



NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

March 1, 2010

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

**Re: NERC Notice of Penalty regarding Southern California Edison - Transmission & Distribution Business Unit  
FERC Docket No. NP10\_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding Southern California Edison - Transmission & Distribution Business Unit (SCET), NERC Registry ID NCR05398,<sup>2</sup> in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).<sup>3</sup>

On December 18, 2008, SCET self-reported to the Western Electricity Coordinating Council (WECC) non-compliance with FAC-001-0 Requirement (R) 1, specifically R1.2 and R1.3, because it did not have a published document that addressed facility connection requirements, in their entirety, for its transmission facilities and end-users. On June 24, 2009, SCET self-reported to WECC non-compliance with PRC-STD-003-1 WR1 for its failure to remove failed relays from service for repair or replacement within 22 hours of a relay misoperation. This Notice of Penalty is being filed with the Commission because, based on information from WECC, SCET does not dispute the violations of FAC-001-0 R1 and PRC-STD-003-1 WR1 and the proposed twenty eight thousand dollar (\$28,000) penalty to be assessed to SCET. Accordingly, the

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

<sup>2</sup> Western Electricity Coordinating Council confirmed that SCET was included on the NERC Compliance Registry as a Distribution Provider, Transmission Operator, Transmission Owner and Transmission Planner on June 17, 2007. As a Transmission Owner, SCET is subject to the requirements of Reliability Standard FAC-001-0 and as a Transmission Owner and Transmission Operator, SCET is subject to the requirements of Reliability Standard PRC-STD-003-1.

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

violations identified as NERC Violation Tracking Identification Numbers WECC200801269 and WECC200901458 are Confirmed Violations, as that term is defined in 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 Notice of Confirmed Violation and Proposed Penalty or Sanction (NOCV) issued on September 14, 2009, by WECC. The details of the findings and basis for the penalty are set forth herein. This Notice of Penalty filing contains the basis for approval of this Notice of Penalty by the NERC Board of Trustees Compliance Committee (BOTCC). In accordance with Section 39.7 of the Commission's Regulations, 18 C.F.R. § 39.7 (2007), NERC provides the following summary table identifying the Reliability Standard at issue in this Notice of Penalty.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty (\$)
WECC	Southern California Edison - Transmission & Distribution Business Unit	NOC-375	WECC200801269	FAC-001-0	1	Medium	28,000
WECC	Southern California Edison - Transmission & Distribution Business Unit	NOC-375	WECC200901458	PRC-STD-003-1	WR1	N/A	

#### FAC-001-0 R1

The purpose of Reliability Standard FAC-001-0 is for Transmission Owners to establish facility connection and performance requirements to avoid adverse impacts on reliability.

FAC-001-0 R1 requires a Transmission Owner, such as SCET, to document, maintain, and publish facility connection requirements to ensure compliance with NERC Reliability Standards and a applicable Regional Entity, subregional, Power Pool, and individual Transmission Owner planning criteria and facility connection requirements. The Transmission Owner's facility connection requirements shall address connection requirements for: (R1.1) Generation facilities; (R1.2 ) Transmission facilities; and (R1.3) End-user facilities. FAC-001-0 R1 and its sub-requirements each have a "Medium" Violation Risk Factor (VRF).

On August 22, 2008, as a result of an internal review, SCET discovered non-compliance with FAC-001-0 R1, specifically R1.2 and R1.3, because it did not have a single published document that addressed facility connection requirements for its transmission facilities and end-users. SCET followed up this discovery with an internal review and, on December 18, 2008, submitted a Self-Report of the potential violation along with a Mitigation Plan.

WECC reviewed the Self-Report along with the findings of its subject matter experts and confirmed that a violation occurred because SCET did not have a document addressing facility connection requirements for transmission facilities and end-users as required by the Standard. WECC also determined that SCET's non-compliance did not create a serious or substantial risk

to the bulk power system (BPS) because, although SCET failed to properly document its facility connection requirements, the requirements were available to other entities through interconnection agreements.

WECC determined that the violation duration for FAC-001-0 R1 was from June 18, 2007, the date the Standard became enforceable, until March 17, 2009, when SCET completed its Mitigation Plan.

#### PRC-STD-003-1 WR1

The purpose of Regional Reliability Standard PRC-STD-003-1 is to ensure that Transmission Operators and Transmission Owners analyze and mitigate all transmission and generation Protection System Misoperations affecting the reliability BPS.

PRC-STD-003-1 WR1 requires owners of protective relays and Remedial Action Schemes (RAS) applied to path elements of selected WECC major transmission path facilities and RAS to take the following action for each known or probable relay misoperation:

- (a) if functionally equivalent protective relaying or RAS remains in service to ensure bulk transmission system reliability; the relay or RAS that misoperated is to be removed from service for repair or modification within 22 hours of the relay or RAS misoperation. The relay or RAS shall be replaced, repaired, or modified such that the incorrect operation will not be repeated;
- (b) if functionally equivalent protective relaying or RAS does not remain in service that will ensure bulk transmission system reliability, and the relay or RAS that misoperated cannot be repaired and placed back in service within 22 hours, the associated transmission path facility must be removed from service. The remaining path facilities, if any, must be de-rated to a reliable operating level;
- (c) if the relay or RAS misoperates and there is some protection but not entirely functionally equivalent, the relay or RAS must be repaired or removed from service within 22 hours. The associated transmission may remain in service; however, system operation must fully comply with WECC and NERC operating standards. This may require an adjustment of operating levels; and
- (d) protective relays or RAS removed from service must be repaired or replaced with functionally equivalent protective relays or RAS within 20 Business Days of removal, or the system shall be operated at levels that meet WECC Standards and NERC Standards or the associated transmission path elements shall be removed from service.

It is not intended that the above requirements apply to system protection and/or RAS actions that appear to be entirely reasonable and correct at the time of NERC standards, and the protective relaying or RAS operation is later found to be

incorrect. In such cases, upon determination of the incorrect operation, the requirements of (a) through (d) above will become applicable at the time the incorrect operation is identified.

