides a forum for resolving transmission access disputes, and provides an environment for coordinating the operating and planning activities of its members. WECC's region encompasses a vast area of nearly 1.8 million square miles

extending from Canada to Mexico and including 14 western states. It is the largest and most diverse of the eight Regional Entities in the United States.

D. The Parties are entering into this Agreement to settle the disputed matters between them. It is in the Parties' and the public's best interests to resolve this matter efficiently without the delay and burden associated with a contested proceeding. Thus, for the purposes of this agreement, PSCO agrees that the violation addressed hereby may be treated as a Confirmed Violation as set forth in the NERC Rules of Procedure.

Nothing contained in this Agreement shall be construed as a waiver of either party's rights, except as otherwise contained herein. Except, however, nothing in this Agreement shall limit or prevent WECC from evaluating PSCO for subsequent violations of the same Reliability Standard addressed herein and taking enforcement action, if necessary. Such enforcement action can include assessing penalties against PSCO for subsequent violations of the Reliability Standard addressed herein in accordance with NERC Rules of Procedure, which can include consideration of the violations resolved herein as prior non-compliance with Reliability Standard.

NOW, THEREFORE, in consideration of the terms set forth herein WECC and PSCO hereby agree and stipulate to the following:

**I. Stipulated Violation Facts**

**A. NERC Reliability Standard PRC-005-1 Requirement 2**

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

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

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

**VIOLATION FACTS**

PSCO is registered on the NERC Compliance Registry as an entity performing the functions of a Transmission Owner, Generator Owner and Distribution Provider, and owns Protection Systems subject to PRC-005-1 R2.

On January 19, 2012, PSCO self-certified non-compliance with PRC-005-1 R2. PSCO reported that in performing generation plant engineering reviews of its protection systems associated with preparation for implementation of PRC-005 Version 2, PSCO identified six relays installed in four BES generating plants that did not have

documentation of testing within the Xcel Energy – Energy Supply protection system maintenance and testing program prescribed interval, by March 12, 2011. Each of these generating facilities is 100 MVA or less. PSCO's Energy Supply protection system maintenance and testing program specifies a 4-year interval beginning March 12, 2007. Based on that interval, on or before March 12, 2011, the six relays should have been maintained and tested, but they were missed. These relays included two relays at Ft. Lupton (59E), one relay at Valmont 6 (59E), and three relays on Alamosa 2 (59E, 27B-1, 27B-2).

Following its Self-Certification submittal, PSCO performed a detailed "extent of condition" review of its PRC-005 compliance at each of its generation plants. The extent of condition review encompassed 29 generating units and their 13 associated start up systems. As a result of this detailed review, PSCO identified 173 additional protection system elements that had not been tested and maintained per PRC-005-1 R2, and which it had not included in the January 19, 2012 Self-Certification of non-compliance. PSCO therefore determined that a total of 179 generation protection system elements were not included in its original generation PRC-005 program, and that three transmission protection system components had not been completely tested within the required interval set forth by the PSCO Transmission protection system maintenance and testing program by December 31, 2012; for a total of 182 devices. The devices included 81 relays (79 generation and 2 transmission), 72 voltage and current sensing devices (all generation), and 29 DC circuitry elements (28 generation and 1 transmission).

A WECC subject matter expert ("SME") reviewed the Self-Certification document, conducted interviews with PSCO's compliance and operations personnel, and submitted data requests for additional information. The SME reviewed the submittals and determined that PSCO had a possible violation of PRC-005-1 R2 for its failure to provide evidence that 182 generation and transmission Protection System devices were maintained and tested within the defined intervals and the date each Protection System device was last tested/maintained.

WECC Enforcement reviewed the self-certification document, the SME's findings, and requested additional information in data requests. Based on this review, Enforcement determined that PSCO had missed maintenance and testing for 81 of 4389 relays, 72 of 5502 voltage and current sensing devices, and 29 of 3779 DC circuitry elements. For these reasons, WECC determined PSCO had an alleged violation of PRC-005-1 R2.

#### MITIGATION PLAN DETAILS

On June 20, 2012, PSCO submitted a mitigation plan addressing the possible violation of PRC-005-1 R2, with a proposed completion date of January 30, 2013.

On July 18, 2012, WECC issued a Notice of Mitigation Plan Rejection and Request for Revised Mitigation Plan to PSCO. WECC requested PSCO submit a revised mitigation plan specifically addressing the six relays in the scope of non-compliance.

On August 1, 2012, PSCO submitted a revised mitigation plan (version 2) that was accepted by WECC on August 8, 2012. The proposed completion date did not change. In the mitigation plan, PSCO proposed to test the six generation relays it had found to be non-compliant by August 1, 2012; to perform an extent of condition review of PSCO generation plants and provide a current list of generation units that have undergone review, by August 28, 2012 and November 28, 2012; to revise its procedure to address activities associated with any newly identified generation protection system devices by November 30, 2012; and provide a final list of all generation units reviewed by January 30, 2013. As part of the extent of condition review, PSCO proposed to review PSCO BES generation units to determine if any additional devices should be included in the PSCO Energy Supply protection system maintenance and testing program. On August 20, 2012, as milestone evidence, PSCO confirmed final action for the original six relays in the scope of the Self-Certification. The last of the six originally reported relays was tested on December 27, 2011.

On September 21, 2012, WECC issued a Notice of Alleged Violation ("NOAV") notifying PSCO of the alleged violation of PRC-005-1 R2 and proposing a penalty. On October 9, 2012, PSCO responded to the NOAV by indicating that it did not contest the alleged violation and accepted the proposed penalty.

