

March 24, 2008

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-08-051
Inspection Report No. 5000361/2007005 and 50003622/2007005
San Onofre Nuclear Generation Station, Units 2 and 3**

Reference: Letter from Mr. J. A. Clark (NRC) to Richard M. Rosenblum (SCE) dated February 13, 2008, NRC Integrated Inspection Report No. 5000361/2007005 and 50003622/2007005

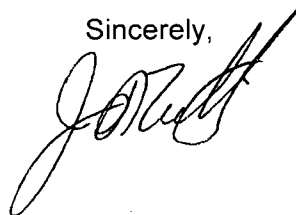
Dear Sir or Madam:

The reference letter transmitted the results of NRC Inspection Report No. 5000361/2007005 and 5000362/2007005 to Southern California Edison (SCE). The referenced letter also contained a Notice of Violation (EA-08-051). Enclosure 1 of this letter provides Southern California Edison's response to this violation. Based on discussions between Mr. Clay E. Williams (SCE) and Mr. George Replogle (NRC), the due date for SCE's response was extended from March 14, 2008 (30 days from the date of the Inspection report) to March 24, 2008 (the first business day following 30 days from receipt of the report).

Concurrently, SCE requests the NRC to withdraw two of the Non-cited Violations contained in the inspection report. Enclosures 2 and 3 of this letter provides SCE's basis for that request.

If you have any questions, please contact me or Mr. C. E. Williams at (949) 368-6707.

Sincerely,



Enclosures: As stated

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

P.O. Box 128
San Clemente, CA 92674-0128
949-368-3780
Fax 949-368-3770

JE01
NRR

ENCLOSURE 1

RESPONSE TO NOTICE OF VIOLATION

RESPONSE TO NOTICE OF VIOLATION

The Enclosure to the NRC letter dated February 13, 2008, states in part:

During an NRC inspection conducted on September 27 through December 31, 2007, 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 XVI, ‘Corrective Action,’ requires, in part, that ‘measures shall be established to ensure that for significant conditions adverse to quality, the cause of the condition is determined and corrective action taken to preclude repetition.’

“Contrary to this, from February 6 through August 8, 2007, the licensee failed to take corrective actions to preclude repetition of the premature tripping of thermal overloads for safety-related equipment, a significant condition adverse to quality.”

SCE RESPONSE TO NOTICE OF VIOLATION

EVENT SUMMARY

On August 8, 2007, the breaker for Unit 3 saltwater cooling pump room intake structure fan 3MA371 tripped. The cause was determined to be a defective Square D melting alloy Thermal Overload (TOL) on the phase C portion due to insufficient solder material in the TOL. This TOL failure occurred after SCE had assessed previous TOL failures and implemented corrective actions to prevent recurrence.

1. Reason for the Violation

SCE identified inadequate solder fill as a premature tripping mechanism for Square D melting alloy TOLs and did not take effective corrective action to ensure all TOLs with inadequate solder were replaced in a timely manner. Once SCE concluded that reduced solder in TOLs could cause premature TOL trips, SCE developed a plan to replace all Class 1E TOLs by July 31, 2007. Subsequent to developing that plan SCE performed testing on a sampling of Square D melting alloy TOLs in an attempt to determine the failure spectrum for the TOLs with inadequate solder fill. The test results indicated that if TOLs had a margin of greater than 20% of the motor current, the TOL was not as susceptible to early tripping. Based on this testing, it was decided that TOLs with greater than 30% margin therefore were not susceptible to premature trips and SCE concluded that the change out of these TOLs with X-rayed TOLs could be performed during normally scheduled maintenance rather than at an accelerated pace. Although the decision was thought to be reasonable at the time, ultimately it proved to be a non-conservative decision. If SCE had replaced all TOLs with X-rayed TOLs as identified in the original corrective action plan, the August 8, 2007, the TOL trip on breaker 3MA371 would not have occurred.

2. Corrective Actions Taken and Results Achieved

SCE has replaced all Class 1E Square D melting alloy TOLs with X-rayed TOLs.

3. Corrective Actions That Will Be Taken

Due to continuing reliability issues associated with melting alloy TOLs, including failure modes other than insufficient solder, SCE is evaluating options to replace all Class 1E melting alloy TOLs with a more robust TOL design.

4. Date When Full Compliance Will Be Achieved

Full compliance was achieved on September 13, 2007, when SCE completed the replacement of all Class 1E Square D melting alloy TOLs with X-rayed TOLs to ensure they had adequate solder material.