PRC-STD-003-1 WR1, as a Regional Standard, does not have a VRF.

On April 3, 2008, an internal fault occurred in one of the Vincent No.1 500 kV circuit breakers at Midway Substation. The fault was internal to both the line and bus zones of protection, and consequently both the line and bus relayed. At the time of the event, it was not known that the circuit breaker at Midway Substation had experienced an internal fault and consequently the fault analysis for this event was inconclusive and the decision was made to leave all relays in service.

On June 24, 2008, Pacific Gas & Electric (PG&E) personnel informed SCET's Protection Engineers that they had determined that there had been an internal fault in one of the Vincent No. 1 circuit breakers at Midway Substation and that the ABB REL-350 relays had failed to operate for a fault in its zone of protection. This misoperation was due to a firmware malfunction; however, redundant protection systems cleared the fault as intended. The relay manufacturer, in conjunction with SCET and PG&E, concluded that: (1) the relay firmware version 2.72 was defective causing the relays to go into sleep mode rendering them inoperable without any warning or external indication; and (2) cycling of the DC power restores the relays to operable status. The affected ABB REL-350 relays were taken out of service on August 7, 2008 so that corrective action could be taken by downgrading the firmware version to version 2.71. On June 24, 2009, as a result of an internal review, SCET self-reported to WECC non-compliance with PRC-STD-003-1 WR1 because it did not remove failed relays from service for repair or replacement within 22 hours of the relay misoperation.

WECC reviewed the Self-Report along with the findings of its subject matter experts and confirmed that a violation occurred because SCET failed to remove faulty relays from service for repair or replacement within 22 hours of the known relay misoperation on June 24, 2008. WECC also determined that SCET's non-compliance did not create a serious or substantial risk to the BPS because, although SCET failed to remove malfunctioning relays from service for 45 days, it has three sets of redundant relay systems in use at the subject facility. Additionally, SCET verified that all relays operated correctly during the period of time the ABB REL-350 relays were out of service.

WECC determined that the violation duration for PRC-STD-003-1 WR1 was from June 24, 2008, the date of the aforementioned relay misoperation, until July 7, 2009, when SCET completed its Mitigation Plan.

#### WECC's Determination of Penalty

WECC assessed an aggregate penalty of twenty eight thousand dollars (\$28,000) for the referenced violations. In reaching this determination, WECC considered the following factors:

1. SCET self-reported the violations;
2. the violations were SCET's first violations of both Standards;

3. SCET was cooperative throughout the compliance process;
4. there was no evidence of any attempt by SCET to conceal the violation;
5. there was no evidence that SCET's violation was intentional; and
6. the violations did not pose a serious or substantial risk to the BPS, as discussed above.

Therefore, WECC determined that, in this instance, the penalty amount of twenty eight thousand dollars (\$28,000) is appropriate and bears a reasonable relation to the seriousness and duration of the subject violations.

#### **Status of Mitigation Plan<sup>4</sup>**

##### FAC-001-0 R1

SCET's Mitigation Plan to address FAC-001-0 R1 was submitted to WECC on December 18, 2008, with a proposed completion date of March 31, 2009. The Mitigation Plan was accepted by WECC on January 15, 2009 and was approved by NERC on February 20, 2009. The Mitigation Plan is designated as MIT-08-1337 and was submitted as non-public information to FERC on February 25, 2009, in accordance with FERC orders.

The Mitigation Plan required SCET to publish a single document describing the technical and operational requirements for connecting transmission facilities and end-users. This document would combine all IEEE Standards, American National Standards Institute Standards, and tariffs/rules currently used by SCET for transmission and end-user facilities into one document.

On March 17, 2009, SCET certified that its Mitigation Plan was completed on March 17, 2009. SCET submitted a document titled *Interconnection Handbook*, dated March 17, 2009 as evidence of completion.

On March 27, 2009, after WECC's review of SCET's submitted evidence, WECC verified that the Mitigation Plan was completed and notified SCET on April 8, 2009, that it was in compliance with FAC-001-0 R1.

##### PRC-STD-003-1 WR1

SCET's Mitigation Plan to address PRC-STD-003-1 WR1 was submitted as complete to WECC on July 7, 2009 with a proposed completion date of July 7, 2009. The Mitigation Plan was accepted by WECC on July 10, 2009 and was approved by NERC on July 27, 2009. The Mitigation Plan is designated as MIT-08-1825 and was submitted as non-public information to FERC on July 27, 2009, in accordance with FERC orders.

The Mitigation Plan required SCET to: (1) update the firmware version of the affected relays; (2) form the Engineering Compliance & Quality group to serve as an independent check of relay misoperations and to ensure on-going training is provided to SCET Protection Engineers on the requirements of the Standard; and (3) provide post-event training to SCET Protection Engineers

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<sup>4</sup> See 18 C.F.R. § 39.7(d)(7).

reinforce the requirement of NERC and WECC Standards, including the 22 hour requirement of the WECC Regional Reliability Standard PRC-STD-003-1 and related SCET procedures.

On July 7, 2009, SCET certified that its Mitigation Plan was completed upon its submission. SCET submitted training rosters as evidence of completion.

On July 10, 2009, after WECC's review of SCET's submitted evidence, WECC verified that the Mitigation Plan was completed and notified SCET on July 21, 2009, that it was in compliance with PRC-STD-003-1 WR1.

### **Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed<sup>5</sup>**

#### **Basis for Determination**

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008 Guidance Order,<sup>6</sup> the NERC BOTCC reviewed the NOCV and supporting documentation on February 10, 2010. The NERC BOTCC approved the assessment of a twenty eight thousand dollar (\$28,000) penalty against SCET based upon WECC's findings and determinations, the NERC BOTCC's review of the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violations at issue.

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

1. The violations were self-reported;
2. The violations were the first violations by SCET;
3. WECC reported SCET was cooperative throughout the enforcement process;
4. There was no evidence of any attempt by SCET to conceal the violations;
5. There was no evidence that SCET's violations were intentional; and
6. The violations were deemed not to put bulk power system reliability at serious or substantial risk, as discussed above.