On November 21, 2012, PSCO compliance and operations personnel notified WECC that the extent of condition review conducted as part of PSCO's mitigation plan activities had revealed additional instances of non-compliance with PRC-005-1 R2.

On December 4, 2012, WECC issued a Notice of Withdrawal of Notice of Alleged Violation ("Withdrawal Notice"). The Withdrawal Notice withdrew the NOAV issued September 21, 2012, and directed PSCO to submit a revised Mitigation Plan addressing the additional violation scope communicated to WECC on November 21, 2012.

On January 10, 2013, in response to the directive in the Withdrawal Notice, PSCO submitted a further revised mitigation plan (version 3), to address the change in the scope of non-compliance. The Version 3 mitigation plan included a milestone, which was complete at the time of submission, to complete required testing and maintenance for all generation protection system elements discovered during the extent of condition review. This testing had been completed before December 31, 2012.

On January 17, 2013, while compiling documentation validating the elements in PSCO's protection system maintenance and testing program, PSCO discovered three transmission protection system elements that had not been completely tested within the required interval by December 31, 2012. Maintenance and testing of these three transmission protection system elements was completed on January 18, 2013.

On January 25, 2013, WECC and PSCO met to resolve this alleged violation. As part of the January 25, 2013 discussion, WECC agreed to an extension of the mitigation plan completion date, as confirmed in a January 28, 2013 Notice of Mitigation Plan Extension ("Extension Notice") issued to PSCO. WECC determined an extension is in the best

interest of the Bulk Power System and is warranted on its merits to best capture PSCO's mitigating activities.

In the Extension Notice, WECC required PSCO to submit a revised Mitigation Plan (version 4) with a completion date six months from the date of submittal of the revised Mitigation Plan<sup>1</sup>. The Version 4 mitigation plan will focus on steps to enhance the overall management of PSCO's Protection System maintenance and testing program. In the event the scope of the violation expands prior to completion of the extended mitigation plan (version 4), WECC and PSCO agree to include any other such instances of noncompliance with PRC-005-1 R2 within this Agreement.

Enforcement, therefore, determined that PSCO failed to maintain and test a total of 182 protection system devices as prescribed under PRC-005-1 R2 within the testing intervals provided in the PSCO Energy Supply and Transmission protection system maintenance and testing programs, respectively, as of June 18, 2007, the effective date of the Standard, to the present.

#### RELIABILITY IMPACT STATEMENT

The purpose of this Standard is to ensure all transmission and generation Protection Systems affecting the reliability of the BES are maintained and tested. PSCO's generation and transmission protection systems affecting the BES (i.e. relays, voltage and current sensing devices, batteries, DC circuits and communications) should be tested according to PSCO's generation and transmission maintenance and testing programs, respectively. Testing these protection systems helps to determine if the devices are reliable to limit the effects of disturbances in a system network. If the devices are not tested per PSCO's programs, the risk increased that the devices would not operate as planned to interrupt disturbances that may damage the transmission system and/or generation plants. PSCO has a large system with a summer peak of 8,549 MW (2012), and approximately 4,000 miles of transmission lines that range from 115 kV to 345 kV.

Because PSCO failed to test 179 generation and three transmission protective devices per its maintenance and testing programs, the risk increased that the devices would not operate as planned to interrupt disturbances that may damage its transmission system or generation plants. This failure increases the risk to the BES because PSCO did not identify all its protective devices addressed under PRC-005-1. PSCO could not provide the "evidence Protection System devices were maintained and tested within the defined intervals" (R2.1); and the "date each Protection System device was last tested/maintained," (R2.2), for the 182 devices in scope. However, there is no evidence that any of the 182 untested devices misoperated during the period from June 18, 2007 until the devices were maintained and tested.

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<sup>1</sup> PSCO is not required in this specific instance to request a Mitigation Plan Extension Request. Thus, PSCO is not required to submit such a request five days prior to its existing proposed completion date.



WECC determined that PSCO had not included these protective devices in the scope of PRC-005-1 R2 dating back to PSCO's initial compliance period. For these reasons, WECC determined this violation posed a Moderate risk to the reliability of the BES.

**PENALTY CONSIDERATIONS**

The Violation Risk Factor ("VRF") is "High," the Violation Severity Level ("VSL") is "Lower," and this violation posed Moderate risk to the reliability of the BES.

The violation duration is as described above.

**MITIGATING FACTORS**

The violation was identified by PSCO in the course of conducting proactive reviews to prepare for compliance with PRC-005 Version 2, and was voluntarily identified to WECC by PSCO. Upon undertaking the actions outlined in the mitigation plan, PSCO took voluntary corrective action to promptly remediate this violation.

WECC reviewed PSCO's Internal Compliance Program ("ICP") at an On-Site Audit on June 5, 2008. WECC found that: PSCO's ICP is documented; the ICP is disseminated throughout its operations staff; PSCO has ICP oversight staff; ICP oversight staff is supervised at a high level in the organization; the ICP oversight staff has independent access to the CEO and/or board of directors; PSCO operates the ICP such that it is independent of staff responsible for compliance with the Reliability Standards; PSCO has allocated sufficient resources to its ICP; the ICP has the support and participation of senior management; PSCO reviews and modifies its ICP regularly; PSCO's ICP includes formal, internal self-auditing for compliance with all Reliability Standards on a periodic basis; and PSCO's ICP includes disciplinary action for employees involved in violations of the Reliability Standards, when applicable and appropriate.

