



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 22, 1996

Mr. Harold B. Ray
Executive Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P. O. Box 128
San Clemente, California 92674-0128

SUBJECT: REVIEW OF RESPONSES TO ANOMALIES FOR SAN ONOFRE NUCLEAR
GENERATING STATION, UNITS 2 AND 3, INSERVICE TESTING PROGRAM
(TAC NO. M93558 AND M93559)

Dear Mr. Ray:

In a letter dated August 28, 1995, Southern California Edison Company (SCE or the licensee) responded to seven anomalies identified in a technical evaluation report incorporated into an NRC safety evaluation dated August 31, 1994, regarding the San Onofre Nuclear Generating Station, Units 2 and 3 (SONGS-2/3), Inservice Testing (IST) Program. The regulatory requirements for an IST program are given in Title 10 of the *Code of Federal Regulations*, Section 50.55a, "Codes and Standards," which incorporates by reference the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (the Code). The SONGS-2/3 IST program is based on the 1989 Edition of Section XI of the ASME Code. Both units are in the second ten-year interval program on a concurrent schedule which began April 1, 1994. IST was to be in conformance with the changes to the IST program plan following the 1995 refueling outages on both units. That is, all tests for which the test schedules changed would be phased in to ensure performance within 92 days after startup from the Unit 3 refueling outage ending in October 1995.

The staff has reviewed the responses to the anomalies and determined that SCE has taken actions to address the identified concerns. All of the anomalies related to justifications for deferring testing from power operations to cold shutdowns or refueling outages. No anomalies related to relief requests or programmatic issues. Each of the anomalies and the actions taken by the licensee are briefly described below. No further NRC actions are necessary related to these issues.

Anomaly 1: The anomaly indicated that the numbering scheme for the alternate testing justifications (ATJs) was not optimal in uniquely identifying each ATJ in correspondence between the licensee and the NRC. The anomaly recommended that the licensee consider improving the numbering scheme for ATJs in future IST program plan development. No specific action was expected at this time and it appears that the numbering scheme has not been changed.

Anomaly 2: The anomaly referred to a number of ATJs that based deferral on the necessity of entry into a technical specification limiting condition for operation (LCO) to perform testing. The NRC's guidance on entry into an LCO to perform surveillance testing was given in Generic Letter 87-09, "Section 3.0 and 4.0 of the Standard Technical Specifications (STS) on the

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3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements," May 4, 1987. The anomaly recommended that the ATJs be reviewed and the test frequency adjusted as needed. The licensee did adjust the test frequency for valves that could be tested at power, even if entry into an LCO was necessary, if there were no other reasons why testing could not be performed. For those valves that cannot be tested during power operations, the ATJs were revised to include additional justification for the test deferral.

Anomaly 3: The anomaly indicated that there were several ATJs which did not adequately demonstrate the impracticality of testing the subject valves quarterly during power operation or during cold shutdowns if testing is deferred to refueling outages. Each listed ATJ was reviewed by the licensee and, using the guidance in NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants," April 1995, the testing frequency was adjusted or additional justification was incorporated into the basis for deferral. (Note, however, that in the resolution description for ATJ 14.0, Part 3, S2(3)2423MU017, the licensee states that "the close exercise test has been removed from the Inservice Testing Program Requirements," while the basis states that "the basis document calls only for a close verification." The statements appear to contradict each other and that it is rather the open function that has been deleted from the IST program.)

Anomaly 4: The anomaly recommended that the licensee consider the use of nonintrusive techniques for exercising check valves where disassembly and inspection was specified as the means of performing inservice testing. The licensee assessed the use of nonintrusive techniques for a number of valves, indicating that previous attempts had not proven successful, but that for some valves, such testing will continue to be evaluated (e.g., auxiliary feedwater pump turbine steam supply valves). However, for the safety injection tank outlet check valves, a test has been developed that will use nonintrusive techniques to verify obturator movement and disassembly and inspection will be used for these valves only if testing is unsuccessful (i.e., inconclusive results).

Anomaly 5: The anomaly identified inconsistencies in several ATJs. Where appropriate, the licensee has revised the ATJ or clarified the apparent discrepancy. Several of these ATJs relate to non-Code valves that have safety functions and are included in the IST program for convenience (as discussed in Position 11 of Generic Letter 89-04, "Guidance on Developing Acceptable Inservice Testing Programs," April 3, 1989).

Anomaly 6: The anomaly identified discrepancies that were essentially editorial. The licensee corrected the discrepancies in the applicable ATJs.

Anomaly 7: The anomaly discussed an ATJ related to skid-mounted components associated with the emergency diesel generators, pointing out that the ATJ was not a test deferral, but a description of the testing performed for the diesel generators. The anomaly recommended that the ATJ be deleted and that the

discussion be moved to a more appropriate portion of the IST program plan. The licensee relocated the discussion to Note 17 of Attachment 2, "Listing of Valves Within the Inservice Testing Program," of the IST program plan.

Other Comments: In reviewing the changes to the IST program plan, an item was noted that may require action by the licensee. Revised Note 23 states that, contrary to the SONGS-2/3 IST basis document and because the subject valves are locked in position, "no actual PIT [position indication verification] test is required" unless the locking requirements are removed. OM-10 does not have provisions related to locking valves in position that obviate the requirements of OM-10, Table 1, "Inservice Test Requirements," for Category A or B passive valves. If the licensee has taken a position that valves locked in place are in a separate set outside the IST requirements, such a position must be approved by the NRC prior to implementation. The 1974 Edition with addenda through the Summer of 1975 Addenda of Section XI of the ASME Code included a "Category E" for valves that were locked in position. "Category E" was deleted from later editions of the code and is not applicable for OM-10 (i.e., the IST requirements for valves referenced in the 1989 Edition of Section XI). The licensee should evaluate the consistency of Revised Note 23 with the ASME OM-10 provisions and inform us of any changes to the IST program plan resulting from the evaluation.

This completes the review performed by the NRC staff under TAC Nos. M93558 and M93559.

Sincerely,

Original signed by:

Mel B. Fields, Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-361
and 50-362

cc: See next page

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