For the foregoing reasons, the NERC BOTCC believes that the proposed twenty eight thousand dollar (\$28,000) penalty amount is appropriate for the violations and circumstances in question, and is consistent with NERC's goal to promote and ensure reliability of the bulk power system.

Pursuant to Order No. 693, the penalty will be effective upon expiration of the thirty (30) day period following the filing of this Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

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<sup>5</sup> See 18 C.F.R § 39.7(d)(4).

<sup>6</sup> *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008).



### **Attachments Included as Part of the Notice of Penalty**

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

- a) SCET's Self-Report for FAC-001-0 R1 dated December 18, 2008, included as Attachment a;
- b) SCET's Self-Report for PRC-STD-003-1 WR1 dated June 24, 2009, included as Attachment b;
- c) SCET's Mitigation Plan designated as MIT-08-1337 for FAC-001-0 R1 submitted December 18, 2008, included as Attachment c;
- d) SCET's Certification of Completion of the Mitigation Plan for FAC-001-0 R1 dated March 17, 2009, included as Attachment d;
- e) WECC's Verification of Completion of the Mitigation Plan for FAC-001-0 R1 dated April 8, 2009, included as Attachment e;
- f) SCET's Mitigation Plan and Certification of Completion therein designated as MIT-08-1825 for PRC-STD-003-1 WR1 submitted July 7, 2009, included as Attachment f; and
- g) WECC's Verification of Completion of the Mitigation Plan for PRC-STD-003-1 WR1 dated July 21, 2009, included as Attachment g.

### **A Form of Notice Suitable for Publication<sup>7</sup>**

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

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<sup>7</sup> See 18 C.F.R. § 39.7(d)(6).

## Notices and Communications

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

<p>Gerald W. Cauley* President and Chief Executive Officer David N. Cook* Vice President and General Counsel North American Electric Reliability Corporation 116-390 Village Boulevard Princeton, N.J. 08540-5721 (609) 452-8060 (609) 452-9550 – facsimile gerry.cauley@nerc.net david.cook@nerc.net</p> <p>Christopher Luras* Manager of Compliance Enforcement Western Electricity Coordinating Council 615 Arapeen Drive, Suite 210 Salt Lake City, UT 84108-1262 (801) 883-6887 (801) 883-6894 – facsimile CLuras@wecc.biz</p> <p>James Kelly* Senior Vice President, Transmission and Distribution Business Unit Southern California Edison – Transmission &amp; Distribution Business Unit P.O. Box 800 8631 Rush Street Rosemead, CA 91770 (626) 302-2284 (626) 302-2781 – facsimile James.Kelly@sce.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>Rebecca J. Michael* Assistant General Counsel Holly A. Hawkins* Attorney North American Electric Reliability Corporation 1120 G Street, N.W. Suite 990 Washington, D.C. 20005-3801 (202) 393-3998 (202) 393-3955 – facsimile rebecca.michael@nerc.net holly.hawkins@nerc.net</p> <p>Louise McCarren* Chief Executive Officer Western Electricity Coordinating Council 615 Arapeen Drive, Suite 210 Salt Lake City, UT 84108-1262 (801) 883-6868 (801) 582-3918 – facsimile Louise@wecc.biz</p> <p>Constance White* Vice President of Compliance Western Electricity Coordinating Council 615 Arapeen Drive, Suite 210 Salt Lake City, UT 84108-1262 (801) 883-6885 (801) 883-6894 – facsimile CWhite@wecc.biz</p> <p>Steven Goodwill* Associate General Counsel Western Electricity Coordinating Council 615 Arapeen Drive, Suite 210 Salt Lake City, UT 84108-1262 (801) 883-6857 (801) 883-6894 – facsimile SGoodwill@wecc.biz</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,

Gerald W. Cauley  
President and Chief Executive Officer  
David N. Cook  
Vice President and General Counsel  
North American Electric Reliability Corporation  
116-390 Village Boulevard  
Princeton, N.J. 08540-5721  
(609) 452-8060  
(609) 452-9550 – facsimile  
gerry.cauley@nerc.net  
david.cook@nerc.net

/s/ Rebecca J. Michael  
Rebecca J. Michael  
Assistant General Counsel  
Holly A. Hawkins  
Attorney  
North American Electric Reliability  
Corporation  
1120 G Street, N.W.  
Suite 990  
Washington, D.C. 20005-3801  
(202) 393-3998  
(202) 393-3955 – facsimile  
rebecca.michael@nerc.net  
holly.hawkins@nerc.net

cc: Southern California Edison - Transmission & Distribution Business Unit  
Western Electricity Coordinating Council

Attachments

## **Attachment a**

### **SCET's Self-Report for FAC-001-0 R1 dated December 18, 2008**



**CONFIDENTIAL**

## **Compliance Violation Self-Reporting Form**

Please complete an **individual** Self-Reporting Form for each NERC Reliability Standard that indicates any level(s) of non-compliance and submit via the WECC Compliance Web Portal File Upload

Registered Entity Name: Southern California Edison - Transmission & Distribution Business Unit (SCET)

Contact Name: David Franklin

Contact Phone: (626) 302-0372

Contact email: David.Franklin@sce.com

Date noncompliance was discovered: Possible non-compliance was found on August 22, 2008, which required extensive review to determine whether any actual non-compliance existed. A final determination of non-compliance was made on December 18, 2008.

Date noncompliance was reported: December 18, 2008

Standard Title: Facility Connection Requirements

Standard Number: FAC-001-0

Requirement Number(s)<sup>1</sup>: R.1: R.1.2, R.1.3

How was the noncompliance found? (e.g. Routine Readiness Evaluation, Self-evaluation, Internal Audit, etc.)

The non-compliance was found through an Internal Audit.

**\*Submit a Mitigation Plan in conjunction with this form to show that corrective steps are being taken within ten (10) business days. If a mitigation plan is not being submitted with this form please complete the following:**

Describe the cause of non-compliance:

Describe the reliability impact of this non-compliance:

Expected date of Mitigation Plan submittal:

<sup>1</sup> Violations are on a per requirement basis.