**AGGRAVATING FACTORS**

Enforcement applied an aggravating factor because this is PSCO's third alleged violation of this Standard:

- (1) On April 15, 2008, PSCO self-reported the first alleged violation of this Standard, because it had failed to conduct monthly and quarterly station battery tests at certain generating stations in 2007, and in January and February, 2008. WECC confirmed that PSCO completed a mitigation plan for this violation on March 31, 2008.
- (2) At a June 2-6, 2008 On-site Audit of PSCO's facilities, WECC determined that PSCO had a second alleged violation of this Standard because PSCO could not provide documentation at the Audit that it had maintained some of its transmission protection systems in accordance with the requirements of the Standard. However, PSCO later verified it actually did perform the

maintenance in accordance with its established intervals. On June 27, 2008, PSCO submitted a Self-Report that included supplemental information showing PSCO had not tested and maintained additional transmission relays within defined schedules. On July 25, 2008, PSCO submitted a mitigation plan to address the June 27, 2008 Self-Report and attached the maintenance and testing records that it had been unable to produce at the Audit. PSCO completed a mitigation plan for this violation on December 19, 2008.

Enforcement determined there were no other aggravating factors warranting a penalty higher than the proposed penalty. PSCO was cooperative throughout the process. PSCO did not fail to complete any applicable compliance directives. There was no evidence of any attempt by PSCO to conceal the violation, and there was no evidence that PSCO's violation was intentional.

## II. Settlement Terms

A. **Payment.** To settle this matter, PSCO hereby agrees to pay \$215,000 to WECC via wire transfer or cashier's check. PSCO shall make the funds payable to a WECC account identified in a Notice of Payment Due that WECC will send to PSCO upon approval of this Agreement by NERC and the Federal Energy Regulatory Commission ("FERC"). PSCO shall issue the payment to WECC no later than thirty days after receipt of the Notice of Payment Due. If this payment is not timely received, WECC shall assess, and PSCO agrees to pay, an interest charge calculated according to the method set forth at 18 CFR §35.19(a)(2)(iii) beginning on the 31<sup>st</sup> day following issuance of the Notice of Payment Due.

The terms of this Agreement, including the agreed upon payment, are subject to review and possible revision by NERC and FERC. Upon NERC approval of the Agreement, NERC will file a Notice of Penalty with FERC and will post the Agreement publicly. If either NERC or FERC rejects the Agreement, then WECC will attempt to negotiate a revised settlement agreement with PSCO that includes any changes to the Agreement specified by NERC or FERC. If the Parties cannot reach a settlement agreement, the CMEP governs the enforcement process.

B. **Settlement Rationale.** WECC's determination of any penalty and sanction included in this settlement agreement is guided by the statutory requirement codified at 16 U.S.C. § 824o(e)(6) that any penalty imposed "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." In addition, WECC considers the direction of the Commission provided in Order No. 693, the NERC Sanction Guidelines, the Commission's Policy Statement on Enforcement, the Commission's July 3, 2008 Guidance Order, the Commission's August 27, 2010 Guidance Order, and all other applicable guidance from NERC and FERC.

To determine a penalty or sanction, WECC considers various factors including, but not limited to: (1) Violation Risk Factor; (2) Violation Severity Level, (3) risk to the



reliability of the Bulk Power System ("BPS"), including the seriousness of the violation; (4) Violation Time Horizon; (5) the violation's duration; (6) the Registered Entity's compliance history; (7) the Registered Entity's self-reports and voluntary corrective action; (8) the degree and quality of cooperation by the Registered Entity in the audit or investigation process, and in any remedial action; (9) the quality of the Registered Entity's compliance program; (10) any attempt by the Registered Entity to conceal the violation or any related information; (11) whether the violation was intentional; (12) any other relevant information or extenuating circumstances; and (13) the Registered Entity's ability to pay a penalty, as applicable.

WECC determined the penalty is appropriate in light of the specific violation facts and penalty considerations described above.

**III. Additional Terms**

A. Authority. The undersigned representative of each party warrants that he or she is authorized to represent and bind the designated party.

B. Representations. The undersigned representative of each party affirms that he or she has read the Agreement, that all matters set forth in the Agreement are true and correct to the best of his or her knowledge, information, or belief, and that he or she understands that the Agreement is entered into by each party in express reliance on the representations set forth herein.

C. Review. Each party agrees that it has had the opportunity to consult with legal counsel regarding the Agreement and to review it carefully. Each party enters the Agreement voluntarily. No presumption or rule that ambiguities shall be construed against the drafting party shall apply to the interpretation or enforcement of this Agreement.

D. Entire Agreement. The Agreement represents the entire agreement between the Parties. No tender, offer, or promise of any kind outside the terms of the Agreement by any member, employee, officer, director, agent, or representative of PSCO or WECC has been made to induce the signatories or the Parties to enter into the Agreement. No oral representations shall be considered a part of the Agreement.

E. Effective Date. The Agreement shall become effective upon FERC's approval of the Agreement by order or operation of law.

F. Waiver of Right to Further Proceedings. PSCO agrees that the Agreement, upon approval by NERC and FERC, is a final settlement of all matters set forth herein. PSCO waives its right to further hearings and appeal, unless and only to the extent that PSCO contends that any NERC or FERC action concerning the Agreement contains one or more material modifications to the Agreement.