ENCLOSURE 2

REQUEST FOR WITHDRAWAL
OF NON-CITED VIOLATION

AFW Trench Temporary Sump Pump Non-Cited Violation

The Enclosure to the NRC letter dated February 13, 2008, states in part:

“TS 5.5.1.1 requires that written procedures be established, implemented, and maintained for activities specified in Appendix A, ‘Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors,’ of Regulatory Guide 1.33, ‘Quality Assurance Program Requirements (Operations),’ dated February 1978. Regulatory Guide 1.33, Appendix A, Section 9.e recommends general procedures for the control of maintenance and modification work. Contrary to this requirement, on May 11, 2007, the licensee failed to implement appropriate procedures to control modification work in the Unit 2 auxiliary feedwater steam supply trench to ensure the trench would not fill up with water and render the Unit 2 turbine driven auxiliary, feedwater pump inoperable.”

Discussion:

In May 2007, Auxiliary Feedwater (AFW) Building Trench Eductor S21301MJ103 was removed from service due to a malfunction of its pressure control valve. The eductor is used for draining water which may collect in the Turbine Driven AFW steam supply line trench. Minor system leakage (valve packing leakage, vent/drain pipe caps leakage) is the only source of the water for the trench. While leakage is not always expected, it is not uncommon. SCE installed a temporary sump pump to remove any water collected in the trench. Operators perform rounds of the area every 12 hours and are instructed to take action to turn on the pump if they observe a build-up of water.

SCE requests withdrawal of the NCV involving the use of a temporary sump pump in the Turbine Driven AFW steam line trench for the following reasons:

A. 10CFR50 Appendix B and Regulatory Guide 1.33 Requirements Are Not Applicable

The Auxiliary Feedwater (AFW) Building Trench Eductor is nonsafety-related and not subject to 10 CFR 50, Appendix B requirements. Consequently it is not subject to Regulatory Guide 1.33 requirements. The eductor was not installed as part of the original design of SONGS and is not described in any design basis documents. It is not required to mitigate any accident scenarios. The eductor is classified as Quality Class III, Seismic II/I, with no important to safety attributes other than seismic (to avoid damaging other equipment). The purpose of the eductor is to remove minor leakage that could accumulate in the Turbine-Driven AFW steam line trench and is non-essential to the operation of the AFW system.

B. No Indication the Temporary Pump Would Not Perform Its Function

In the referenced letter, the NRC included the following assessment:

“The inspectors noted that the atmosphere in the top of the pipe trench felt very hot to the touch. The inspectors then reviewed the vendor manual for the submersible pump and hose and found that both had a maximum temperature rating of 140°F. The inspectors concluded that water in the pipe trench could easily exceed the maximum temperature rating for the submersible pump and hose rated of 140°F.”

SCE does not agree with the NRC’s conclusion that the temperature in the AFW trench could “easily exceed” 140°F. At the time of the inspection, SCE took thermal readings on the water in the trench and determined the water to be below 140°F (two readings 133°F and 134°F). In addition, SCE believes the pump would have performed at even greater than 140°F because the

pump was run intermittently and the vendor rating cited is a conservative number based on continuous use. At the time of the inspection, the temporary sump pump had been in service for four months and had no performance issues with removing water on an approximately bi-weekly basis.

C. Approved Temporary Modification

SCE was in compliance with the SONGS temporary modification procedure:

“The inspectors noted this procedure did not direct consideration of the environment in which the pump would be used or the potential consequences of failure of the pump, as would have been required by Procedure SO123-XV-5.1, "Temporary Modifications Control," Revision 8.”

SCE did evaluate the sump in accordance with the SONGS temporary modification procedure. SONGS Procedure SO123-XV-5.1, "Temporary Modifications Control," allows the use of existing procedures to control temporary modifications. The installation of the temporary sump pump was accomplished in accordance with SO23-2-16, "Operation Of Waste Water Systems" Attachment 28 "Use of Temporary Sump Pumps," Revision 20. This procedure is used to install all temporary sump pumps at SONGS. The procedure received the required 10CFR50.59 review. In addition, per procedure, the installation of the temporary sump pump received an additional 50.59 screening once it was determined that the temporary pump installation would exceed 90 days.

D. Postulated Scenario Highly Unlikely

Regardless of whether regulatory requirements apply to the temporary sump pump, the scenario postulated in the Inspection Report is so unlikely as to be not credible (i.e., water reaching the steam supply to the Unit 2 turbine-driven AFW pump which could affect the operability of the pump). As a part of daily rounds, Operators perform a number of AFW system checks, including verification that no water is in the AFW pump steam supply trench. If there is water in the trench, operators are to notify the SRO Operations Supervisor and action is to be taken to ensure water level remains at a low level. The checks are to be performed on each Operations shift or approximately every 12 hours.