**Attachment b**

**SCET's Self-Report for PRC-STD-003-1 WR1  
dated June 24, 2009**



James A. Kelly  
Senior Vice President  
Transmission & Distribution  
2244 Walnut Grove Avenue  
Rosemead, California 91770  
(626) 302-2284

June 24, 2009

Ms. Connie White  
Vice President of Compliance  
Western Electricity Coordinating Council  
615 Arapeen Drive, Suite 210  
Salt Lake City, Utah, 84108-1262

RE: Self-Reporting Form for WECC Reliability Standard PRC-STD-003-1

Dear Ms. White,

This letter is to inform the Western Electricity Coordinating Council (WECC) that Southern California Edison Company's Transmission & Distribution Business Unit (SCET) discovered a potential noncompliance event relative to WECC Reliability Standard PRC-STD-003-1. This discovery was made during an internal review of our NERC compliance program.

The potential violation involves a failure to remove relays that have misoperated from service for repair or replacement within 22 hours of the relay misoperation pursuant to Requirement WR1 (a) of the standard. Therefore, SCE is submitting a Compliance Violation Self-Reporting Form.

As there are three sets of redundant relay systems on the Midway – Vincent No. 1 500 kV line, removal of the relays from service did not impact the protection of the line or the reliability of the Bulk Power System. A Mitigation Plan is being prepared and will be submitted when complete.

If you have any questions regarding this matter, please contact Kenya Streeter at [Kenya.Streeter@sce.com](mailto:Kenya.Streeter@sce.com) or Robert Ramirez at [Robert.Ramirez@sce.com](mailto:Robert.Ramirez@sce.com).

Sincerely,

A handwritten signature in black ink, appearing to read "JAKelly", is written over the printed name "James A. Kelly".

James A. Kelly

Attachment:  
WECC Self-Reporting Form  
cc: Robert Ramirez  
Neil Shockey  
Rebecca Furman



## Self-Reporting Form

Date Submitted by Registered Entity: 6/24/2009

NERC Registry ID: NCR05398

Joint Registration Organization (JRO) ID: JRO00009

Registered Entity: Southern California Edison - Transmission & Distribution Business Unit

Registered Entity Contact: Neil Shockey (626) 302-4604

### Function(s) Applicable to Self-Report:

- |                              |                              |                                        |                              |                              |                              |
|------------------------------|------------------------------|----------------------------------------|------------------------------|------------------------------|------------------------------|
| <input type="checkbox"/> BA  | <input type="checkbox"/> TOP | <input checked="" type="checkbox"/> TO | <input type="checkbox"/> GO  | <input type="checkbox"/> GOP | <input type="checkbox"/> LSE |
| <input type="checkbox"/> DP  | <input type="checkbox"/> PSE | <input type="checkbox"/> TSP           | <input type="checkbox"/> PA  | <input type="checkbox"/> RP  | <input type="checkbox"/> TP  |
| <input type="checkbox"/> RSG | <input type="checkbox"/> RC  | <input type="checkbox"/> IA            | <input type="checkbox"/> RRO |                              |                              |

Standard: WECC Standard PRC-STD-003-1

Requirement: WR1 (a)

Has this violation previously been reported or discovered: ☐ Yes ☒ No  
If Yes selected: Provide NERC Violation ID (if known):

Date violation occurred: On June 24, 2008 SCE confirmed that the event of April 3, 2008 was a misoperation.

Date violation discovered: 6/19/2009

Is the violation still occurring? ☐ Yes ☒ No

Detailed explanation and cause of violation: On April 3, 2008, an internal fault occurred in one of the Vincent No. 1 500 kV CBs at Midway Substation. The fault was internal to both the line and bus zones of protection, and consequently both the line and bus relayed. At the time of the event it was not known that the CB at Midway had experienced an internal fault and consequently the fault analysis for this event was inconclusive and the decision was made to leave all relays in service.

On June 24, 2008, PG&E personnel informed SCE's Protection Engineers that they had determined that there had been an internal fault in one of the Vincent No. 1 CBs at Midway and that the ABB REL-350 relays had failed to operate for a fault in its Zone of protection. This misoperation was due to a firmware malfunction; however, redundant protection systems cleared the fault as intended. The relay manufacturer, in conjunction with SCE and PG&E, concluded that: 1) the relay firmware version 2.72 was defective causing the relays to go into sleep mode rendering them inoperable without any warning or external indication and 2) cycling of the DC power restores the relays to operable status.





On August 7, 2008, the ABB REL-350 relays were taken out of service and corrective action taken by downgrading the firmware to version 2.71 as recommended by the manufacturer.

During an internal review, a potential violation was discovered related to WECC Regional Standard PRC STD 003-1, Requirement WR1 (a), whereby the ABB REL-350 relays were not removed from service for repair or replacement within 22 hours of the relay misoperation.

There are three sets of redundant relay systems on this line and removal of the relays from service did not impact the protection of the line.

Potential Impact to the Bulk Power System (minimal, moderate, or severe): minimal

Detailed explanation of Potential Impact: There was minimal impact to the Bulk Power System as redundant relays were in place and had operated properly during the fault in question.

**Additional Comments:**

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**NOTE:** While submittal of a mitigation plan is not required until after a determination of a violation is confirmed, early submittal of a mitigation plan to address and remedy an identified deficiency is encouraged. Submittal of a mitigation plan shall not be deemed an admission of a violation. (See NERC Rules of Procedure, Appendix 4C, Section 6.4.)

## **Attachment c**

**SCET's Mitigation Plan designated as MIT-08-1337 for FAC-001-0 R1 submitted December 18, 2008**



## Mitigation Plan Submittal Form

New ☒ or Revised ☐

Date this Mitigation Plan is being submitted: December 18, 2008

If this Mitigation Plan has already been completed:

- Check this box ☐ and
- Provide the Date of Completion of the Mitigation Plan:

### Section A: Compliance Notices & Mitigation Plan Requirements

- A.1 Notices and requirements applicable to Mitigation Plans and this Submittal Form are set forth in "Appendix A - Compliance Notices & Mitigation Plan Requirements" to this form. **Review Appendix A and check this box ☒ to indicate that you have reviewed and understand the information provided therein.** This Submittal Form and the Mitigation Plan submitted herein are incomplete and cannot be accepted unless the box is checked.