G. Reservation of Rights. WECC reserves all of its rights to initiate enforcement, penalty or sanction actions against PSCO in accordance with the Agreement, the CMEP and the NERC Rules of Procedure. In the event that PSCO fails to comply with any of the terms of this Agreement, WECC shall have the right to pursue enforcement, penalty or sanction actions against PSCO up to the maximum penalty allowed by the NERC Rules of Procedure. PSCO shall retain all of its rights to defend against such enforcement actions in accordance with the CMEP and the NERC Rules of Procedure. Failure by WECC to enforce any provision hereof on occasion shall not constitute a waiver by WECC of its enforcement rights or be binding on WECC on any other occasion. In the event the scope of the violation expands prior to completion of the extended mitigation plan (version 4) discussed in this Agreement, WECC and PSCO agree to include any other such instances of noncompliance with PRC-005-1 R2 within this Agreement.

H. Consent. PSCO consents to the use of WECC's determinations, findings, and conclusions set forth in this Agreement for the purpose of assessing the factors, including the factor of determining the company's history of violations, in accordance with the NERC Sanction Guidelines and applicable Commission orders and policy statements. Such use may be in any enforcement action or compliance proceeding undertaken by NERC and/or any Regional Entity; provided, however, that Registered Entity does not consent to the use of the specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by NERC and/or WECC, nor does PSCO consent to the use of this Agreement by any other party in any other action or proceeding.

I. Amendments. Any amendments to the Agreement shall be in writing. No amendment to the Agreement shall be effective unless it is in writing and executed by the Parties.

J. Successors and Assigns. The Agreement shall be binding on successors or assigns of the Parties.

K. Governing Law. The Agreement shall be governed by and construed under the laws of the State of Utah.

L. Captions. The Agreement's titles, headings and captions are for the purpose of convenience only and in no way define, describe or limit the scope or intent of the Agreement.

M. Counterparts and Facsimiles. The Agreement may be executed in counterparts, in which case each of the counterparts shall be deemed to be an original. Also, the Agreement may be executed via facsimile, in which case a facsimile shall be deemed to be an original.

*[Remainder of page intentionally left blank -*



***signatures affixed to following page]***

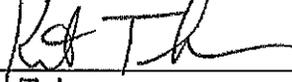


Agreed to and accepted:

WESTERN ELECTRICITY COORDINATING COUNCIL

*for Constance White*  
 3/12/2013  
Constance B. White Date  
Vice President of Compliance

PUBLIC SERVICE COMPANY OF COLORADO

 3/5/13  
Kent T. Larson Date  
Senior Vice President, Operations  
Xcel Energy Services Inc., agent for  
Public Service Company of Colorado

## **Attachment b**

**PSCO's Self-Certification for 2011  
submitted on January 20, 2012**

Standard Requirement	Description	Compliance Status	OEA Status	Entity Requirement Comment
PRC-005-1 R1	<p>Protection Systems that affect the reliability of the BES. The program shall include:</p> <p>R1.1 - Maintenance and testing intervals and their basis.</p> <p>R1.2 - Summary of maintenance and testing procedures.</p>	Compliant	N/A	
PRC-005-1 R2	<p>Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30calendar days). The documentation of the program implementation shall include:</p> <p>R2.1 - Evidence Protection System devices were maintained and tested within the defined intervals.</p> <p>R2.2 - Date each Protection System device was last tested/maintained.</p>	Not Compliant	No	A potential deficiency has been identified with this requirement. A Self-Report is being prepared and will be submitted as soon as practicable.
PRC-007-0 R2	The Transmission Owner, Transmission Operator, Distribution Provider, and Load-Serving Entity that owns or operates a UFLS program (as required by its Regional Reliability Organization) shall provide, and annually update, its underfrequency data as necessary for its Regional Reliability Organization to maintain and update a UFLS program database.	Compliant	N/A	
PRC-008-0 R1	The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall have a UFLS equipment maintenance and testing program in place. This UFLS equipment maintenance and testing program shall include UFLS equipment identification, the schedule for UFLS equipment testing, and the schedule for UFLS equipment maintenance.	Compliant	N/A	
PRC-008-0 R2	The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall implement its UFLS equipment maintenance and testing program and shall provide UFLS maintenance and testing program results to its Regional Reliability Organization and NERC on request (within 30 calendar days).	Compliant	N/A	

## **Attachment c**

**PSCO's Mitigation Plan designated as  
WECCMIT007522 for PRC-005-1 R2 submitted  
August 1, 2012**

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## Mitigation Plan

Registered Entity: Public Service Company of Colorado

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
	WECC2012009202	PRC-005-1 R2	05/08/2012	2

Mitigation Plan Submitted On: August 01, 2012

Mitigation Plan Accepted On:

Mitigation Plan Proposed Completion Date: January 30, 2013

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by PSCO On:

Mitigation Plan Completion Verified by WECC On:

Mitigation Plan Completed? (Yes/No): No

## Section A: Compliance Notices

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

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

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Public Service Company of Colorado  
NERC Compliance Registry ID: NCR05521  
Address: 1800 Larimer St, Suite 1100  
Denver CO 80202

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

Name: Dan Lusk  
Title: Mgr., Mandatory Reliability Standards  
Email: dan.lusk@xcelenergy.com  
Phone: 303-294-2017

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

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

Violation ID	Date of Violation	Requirement
Requirement Description		
WECC2012009202	03/13/2011	PRC-005-1 R2
Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30calendar days). The documentation of the program implementation shall include:		

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

The PSCo Energy Supply Relay Maintenance Standard (EPR 5.714S "Protective Relay Standard, Section 4.2.1), was effective March 12, 2007, before PRC-005-001 was mandatory, and required all PSCo generation protection systems to be initially tested and maintained within a 4 year interval, ending on March 12, 2011.

