

January 19, 2009

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: Docket Nos. 50-361 and 50-362
Reply to Notice of Violation; EA-08-296
Inspection Report No. 05000361/2008013 and 05000362/2008013
San Onofre Nuclear Generation Station, Units 2 and 3

References: Letter from Mr. E. E. Collins (NRC) to Ross T. Ridenoure (SCE) dated
December 19, 2008 and LER 2008-006, dated September 17, 2008

Dear Sir or Madam:

The reference letter transmitted the results of NRC Inspection Report No. 05000361/2008013 and 05000362/2008013 to Southern California Edison (SCE). The Special Inspection was conducted between August 4, 2008 and December 11, 2008 at San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. The referenced report also transmitted a Notice of Violation (EA-08-296). The attachment to this letter provides the required response to the Notice of violation.

If you have any questions, please feel free to contact me or Mr. A. E. Scherer.

Sincerely,



Enclosure: As stated

cc: E. E. Collins, Regional Administrator, NRC Region IV
G. Warnick, NRC Senior Resident Inspector, San Onofre Units 2 and 3

Mail Stop D45
P.O. Box 128
San Clemente, CA 92672
(949) 368-6255 PAX 86255
Fax: (949) 368-6183
Ross.Ridenoure@sce.com

TEO1
RGNH

**ENCLOSURE
REPLY TO A NOTICE OF VIOLATION**

The Enclosure to Mr. E. E. Collin's letter dated December 19, 2008, states in Part:

During an NRC inspection completed on December 11, 2008, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions and procedures shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, in March 2004, the licensee engaged in activities affecting quality that were not prescribed by documented instructions or procedures of the type appropriate to the circumstances. Specifically, maintenance and work control personnel failed to develop appropriate instructions or procedures, and failed to include quantitative or qualitative steps to ensure the maintenance activities on safety-related 125 Vdc station battery Breaker 2D201 had been satisfactorily completed. The work plan described in Maintenance Order 03100406000 was incomplete and lacked the steps necessary to ensure that electrical connection fasteners on Breaker 2D201 upper stud to bus bar connections were properly installed. This failure resulted in the Unit 2 safety-related Battery 2B008 being inoperable between March 2004 and March 25, 2008.

This violation is associated with a White significance determination process finding.

SCE RESPONSE TO VIOLATION

BACKGROUND AND EVENT SUMMARY

On March 25, 2008, while performing a weekly surveillance of a 1E battery, plant personnel discovered its voltage below the required value. SCE determined the low voltage was caused by loose bolts to the DC breaker connecting the battery to the source of the battery charging current, the 1E 125 VDC bus. SCE determined that the degraded electrical connection to the DC breaker was due to an inadequate work plan and lack of checks during installation in March 2004. A report of the event was submitted on September 17, 2008 (LER 2008-013).

As discussed with the Nuclear Regulatory Commission during the Special Inspection Exit meeting on December 11, 2008, SCE does not contest the violation or the NRC's determination of its significance.

1. Reason for the Violation

The SCE Root Cause Evaluation for the maintenance activity of the 2004 installation of the DC breaker identified two root causes leading to the deficient work. First, SCE concluded that the Work Order was not sufficient in detail to match the significance of the work activity. SCE planner personnel do not consistently perform to the same set of standards. In this case, the Maintenance Order Planner did not include critical steps in the work plan and did not provide adequate instruction to verify the tightness of the breaker bolts. The work plan was reliant on a single barrier (the electrician's performance) to ensure proper tightening of the bolts.

SCE concluded the event involved not only planners not meeting procedure expectations, but also electricians not meeting expectations for applying their skills/knowledge in the conduct of their work. In addition, the supervisor was not overseeing work and verifying critical steps were complete. Underlying these behaviors was a lack of accountability.

2. Corrective Actions Taken and Results Achieved

- a. On March 25, 2008, SCE tightened the loose connections for 2D201 which restored battery 2B008 to Operable status.
- b. On March 25-26, 2008, SCE inspected the bolt/connections for the seven similar breakers and verified that they were tight.
- c. SCE revised appropriate maintenance procedures to provide additional assurance that critical electrical connections, as defined by procedure, disturbed during maintenance activities are restored to their design condition. These changes include:
 - o Additional verifications of connection torque or tightness.
 - o Specification of torque values in procedure or work order instructions.
 - o Post maintenance verification testing to confirm the connection is restored to design condition.

- d. To assess the extent of condition, SCE reviewed over 1300 Maintenance Orders for the electrical portion of the Emergency Diesel systems, the Auxiliary Feedwater system and the 1E electrical system. This review covered the previous 3 years and focused on identifying previously performed work in which the work plan lacked critical steps and verification.
- e. Based upon the review described in 2.d, SCE has initiated inspection of the limited set of connections based upon the work plans that lacked critical steps and verification. This effort is on-going.
- f. SCE has initiated independent reviews to find and correct deficiencies of previously planned Maintenance Order work plans prior to issuance to the field. (This review includes the equipment whose failure may initiate (a) a plant trip, (b) a 5% reduction in load, (c) entry into a 72-hour or less Technical Specification required shutdown or (d) DG inoperability.)
- g. To initially address the issue of not meeting expectations, SCE has reviewed the lessons learned from this event with the planners, electricians and supervisors involved with the 2004 installation.

3. Corrective Actions That Will Be Taken

- a. SCE recognizes the importance of its responsibilities with respect to identifying and correcting significant degraded conditions, not meeting expectations and lack of accountability. Consequently, the RCE that addressed the causes of this event is being expanded and broadened. Additional Corrective Actions are anticipated that will further address the root causes and reduce the likelihood of a future safety significant equipment functional failure due to loose electrical connections.
- b. SCE is developing training modules to train planners in planning fundamentals. These modules will address the use of newly revised planning procedures as well as other applicable division and site procedures. SCE anticipates the program will be implemented and training will begin in April 2009.

4. Date When Full Compliance Will Be Achieved

Full compliance with the Technical Specifications was achieved with the maintenance performed on March 25, 2008 and Battery 2B008 restored to Operable status.

Full compliance with 10 CFR 50 Appendix B, Criterion V was achieved on December 31, 2008 when revised procedures (in 2.c) were issued.