### Section B: Registered Entity Information

- B.1 Identify your organization:

Registered Entity Name: Southern California Edison - Transmission & Distribution Business Unit (SCET)  
 Registered Entity Address: 2244 Walnut Grove Ave, Rosemead, CA 91770  
 NERC Compliance Registry ID: NCR05398

- B.2 Identify the individual in your organization who will be the Entity Contact regarding this Mitigation Plan. Please see Section 6.2 of the WECC Compliance Monitoring and Enforcement Program (CMEP) for a description of the qualifications required of the Entity Contact.<sup>1</sup>

Name: David Franklin  
 Title: Project Manager

<sup>1</sup> A copy of the WECC CMEP is posted on WECC's website at <http://www.wecc.biz/documents/library/compliance/manuals/Att%20A%20-%20WECC%20CMEP.pdf>. Registered Entities are responsible for following all applicable WECC CMEP procedures. WECC strongly recommends that registered entities become familiar with the WECC CMEP and its requirements, as they may be amended from time to time.



Western Electricity Coordinating Council

Email: David.Franklin@sce.com

Phone: (626) 302-0372



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

This Mitigation Plan is associated with the alleged or confirmed violation(s) of the reliability standard/requirements listed below:

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

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

NERC Violation ID # [if known]	WECC Violation ID # [if known ]	Requirement Violated (e.g. R3)	Violation Risk Factor	Alleged or confirmed Violation Date <sup>(*)</sup> (MM/DD/YY)	Method of Detection (e.g. audit, self-report, investigation)
		R1: R1.2, R1.3	Medium	12/18/08	Internal Audit

(\*) Note: The Alleged or Confirmed Violation Date shall be: (i) the date the violation occurred; (ii) the date that the violation was self-reported; or (iii) the date upon which WECC has deemed the violation to have occurred. Please contact WECC if you have questions regarding which date to use.

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

FAC-001-0 requires published facility connection requirements that address connection requirements for generation facilities, transmission facilities, and end-users. SCE does have a published document for R.1.1, generation facilities. However, although practices exist that meet requirements R.1.2 and R.1.3, SCE does not have a published, uniform document that currently exists which addresses these requirements in their entirety for transmission facilities and end-users. However, SCE, in its interconnection agreements, addresses requirements for interconnecting to SCE's system.





Western Electricity Coordinating Council



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

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

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

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

### **Mitigation Plan Contents**

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

A plan has been initiated to publish a single document that describes the technical and operational requirements for connecting transmission facilities and end-users. This document will combine all IEEE Standards, ANSI Standards, and tariffs/rules currently utilized by SCE for connecting transmission facilities and end-users into one document.  
[Provide your response here; additional detailed information may be provided as an attachment as necessary]

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

### **Mitigation Plan Timeline and Milestones**

- D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the alleged or confirmed violations associated with this Mitigation Plan corrected: March 31, 2009
- D.3 Enter Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:



Milestone Activity	Proposed Completion Date* (milestones cannot be more than 3 months apart)
1 <sup>st</sup> Draft of Document	January 31, 2009
2 <sup>nd</sup> Draft of Document	February 28, 2009
Final Document	March 31, 2009

(\*) Note: Implementation milestones should be no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. As set forth in CMEP section 6.6, adverse consequences could result from failure to complete, on a timely basis, all required actions in this Mitigation Plan, including implementation of milestones. A request for an extension of the completion date of any milestone or of the Mitigation Plan must be received by WECC at least five (5) business days before the relevant milestone or completion date.

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

#### **Additional Relevant Information (Optional)**

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

FAC-001-0 requires a transmission owner to publish facility connection requirements for generation facilities, transmission facilities, and end-users. A unified document does not exist that addresses these requirements. However, SCE utilizes the following existing IEEE Standards, ANSI Standards, and tariffs/rules to meet the requirements for connecting transmission facilities and end-users:

- SCE Transmission Planning Criteria and Guidelines
- NERC/WECC Planning Standards
- Electric Design Station Layout
- IEEE 519 IEEE Recommended Practices and Requirements for Harmonic Control in Electric Power Systems
- IEEE 80 Guide for Safety in AC Substation Grounding
- FERC Electric Tariff
- Standard Large Generator Interconnection Procedures
- Standard Large Generator Interconnection Agreement
- SCE Bulk Electric System Facility Rating Methodology
- WECC Minimum Operating Reliability Criteria
- WECC Operating Committee Handbook





*Western Electricity Coordinating Council*



- WECC Coordinated Off-Nominal Frequency Load Shedding and Restoration Plan
- California Public Utilities Commission Rule 2
- CAISO Business Practice Manual for Transmission Planning

Although SCE performs transmission facilities and end-user studies in accordance with these standards, tariffs, and rules, we currently do not have a unified document that can be published for transmission facilities and end-users. A single document will be developed that consolidates the various national standards and SCE tariffs and rules into a single document.

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



## Section E: Interim and Future Reliability Risk

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

### Abatement of Interim BPS Reliability Risk

- E.1 While your organization is implementing the Mitigation Plan proposed in Part D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known, reasonably suspected 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:

While the Mitigation Plan is being completed, there are no risks or impacts to the reliability of the bulk power system that are reasonably suspected or anticipated. Therefore, no further actions need to be taken due to no reasonable increase in risk to the reliability of the bulk power system, since SCE's historical practices were in accordance with these requirements, even though a single document consolidating the various national standards and SCE tariffs and rules has not been published.  
[Provide your response here; additional detailed information may be provided as an attachment as necessary]

### Prevention of Future BPS Reliability Risk

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

Publishing a uniform document for generation facilities, transmission facilities, and end-users will ensure that any party seeking to connect to SCE's bulk power system has access to its connection requirements.  
[Provide your response here; additional detailed information may be provided as an attachment as necessary]



*Western Electricity Coordinating Council*



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

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



## Section F: Authorization

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

- a) Submits the Mitigation Plan, as laid out in Section D of this form, to WECC for acceptance by WECC 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 the Senior Vice-President of the Transmission & Distribution Business Unit.
  2. I am an officer, employee, attorney or other person authorized to sign this Mitigation Plan on behalf of Southern California Edison.
  3. I understand Southern California Edison's obligations to comply with Mitigation Plan requirements and WECC or ERO remedial action directives and I have reviewed the WECC and ERO documents related to these obligations, including, but not limited to, the WECC CMEP and the NERC Rules of Procedure.
  4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  5. Southern California Edison agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by WECC and approved by NERC.