In preparation for implementation of PRC-005 version 2, detailed operational check procedures for the protection systems are being developed for all of the PSCo generation plants. The development of the operational checks progressed in parallel to the normal protective relay testing being performed for 2011 and 2012.

During the internal review, one relay at Ft. Lupton 1 (59E), one relay at Ft. Lupton 2 (59E), one relay at Valmont 6 (59E) and three relays on Alamosa 2 (59E, 27B-1, 27B-2) generating stations were identified as not having documentation of testing within the prescribed interval (e.g., by March 12, 2011).

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

As discussed above, the potential violation was discovered during advance preparations for Version 2 of PRC-005.

Section D: Details of Proposed Mitigation Plan

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

The specific relays at the four PSCo generating plants where protection system testing could not be documented were either tested or retired before the end of 2011.

Consistent with its culture of compliance, PSCo also decided to conduct a review of all BES generation plants to ascertain if a similar situation has occurred at other facilities.

• The PSCo BES units will be reviewed in 2012 to determine if any additional relays should be in the protection system program. The schedule for this review is contained in the attached file "Mitigation Plan Schedule and Progress 07-31-2012.doc"

• The PSCo Energy Supply Relay Maintenance Standard will be revised to account for testing of new devices found during the review. (EPR 5.714S)

Note: Cherokee 2 was retired on October 15, 2011 for conversion to a Synchronous Condenser. Cherokee 2 will be commissioned as a Synchronous Condenser during 2012 and PRC-005 related equipment will be tested during the commissioning process and maintained per the Energy Supply Relay Maintenance Standard (EPR 5.714S) thereafter. Cherokee 1 was retired on April 30, 2012. The transformers will be used to feed internal electrical busses at the site, and all protection system devices associated with this unit will continue to be subject to protection system testing.

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

Proposed Completion date of Mitigation Plan: January 30, 2013

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

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Test relays found to be non-compliant	6 relays were discovered to have not been tested per the PSCo Energy Supply PRC-005 program. These Relays will be tested to bring them in compliance with the PSCo program.	08/01/2012	08/01/2012
Provide update	Provide current list of units that have undergone review.	08/30/2012	
Provide update	Provide current list of units that have undergone review.	11/28/2012	
Revise Procedure	EPR 5.714S Program revision to address any newly identified protection system devices.	11/30/2012	
Provide update	Provide final list of all units reviewed.	01/30/2013	

- D.4 Additional Relevant Information (Optional)

## Section E: Interim and Future Reliability Risk

### E.1 Abatement of Interim BPS Reliability Risk

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

As described below, Xcel Energy believes the risk to the bulk power system while this Mitigation Plan is being implemented is minimal because 1) the newly identified testing deficiencies identified have all been corrected, and 2) the previously identified generator protection systems have all been fully tested in compliance with the Energy Supply Relay Maintenance Standard or retired.

It should also be noted that each generator in the PSCo system is safeguarded by several different protection functions, all of which are currently in the exiting testing program.

### E.2 Prevention of Future BPS Reliability Risk

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

This comprehensive review, being conducted in conjunction with PSCo in preparation for PRC-005 -2 is extensive. The individual conducting the review has extensive background knowledge of generation protection and control systems.

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

Section F: Authorization

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

- (a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and
- (b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- (c) Acknowledges:
  - 1. I am Vice President - Technical Services of Public Service Company of Colorado
  - 2. I am qualified to sign this Mitigation Plan on behalf of Public Service Company of Colorado
  - 3. I have read and understand Public Service Company of Colorado's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
  - 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  - 5. Public Service Company of Colorado 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 authorities in Canada.

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

Authorized Individual

Name: Mark Freeman

Title: Vice President - Technical Services

Authorized On: June 19, 2012

## **Attachment d**

**PSCO's revised Mitigation Plan designated as  
WECCMIT007522 for PRC-005-1 R2 submitted  
February 15, 2013**

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## Mitigation Plan

Registered Entity: Public Service Company of Colorado

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
	WECC2012009202	PRC-005-1 R2	05/08/2012	4

Mitigation Plan Submitted On: February 15, 2013

Mitigation Plan Accepted On:

Mitigation Plan Proposed Completion Date: August 15, 2013

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by PSCO On:

Mitigation Plan Completion Verified by WECC On:

Mitigation Plan Completed? (Yes/No): No

## Section A: Compliance Notices

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

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

Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Public Service Company of Colorado  
NERC Compliance Registry ID: NCR05521  
Address: 1800 Larimer St, Suite 1100  
Denver CO 80202

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

Name: Paula K. Anderson  
Title: Manager, Reliability Standards Compliance  
Email: paula.k.anderson@xcelenergy.com  
Phone: 612-330-2983

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

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

Violation ID	Date of Violation	Requirement
Requirement Description		
WECC2012009202	03/13/2011	PRC-005-1 R2
Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30calendar days). The documentation of the program implementation shall include:		

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

Original Violation: During a review of protective devices in preparation for revision 2 of PRC-005, PSCo Energy Supply determined that six protection system devices (at four PSCo generating plants) subject to PRC-005-1 had not been included in PSCo Energy Supply's PRC-005 testing and maintenance program, and testing documentation was not found to support testing had been conducted on these devices.

In executing an extent of condition review as part of the mitigation plan accepted by WECC on August 8, 2012, a full review of generation (Energy Supply) protection system schemes was conducted by PSCo personnel to determine if all required elements were in the protection system maintenance and testing program. The condition review activity revealed that a total of 173 additional elements (devices) were not tested within the interval required by the PSCo Energy Supply testing program because they were not originally identified as part of the testing program population.