The only source of water to the sump during normal plant operations is leakage from miscellaneous AFW system valve packing leaks, or leakage through valve pipe caps. The rate at which water collects in the trench from these sources is very small. At the time of the event referenced in the inspection report, S21301MU360 (1/2" globe valve) was leaking at a rate of approximately 1 drop per second. The volume of the AFW trench below the steam pipe is approximately 32 cubic feet. At this leakage rate, it would take months for the water to reach the pipe insulation. Operators were running the temporary sump pump approximately every three or four days for a few minutes when water built up to a noticeable level. If leakage and water accumulation had become excessive, operators could have identified a deteriorating condition and SCE could have taken additional corrective action to address the problem. SCE recognizes that if water in the AFW steam line trench were to accumulate to the level of the steam line piping insulation (~31") it could affect the operability of the Turbine Driven AFW pump. However, the rate of normal leakage in the sump is very low and SCE has a sufficient amount of time to remove the water with the temporary sump or other available means.

Conclusion

As noted in the discussion above, SCE does not believe a violation of regulatory requirements occurred when SCE installed a temporary sump pump with a temperature rating of 140°F. The eductor is non-safety related and is non-essential to the operation of the safety-related AFW system. Operators perform inspections of the trench area every shift to ensure water is not accumulating in the trench. The performance of the eductor, and its replacement, the temporary sump pump, are not subject to 10 CFR 50, Appendix B requirements, and consequently are not subject to Regulatory Guide 1.33 requirements. SCE requests the NRC to withdraw this violation.

ENCLOSURE 3

REQUEST FOR CONVERSION
OF NON-CITED VIOLATION
TO MINOR VIOLATION

Maintenance Rule Functional Failure Non-Cited Violation

The Enclosure to the NRC letter dated February 13, 2008, states in Part:

“The inspectors identified a Green noncited violation of 10 CFR 50.65(a)(2) associated with the failure to include Units 2 and 3 emergency diesel generator (EDG) automatic voltage regulator (AVR) deficiencies as functional failures in the maintenance rule program. The inspectors noted that the voltage regulator deficiencies should have placed the emergency diesel generators into Maintenance Rule 10 CFR 50.65(a)(1) status approximately 6 months after the failures occurred. This caused a lapse in the determination of appropriate system monitoring and goal setting to maintain system reliability.”

Discussion:

SCE understands the importance of the Emergency Diesel Generator systems and shares the NRC’s expectation of promptly resolving issues associated with the system. In this case SCE took corrective action to address the March 3, 2007 3G003 EDG AVR failure. SCE further agrees the failure should have been classified as a Maintenance Rule Functional Failure (MRFF) and the system should have been put into 10 CFR 50.65(a)(1) goal setting. However, SCE does not believe the failure to classify the March 3, 2007 EDG AVR failure as a Maintenance Rule Functional Failure should be more than a minor violation.

Failure to move an SSC from to 10 CFR 50.65 (a)(2) to (a)(1) solely because its performance criteria is not met, or the failure to characterize a SSC failure as a Maintenance Rule Functional Failure (MRFF) is not a violation as long as SONGS has taken the appropriate corrective actions to address the issue. The basis for this is as follows:

NRC Enforcement Manual Section 7.11.1.b establishes criteria to be used in determining whether an issue is a violation of 10 CFR 50.65(a)(2). Section 7.11.1.b.2 establishes criteria for issues that are not violations of 10 CFR 50.65 (a)(2).

The criteria provided for issues that are not violations include:

- Section 7.11.1.b.2(b) “Failure to move an (a)(2) SSC to (a)(1) solely because its performance criteria are not met,” and
- Section 7.11.1.b.2(c) “Failure to correctly characterize a functional failure (FF) or maintenance preventable functional failure (MPFF).”

The NRC issued an NCV to SCE for the March 3, 2007 3G003 EDG AVR failure as documented in NRC inspection report 2007-003, dated August 9, 2007. The NCV was for the failure of SONGS to promptly correct the AVR R3 potentiometer problem. A PI&R cross-cutting aspect was associated with the NCV for failing to take appropriate corrective actions. As documented in IR 2007-003, SONGS captured the issue in our corrective action program. Those corrective actions were underway and almost complete at the time the failure to classify the March 2007 event as a MRFF was identified by the NRC (August 2007). The only new goal established as a result of classifying this event as a MRFF was for the EDGs to have normal voltage and MVAR control during all EDG surveillances until the end of 2007.

SCE’s performance for this issue is consistent with NRC Enforcement Manual Section 7.11.1.b.2 criteria for issues that are not violations. SCE failed to move the EDG system from (a)(2) SSC to (a)(1), but SCE had already instituted corrective actions and additional management focus.

Conclusion

Based on the guidance in the Enforcement Manual and the corrective actions already implemented, SCE believes the failure to classify the March 3, 2007 EDG AVR failure as a Maintenance Rule Functional Failure should be “minor” violation rather than a “non-cited” violation.