Authorized Signature: 

(Electronic signatures are acceptable; see CMEP Section 3.0)

Name (Print): James A. Kelly

Title: Senior Vice-President - Transmission & Distribution Business Unit

Date: 12/18/08





### **Section G: Comments and Additional Information**

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

Although SCE has historically practiced in accordance with these requirements, there is currently not a unified document that describes these procedures in its entirety for transmission facilities and end-users. Through our Mitigation Plan, a consolidated document will be published that will address those requirements specifically.

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

### **Section H: WECC Contact and Instructions for Submission**

Please direct any questions regarding completion of this form to:

Mike Wells, Sr. Compliance Engineer

Email: [mike@wecc.biz](mailto:mike@wecc.biz)

Phone: (801) 883-6884

For guidance on submitting this form, please refer to the "*WECC Compliance Data Submittal Policy*". This policy can be found on the Compliance Manuals website as Manual 2.12:

<http://www.wecc.biz/wrap.php?file=/wrap/Compliance/manuals.html>



## **Attachment A – Compliance Notices & Mitigation Plan Requirements**

- I. Section 6.2 of the WECC 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 2.0.
  - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
  - (3) The cause of the Alleged or Confirmed Violation(s).
  - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
  - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
  - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
  - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
  - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission.
  - (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.
- II. This submittal form may be used to provide a required Mitigation Plan for review and approval by WECC and NERC.





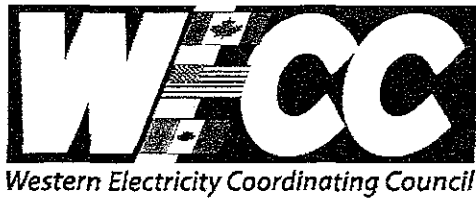
Western Electricity Coordinating Council



- III. The Mitigation Plan shall be submitted to the WECC and NERC as confidential information in accordance with Section 9.3 of the WECC CMEP and Section 1500 of the NERC Rules of Procedure.
- IV. 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 violations with respect to each additional Reliability Standard, as applicable.
- V. If the Mitigation Plan is approved by WECC and NERC, a copy of the Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- VI. Either WECC or NERC may reject a Mitigation Plan that it determines to be incomplete or inadequate. If the Mitigation Plan is rejected by either WECC or NERC, the Registered Entity will be notified and required to submit a revised Mitigation Plan.
- VII. In accordance with Section 7.0 of the WECC CMEP, remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

## **Attachment d**

### **SCET's Certification of Completion of the Mitigation Plan for FAC-001-0 R1 dated March 17, 2009**



**CONFIDENTIAL**

### Mitigation Plan Completion Form

Please complete a Mitigation Plan Completion form for each fully mitigated violation and submit to the WECC Compliance Web Portal File Upload along with the supporting evidence that confirms full compliance and Authorized Officer's signature.

Registered Entity Name: Southern California Edison - Transmission & Distribution Business Unit (SCET)

Standard Title: Facility Connection Requirements

Standard Number: FAC-001

Requirement Number(s): R.1: R.1.2, R.1.3

Actual completion date of Mitigation Plan: March 17, 2009

Check this box ☒ to indicate that you understand that the submittal of this Completion form is incomplete and cannot be reviewed for approval unless supporting documentation/evidence that confirms full compliance is attached.

Please provide the specific location (i.e. paragraph numbers, page numbers) in the documentation / evidence submitted to verify compliance.

The complete Interconnection Handbook is the documentation for R.1: R.1.2, R.1.3

Additional Notes or Comments pertaining to this violation: ~

By endorsement of this document I attest that Southern California Edison is now in full compliance with the standard / requirements addressed in this Mitigation Plan and documentation / evidence supporting full compliance is attached for review and audit by the WECC Compliance Staff.

Authorized Officer's Signature: \_\_\_\_\_

Authorized Officer's Name: David L. Mead

Authorized Officer's Title: Vice President, Engineering & Technical Services

Date: March 17, 2009

## **Attachment e**

### **WECC's Verification of Completion of the Mitigation Plan for FAC-001-0 R1 dated April 8, 2009**

**CONFIDENTIAL**



**Laura Scholl**  
Managing Director of Compliance

801.819.7619  
[lscholl@wecc.biz](mailto:lscholl@wecc.biz)

April 8, 2009

Kenya Streeter  
Project Manager  
Southern California Edison - Transmission & Distribution Business Unit  
2244 Walnut Grove Quad 4A  
Rosemead, California 91770

NERC Registration ID: NCR05398

Subject: Certification of Completion Response Letter

Dear Kenya Streeter,

The Western Electricity Coordinating Council (WECC) has received the Certification of Completion and supporting evidence on 3/18/2009 for Southern California Edison - Transmission & Distribution Business Unit SCET's alleged violation of Reliability Standard FAC-001-0 and Requirement(s) 1. Listed below is the outcome of WECC's official review.

WECC has accepted the Certification of Completion for Requirement(s) 1 of the Reliability Standard FAC-001-0 and have found these requirements to be fully mitigated. No further mitigation of these requirements will be required at this time.

If you have any questions or concerns, please contact Jay Look at [jay@wecc.biz](mailto:jay@wecc.biz). Thank you for your assistance in this effort.