When assembling summary data as part of the mitigation plan, an additional three PSCo Transmission protection system devices were found not to have complete testing documentation required by the PSCo Transmission protection system testing and maintenance program.

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

As discussed above, the original violation was discovered during advance preparations for Version 2 of PRC-005.

In preparation for implementation of PRC-005 version 2, detailed operational check procedures for the protection systems were developed for all of the PSCo generation plants. The development of the operational checks progressed in parallel to the normal protective relay testing being performed for 2011 and 2012. During this effort, devices were identified that did not have testing documentation.

The PSCo Energy Supply Relay Maintenance Standard (EPR 5.714S "Protective Relay Standard, Section 4.2.1), first became effective March 12, 2007, before PRC-005-1 was mandatory, and required all PSCo generation protection systems to be initially tested and maintained within a 4 year interval, ending on March 12, 2011. The devices identified in the original self report and subsequent mitigation activities were therefore not tested in the required interval. Once identified, all required testing was completed by December 31, 2012.

The additional three Transmission devices were found to be non-compliant when assembling summary data as part of the mitigation plan associated with this possible violation. The end of the first interval for testing these devices was December 31, 2012 pursuant to the PSCo Transmission maintenance and testing program, XEL-POL-Relay Test and Maint Program.doc. The required testing was immediately conducted on these devices upon discovery on January 17, 2013, and completed on January 18, 2013.

Section D: Details of Proposed Mitigation Plan

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

The six specific relays at the four PSCo generating plants where protection system testing could not be documented were either tested or retired before the end of 2011.

Consistent with its culture of compliance, PSCo also decided to conduct an extent of condition review of all BES generation plants to ascertain if a similar situation has occurred at other facilities:

• The PSCo BES units were reviewed in 2012 to determine if any additional relays should be in the protection system program.

• All devices found during the review to not be compliant were tested and brought into compliance during the original mitigation plan timeframe (ending 1/31/2013).

• The PSCo Energy Supply Relay Maintenance Standard was revised to account for testing of new devices found during the review. (EPR 5.714S).

As part of the six-month mitigation plan extension verbally agreed to by PSCo and WECC on January 25, 2013, as confirmed in the Notice of Mitigation Plan Extension issued by WECC to PSCo on January 28, 2013, PSCo will perform the following additional activities:

• Provide information updates on progress toward establishing a cross-functional business unit (i.e. Generation and Transmission) collaboration on PRC-005 compliance programs.

• Reinforce management expectations in the Energy Supply organization for compliance through an Energy Supply executive communication.

• Modify PSCo Energy Supply Relay Maintenance Standard to clarify requirement that scheme reviews are to be conducted for Protection System Device modifications.

• Conduct a thorough third party review of protection schemes for all PSCo BES Generators to ensure that all protection system elements are being identified and tested.

• Conduct a thorough review of protection schemes for a sample of substations to ensure that all protection system elements are being identified and tested.

• Conduct a thorough review of testing/maintenance documentation for a sample of Transmission protection schemes to ensure that all necessary information is being captured.

• Develop and implement in Energy Supply on-going refresher training program on PRC-005 requirements, expectations and standard changes.

• PSCo will provide to WECC a completed Attachment G, for both its generation and transmission Protection System devices.

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

Proposed Completion date of Mitigation Plan: August 15, 2013

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

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Test relays found to be non-compliant	6 relays were discovered to have not	08/01/2012	12/27/2011

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	been tested per the PSCo Energy Supply PRC-005 program. These Relays will be tested to bring them in compliance with the PSCo program.		
Provide update	Provide current list of units that have undergone extent of condition review.	08/30/2012	08/28/2012
Provide update	Provide current list of units that have undergone review.	11/28/2012	11/28/2012
Revise Procedure	EPR 5.714S Program revision to address any newly identified protection system devices.	11/30/2012	11/29/2012
Provide update	Provide supporting information to WECC regarding the final results of the extent of condition review.	01/31/2013	01/25/2013
Cross Functional Business Unit Collaboration	Provide information update to WECC on progress of establishing a cross-functional and cross-regional business unit collaboration on PRC-005 programs	04/30/2013	
Energy Supply Management Expectations	Reinforce management expectations for compliance in the Energy Supply Organization through an Energy Supply executive communication.	05/31/2013	
Update Energy Supply Program for PRC-005	Modify Energy Supply procedures to clarify requirement that scheme reviews are to be conducted for Protection System Device modifications.	05/31/2013	
Review sample of substation protection schemes.	Conduct a thorough review of protection schemes for a sample of substations to ensure that all protection system elements are being identified and tested.	06/30/2013	
Review sample of substation testing documentation.	Conduct a thorough review of testing/maintenance documentation for a sample of Transmission protection schemes to ensure that all necessary information is being captured.	06/30/2013	
Third party review of generation protection schemes.	Conduct a thorough third party review of protection schemes for all PSCo BES generators to ensure that all protection system elements are being identified and tested. Complete any testing, if required.	07/31/2013	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Training program for Energy Supply Personnel involved in PRC-005	Develop and implement in Energy Supply on-going refresher training program on PRC-005 requirements, expectations and standard changes.	07/31/2013	
Cross Functional Business Unit Collaboration	Provide information update to WECC on progress of establishing a cross-functional and cross-regional business unit collaboration on PRC-005 programs	08/15/2013	
Appendix G	Provide completed "Appendix G" for PSCo generation and transmission Protection System devices.	08/15/2013	

#### D.4 Additional Relevant Information (Optional)

Note: Cherokee 2 was retired on October 15, 2011 for conversion to a Synchronous Condenser. Cherokee 2 was commissioned as a Synchronous Condenser during 2012 and PRC-005 related equipment was tested during the commissioning process and maintained per the Energy Supply Relay Maintenance Standard (EPR 5.714S) thereafter. Cherokee 1 was retired on April 30, 2012. The Cherokee 1 transformers will be used to feed internal electrical busses at the site, and all protection system devices associated with this unit will continue to be subject to protection system testing under EPR 5.714S.

## Section E: Interim and Future Reliability Risk

### E.1 Abatement of Interim BPS Reliability Risk

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

As described below, Xcel Energy believes the risk to the bulk power system while this Mitigation Plan is being implemented is minimal because 1) an in-depth extent of condition review has been performed and the newly identified testing deficiencies have all been corrected, and 2) the original identified generator protection systems have all been fully tested in compliance with the Energy Supply Relay Maintenance Standard or retired.

An aggressive testing schedule was executed to test all Energy Supply protection system devices that were found to be non-compliant with PSCo's Energy Supply PRC-005 compliance program. All systems were reviewed and tested by 12/31/2012.

The three Transmission protection system devices discovered to be not tested within the required interval were immediately tested on January 18, 2013.

### E.2 Prevention of Future BPS Reliability Risk

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

This comprehensive review of PSCo's testing and maintenance procedures and program scope, which is being conducted in conjunction with preparation for PRC-005 -2, is extensive. The individual conducting the review has extensive background knowledge of generation protection and control systems. The additional mitigation plan items incorporate recommendations from a cause analysis conducted on the condition discovered in Energy Supply. These actions will serve to close identified gaps that contributed to this condition " training, expectations, and process document improvements.

The third-party review of PSCo Energy Supply BES generator protection schemes will provide additional confidence that all required elements are included in the program.

The Transmission devices discovered to be non-compliant appeared to be the result of anomalous data entry that occurred relatively early in the implementation of the PRC-005 program. Recently implemented automated process checks should prevent recurrence. However, a sampling of Transmission substation protection system schemes will provide additional confidence that all required elements are being included in the program and the required documentation is captured.

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

Section F: Authorization

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

- (a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and
- (b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- (c) Acknowledges:
  - 1. I am Vice President - Technical Services of Public Service Company of Colorado
  - 2. I am qualified to sign this Mitigation Plan on behalf of Public Service Company of Colorado
  - 3. I have read and understand Public Service Company of Colorado's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
  - 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  - 5. Public Service Company of Colorado 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 authorities in Canada.

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

Authorized Individual

Name: Mark Freeman

Title: Vice President - Technical Services

Authorized On: February 15, 2013

**Attachment e**

**PSCO's Certification of Mitigation Plan Completion  
for PRC-005-1 R2  
submitted on August 15, 2013**

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## 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: Public Service Company of Colorado

NERC Registry ID: NCR05521

NERC Violation ID(s): WECC2012009202

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

Scheduled Completion as per Accepted Mitigation Plan: August 15, 2013

Date Mitigation Plan completed: August 13, 2013

WECC Notified of Completion on Date: August 15, 2013

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	Mitigation Plan Schedule and Progress 07-31-2012.doc	Mitigation Plan Schedule and Progress 07-31-2012	108,032
Entity	1..Mitigation Plan Schedule and Progress Status.8.20.rev1.doc	Milestone Evidence - Schedule for review of trip paths at PSCo BES plants.	114,176
Entity	Mitigation Plan Schedule and Progress Status Submitted to WECC 11-28-12.doc		107,520
Entity	EPR 5.714S V3.0 Protective Relay.doc	EPR 5.714S V3.0 Protective Relay	204,288
Entity	PSC-EVD-PSCo Response to Jan 16 WECC Data Request PRC-005- due 01 22 2013.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	59,613
Entity	PSC-EVD-PSCo Response to WECC Data Request 01222013 Q6-Startup Relays.xls	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	16,896
Entity	PSC-EVD-PSCo Response to WECC DR Number 2.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	24,186
Entity	PSC-EVD-PSCo Response to WECC DR#2-EPR 5 704S V1 8 Battery.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	61,951
Entity	PSC-EVD-PSCo Response to WECC DR#2-EPR 5 704S V2	See "Provide Update" milestone, provide supporting information regarding final results of the extent of	74,474

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	0 Battery Maintenance Standard _2_.pdf	condition review.	74,474
Entity	PSC-EVD-PSCo Response to WECC DR#2-EPR 5 714S V3 0 Protective Relay.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	105,394
Entity	PSC-EVD-PSCo Response to WECC DR#2-XEL-POL-Relay Test and Maint Program.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	98,665
Entity	PSC-EVD-PSCo Response to WECC DR#2-XEL-POL-Substation Battery Supply Maintenance & Test.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	69,263
Entity	PSC-EVD-PSCo Response to WECC DR #2-EPR 5 714S V2 2 Protective Relay.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	138,788
Entity	April 2013_PSCo PRC-005 Mitigation Update on Peer Team.pdf	For miestone: Provide information update to WECC on progress of establishing a cross-functional and cross-regional business unit collaboration on PRC-005 programs	21,932
Entity	Transmission Sample Review of Relay Schemes in PSCo.pdf	No discrepancies found. See Transmission Sample Review of Relay Schemes in PSCo.pdf	35,779
Entity	Transmission Sample Review of Relay Test Results in PSCo.pdf	No discrepancies found. See Transmission Sample Review of Relay Test Results in PSCo.pdf	659,732