Sincerely,

*Laura Scholl*

Laura Scholl  
Managing Director of Compliance

LS:cm

cc: Robert Ramirez, SCET Manager  
Lisa Milanes, WECC Manager of Compliance Program Administration  
Jay Look, WECC Senior Compliance Engineer



## **Attachment f**

**SCET's Mitigation Plan and Certification of  
Completion therein designated as MIT-08-1825  
for PRC-STD-003-1 WR1 submitted July 7,  
2009**



## Mitigation Plan Submittal Form

New ☒ or Revised ☐

Date this Mitigation Plan is being submitted: July 7, 2009

If this Mitigation Plan has already been completed:

- Check this box ☒ and
- Provide the Date of Completion of the Mitigation Plan: July 7, 2009

### Section A: Compliance Notices & Mitigation Plan Requirements

- A.1 Notices and requirements applicable to Mitigation Plans and this Submittal Form are set forth in "Appendix A - Compliance Notices & Mitigation Plan Requirements" to this form. **Review Appendix A and check this box ☒ to indicate that you have reviewed and understand the information provided therein.** This Submittal Form and the Mitigation Plan submitted herein are incomplete and cannot be accepted unless the box is checked.

### Section B: Registered Entity Information

- B.1 Identify your organization:

Registered Entity Name: Southern California Edison - Transmission & Distribution Business Unit  
Registered Entity Address: 2244 Walnut Grove Ave., Rosemead, CA 91770  
NERC Compliance Registry ID: NCR05398

- B.2 Identify the individual in your organization who will be the Entity Contact regarding this Mitigation Plan. Please see Section 6.2 of the WECC Compliance Monitoring and Enforcement Program (CMEP) for a description of the qualifications required of the Entity Contact.<sup>1</sup>

Name: Ron Lavorin  
Title: Manager, TDBU Engineering Compliance & Quality

<sup>1</sup> A copy of the WECC CMEP is posted on WECC's website at <http://www.wecc.biz/documents/library/compliance/manuals/Alt%20A%20-%20WECC%20CMEP.pdf>. Registered Entities are responsible for following all applicable WECC CMEP procedures. WECC strongly recommends that registered entities become familiar with the WECC CMEP and its requirements, as they may be amended from time to time.



Western Electricity Coordinating Council

Email: Ronald.Lavorin@scc.com

Phone: 626-302-9416



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

This Mitigation Plan is associated with the alleged or confirmed violation(s) of the reliability standard/requirements listed below:

C.1 Standard: WECC Standard PRC-STD-003-1  
*[Identify by Standard Acronym (e.g. FAC-001-1)]*

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

NERC Violation ID # [if known]	WECC Violation ID # [if known]	Requirement Violated (e.g. R3)	Violation Risk Factor	Alleged or confirmed Violation Date <sup>(*)</sup> (MM/DD/YY)	Method of Detection (e.g. audit, self-report, investigation)
		WR1 (a)	N/A	06/24/2009	self-report

(\*) Note: The Alleged or Confirmed Violation Date shall be: (i) the date the violation occurred; (ii) the date that the violation was self-reported; or (iii) the date upon which WECC has deemed the violation to have occurred. Please contact WECC if you have questions regarding which date to use.

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

On April 3, 2008, an internal fault occurred in one of the Vincent No. 1 500 kV CBs at Midway Substation. The fault was internal to both the line and the bus zones of protection, and consequently both the line and bus relayed. At the time of the event, it was not known that the CB at Midway had experienced an internal fault. Consequently the fault analysis for this event was inconclusive and the decision was made to leave all relays in service, consistent with our past operating practice. The decision to leave these relays in service did not degrade the reliability of the bulk power system and, in fact, these relays operated





properly and provided additional redundancy when they were out of sleep mode.

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

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

On June 24, 2008, PG&E personnel informed SCE's Protection Engineers that they had determined that there had been an internal fault in one of the Vincent No. 1 CBs at Midway and that the ABB REL-350 relays had failed to operate for a fault in its zone of protection.

The relay manufacturer, in conjunction with SCE and PG&E, concluded that: (1) the relay firmware version 2.72 was defective and caused the relays to go into sleep mode, rendering them inoperable without any warning or external indication; and (2) rebooting the relay software would restore the relays to operable status. In circumstances where a relay system failed to operate for its zone of protection and the relay operation analysis results were inconclusive, it had been our past practice to leave the relays in service. In this case, the misoperation was caused by a firmware malfunction; however, redundant protection systems had cleared the fault as intended.

Beginning on June 24, 2008, SCE and PG&E began to take the necessary steps to correct the defective relay firmware, by coordinating with multiple parties on the logistics of the firmware replacement, acquiring firmware from ABB, developing in-service test plans, and arranging necessary transmission line outages and field resources. SCE and PG&E completed the corrective action by August 7, 2008. Even if the relays had been removed within 22 hours of the determination on June 24 that a misoperation had occurred, completion of the firmware replacement could not have been accomplished any sooner.

During an internal review of records in May 2009, SCE discovered that the ABB REL-350 relays had not been removed from service for repair or replacement within the required 22-hour period described in WECC Regional Standard PRC-STD-003-1, Requirement WR1(a).

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



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

### **Mitigation Plan Contents**

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

Training has been provided to SCE Protection Engineers on the requirements of Standard PRC-STD-003-1, SCE System Protection Procedure No. 2, NERC reporting requirements, and protective relay and remedial action scheme misoperation. See attached training rosters.

In addition, a Compliance & Quality group was formed August 1, 2008, to, among other things, serve as an independent check of relay misoperations and to ensure on-going training is provided to SCE Protection Engineers on the requirements of the standard. See attached Compliance and Quality Organization Chart.

In summary, the following mitigation actions have been taken following the event:

1. the relay firmware was replaced on August 7, 2008;
2. the Engineering Compliance & Quality group was formed on August 1, 2008; and,
3. post-event training has been provided to SCE Protection Engineers in July 2008 and February 2009 to reinforce the requirements of NERC and WECC standards, including the 22-hour requirement of WECC Standard PRC-STD-003-1, and related SCE procedures.

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

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

### **Mitigation Plan Timeline and Milestones**

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





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

Milestone Activity	Proposed Completion Date* (milestones cannot be more than 3 months apart)

(\*) Note: Implementation milestones should be no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. As set forth in CMEP section 6.6, adverse consequences could result from failure to complete, on a timely basis, all required actions in this Mitigation Plan, including implementation of milestones. A request for an extension of the completion date of any milestone or of the Mitigation Plan must be received by WECC at least five (5) business days before the relevant milestone or completion date.