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: Mark Freeman

Title: Vice President - Technical Services

Email: mark.freeman@xcelenergy.com

Phone: 1 (303) 294-2755

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

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

## **Attachment f**

**WECC's Notice of Completed Mitigation Plan  
Rejection submitted on November 6, 2013**

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Chris Luras  
Director of Enforcement

(801) 883-6887  
[cluras@wecc.biz](mailto:cluras@wecc.biz)

VIA WECC ENHANCED FILE TRANSFER SERVER

November 6, 2013

Alice Ireland  
Manager, Reliability Standard Compliance  
Public Service Company of Colorado

NERC Registration ID: NCR05521  
NERC Violation ID: WECC2012009202

Subject: Notice of Completed Mitigation Plan Rejection  
Reliability Standard PRC-005-1 Requirement 2

Alice,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Public Service Company of Colorado (PSCO) on August 15, 2013 for the violation of Reliability Standard PRC-005-1 Requirement 2 .

After a thorough review, WECC rejected the Completed Mitigation Plan to allow PSCO to include three additional instances of non-compliance that were not previously included in its original Mitigation Plan.

WECC received the Revised Mitigation Plan on October 25, 2013. WECC notified PSCO of the Mitigation Plan acceptance on November 5, 2013. Please submit the Certification and evidence via webCDMS at <https://www.cdms.oati.com> by the proposed completion date so WECC may verify completion.

If you have any questions or concerns, please contact Keshav Sarin at [ksarin@wecc.biz](mailto:ksarin@wecc.biz).

Sincerely,

A handwritten signature in blue ink, appearing to read "CL", is placed above the name of the sender.

Chris Luras  
Director of Enforcement

cc: Keshav Sarin, WECC Manager, O&P and CIP

## **Attachment g**

**PSCO's request for Mitigation Plan extension,  
submitted on November 11, 2013**

### Mitigation Plan - Summary of Extension Requests

Western Electricity Coordinating Council (WECC)

**Violation Information****NERC Violation ID:** WECC2012009202**Entity:** Public Service Company of Colorado (PSCO)**Program Year:** 2011**Std.Reg.:** PRC-005-1 R2**Discovery Method:** Self-Certification**Mitigation Plan Status:** Accepted**Proposed Completion Date:** 11/15/2013

Action	Extension \ Request \ Made on	Previous \ Completion \ Date	Requested \ Completion \ Date	Entity Comment	Regional Comment	Regional \ Response On	Regional \ Respons
<a href="#">View Notifications</a>	11/11/2013	11/15/2013	11/22/2013	Per conversation on 11/11/2013, please extend until 11/22/2013.			

## **Attachment h**

**PSCO's Certification of Mitigation Plan Completion  
for PRC-005-1 R2  
submitted on November 15, 2013**

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## 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: Public Service Company of Colorado

NERC Registry ID: NCR05521

NERC Violation ID(s): WECC2012009202

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

Scheduled Completion as per Accepted Mitigation Plan: November 22, 2013

Date Mitigation Plan completed: November 15, 2013

WECC Notified of Completion on Date: November 15, 2013

Entity Comment:

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	Mitigation Plan Schedule and Progress 07-31-2012.doc	Mitigation Plan Schedule and Progress 07-31-2012	108,032
Entity	1..Mitigation Plan Schedule and Progress Status.8.20.rev1.doc	Milestone Evidence - Schedule for review of trip paths at PSCo BES plants.	114,176
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Entity	PSC-EVD-PSCo Response to Jan 16 WECC Data Request PRC-005- due 01 22 2013.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	59,613
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Entity	PSC-EVD-PSCo Response to WECC DR#2-EPR 5 704S V1 8 Battery.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	61,951
Entity	PSC-EVD-PSCo Response to WECC DR#2-EPR 5 704S V2	See "Provide Update" milestone, provide supporting information regarding final results of the extent of	74,474

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Entity	PSC-EVD-PSCo Response to WECC DR#2-XEL-POL-Relay Test and Maint Program.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	98,665
Entity	PSC-EVD-PSCo Response to WECC DR#2-XEL-POL-Substation Battery Supply Maintenance & Test.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	69,263
Entity	PSC-EVD-PSCo Response to WECC DR #2-EPR 5 714S V2 2 Protective Relay.pdf	See "Provide Update" milestone, provide supporting information regarding final results of the extent of condition review.	138,788
Entity	April 2013_PSCo PRC-005 Mitigation Update on Peer Team.pdf	For miestone: Provide information update to WECC on progress of establishing a cross-functional and cross-regional business unit collaboration on PRC-005 programs	21,932
Entity	Transmission Sample Review of Relay Schemes in PSCo.pdf	No discrepancies found. See Transmission Sample Review of Relay Schemes in PSCo.pdf	35,779
Entity	Transmission Sample Review of Relay Test Results in PSCo.pdf	No discrepancies found. See Transmission Sample Review of Relay Test Results in PSCo.pdf	659,732
Entity	PSCO Nov 15 2013 Sched G Updated Gen PRC-005.xlsx	Updated PRC-005 Generator Devices in PSCo's Attachment G as of Nov. 15, 2013.	225,960
Entity	SignedCert_MitPlanComplete_PRC-005.pdf	Signed Certification of Mitigation Plan Completion by Mark Freeman.	245,602

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: Mark Freeman

Title: Vice President - Technical Services

Email: mark.freeman@xcelenergy.com

Phone: (303) 294-2755

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

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