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

#### **Additional Relevant Information (Optional)**

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

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



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

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

### **Abatement of Interim BPS Reliability Risk**

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

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

### **Prevention of Future BPS Reliability Risk**

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

The ABB REL - 350 relays were taken out of service and corrective action taken by downgrading the firmware to version 2.71 as recommended by the manufacturer.

When this event occurred a transition phase was in progress and a new Compliance & Quality (C&Q) group was formed within the Transmission & Distribution Business Unit Engineering organization. The C&Q group was mandated to review compliance documentation for past events, provide a double-check for current events, and provide reinforcement of NERC and WECC regulatory requirements by conducting training sessions and refresher courses.



The C&Q group provides assistance to the engineering discipline groups in complying with NERC requirements and audits. C&Q also tracks protection activities related to NERC compliance and performs daily reviews of NERC related events. Training was provided after this event to reinforce SCE System Protection Procedures, which included the 22-hour requirement in PRC-STD-003-1 WR1 (a). This training was aimed at preventing a reoccurrence.

On-going training has been conducted since the June 24, 2008 event to SCE Protection Engineers on all applicable NERC and WECC Standards.

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

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

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

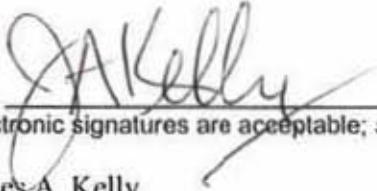




## Section F: Authorization

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

- a) Submits the Mitigation Plan, as laid out in Section D of this form, to WECC for acceptance by WECC 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 the Senior Vice-President of the Transmission & Distribution Business Unit.
  2. I am an officer, employee, attorney or other person authorized to sign this Mitigation Plan on behalf of Southern California Edison.
  3. I understand Southern California Edison's obligations to comply with Mitigation Plan requirements and WECC or ERO remedial action directives and I have reviewed the WECC and ERO documents related to these obligations, including, but not limited to, the WECC CMEP and the NERC Rules of Procedure.
  4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  5. Southern California Edison agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by WECC and approved by NERC.

Authorized Signature: 

(Electronic signatures are acceptable; see CMEP Section 3.0)

Name (Print): James A. Kelly

Title: Senior Vice President - Transmission & Distribution Business Unit

Date: 7/7/09



### **Section G: Comments and Additional Information**

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

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

### **Section H: WECC Contact and Instructions for Submission**

Please direct any questions regarding completion of this form to:

Mike Wells, Sr. Compliance Engineer

Email: [mike@wecc.biz](mailto:mike@wecc.biz)

Phone: (801) 883-6884

For guidance on submitting this form, please refer to the "*WECC Compliance Data Submittal Policy*". This policy can be found on the Compliance Manuals website as Manual 2.12:

<http://www.wecc.biz/wrap.php?file=/wrap/Compliance/manuals.html>





## **Attachment A – Compliance Notices & Mitigation Plan Requirements**

- I. Section 6.2 of the WECC 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 2.0.
  - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
  - (3) The cause of the Alleged or Confirmed Violation(s).
  - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
  - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
  - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
  - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
  - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission.
  - (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.
- II. This submittal form may be used to provide a required Mitigation Plan for review and approval by WECC and NERC.



- III. The Mitigation Plan shall be submitted to the WECC and NERC as confidential information in accordance with Section 9.3 of the WECC CMEP and Section 1500 of the NERC Rules of Procedure.
- IV. 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 violations with respect to each additional Reliability Standard, as applicable.
- V. If the Mitigation Plan is approved by WECC and NERC, a copy of the Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- VI. Either WECC or NERC may reject a Mitigation Plan that it determines to be incomplete or inadequate. If the Mitigation Plan is rejected by either WECC or NERC, the Registered Entity will be notified and required to submit a revised Mitigation Plan.
- VII. In accordance with Section 7.0 of the WECC CMEP, remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

## **Attachment g**

### **WECC's Verification of Completion of the Mitigation Plan for PRC-STD-003-1 WR1 dated July 21, 2009**

**CONFIDENTIAL**



**Laura Scholl**  
Managing Director of Compliance

801.819.7619  
[lscholl@wecc.biz](mailto:lscholl@wecc.biz)

July 21, 2009

Kenya Streeter  
Project Manager  
Southern California Edison - Transmission & Distribution Business Unit  
2244 Walnut Grove Quad 4A  
Rosemead, California 91770

NERC Registration ID: NCR05398

Subject: Certification of Completion Response Letter

Dear Kenya Streeter,

The Western Electricity Coordinating Council (WECC) received the Certification of Completion and supporting evidence of Southern California Edison - Transmission & Distribution Business Unit (SCET) on 7/7/2009 for the alleged violation of Reliability Standard PRC-STD-003-1 Requirement WR1.

WECC accepted the Certification of Completion for Requirement WR1 of the Reliability Standard PRC-STD-003-1 and found this requirement to be fully mitigated. No further mitigation of this requirement is required at this time.

If you have any questions or concerns, please contact Phil O'Donnell at [podonnell@wecc.biz](mailto:podonnell@wecc.biz). Thank you for your assistance in this effort.

Sincerely,  
*Laura Scholl*  
Laura Scholl  
Managing Director of Compliance

LS:ki

cc: Robert Ramirez, SCET Manager  
Lisa Milanese, WECC Manager of Compliance Program Administration  
Phil O'Donnell, WECC Acting Manager of Audits

**Attachment h**

**Notice of Filing**



UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Southern California Edison - Transmission    Docket  
& Distribution Business Unit

No. NP10-\_\_\_\_-000

NOTICE OF FILING  
March 1, 2010

Take notice that on March 1, 2010, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Southern California Edison - Transmission & Distribution Business Unit in the Western Electricity Coordinating Council region.

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

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

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

Comment Date: [BLANK]

Kimberly D. Bose,  
Secretary