

**Southern California Edison Company**

P.O. BOX 800

2244 WALNUT GROVE AVENUE  
ROSEMEAD, CALIFORNIA 91770

KENNETH P. BASKIN  
VICE PRESIDENT

TELEPHONE  
818-302-1401

March 9, 1989

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

Gentlemen:

Subject: Docket Nos. 50-206  
Reply to a Notice of Violation  
San Onofre Nuclear Generating Station  
Unit 1

Reference: Letter, Mr. D. F. Kirsch (NRC) to Mr. Kenneth P. Baskin (SCE),  
dated February 10, 1989

The Reference forwarded NRC Inspection Report No. 50-206/89-03 and a Notice of Violation resulting from the routine inspection conducted by Mr. C. Clark during the period of January 9-20, 1989. In accordance with 10 CFR 2.201, the enclosure to this letter provides the Southern California Edison (SCE) reply to the subject Notice of Violation.

If you require any additional information, please so advise.

Very truly yours,

*Kenneth P. Baskin*

Enclosure

cc: J. B. Martin, Regional Administrator, NRC Region V  
F. R. Huey, NRC Senior Resident Inspector, San Onofre Units 1, 2 and 3

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ENCLOSURE

REPLY TO A NOTICE OF VIOLATION

Appendix A to Mr. D. F. Kirsch's letter, dated February 10, 1989, states in part:

"10 CFR Part 50, Appendix B, Criterion V, is implemented by section 17.2.5 of the Southern California Edison Company Quality Assurance Program SCE-1-A, Amendment 11, which states in part: 'Activities affecting quality are prescribed by, and accomplished in accordance with appropriate instructions, procedures, and drawings.'

"General Procedure S0123-XV-5.0, Revision 2, TCN 2-7, titled 'Nonconforming Materials, Parts or Components', paragraph 6.2.1.3, requires that items found in use in the plant that are not in accordance with drawings or other design disclosure documents, are to be documented on a nonconformance report. A note under paragraph 6.2.2 of the same procedure states in part: 'Validation of an NCR should normally occur within 24 hours...'

"Contrary to the above:

"As of January 11, 1989 a nonconformance report (NCR) had not been prepared to identify that a January 3, 1989 ultrasonic (UT) examination of eight inch diameter residual heat removal (RHR) piping adjacent to weld joint no. 5002-7, indicated the existing wall thickness was less than design requirements. The unanalyzed nonconforming wall thickness was first identified by the Westinghouse ISI group on January 3, 1989. After the Westinghouse ISI group reverified the UT wall thickness measurements on January 4, 1989, a sketch was prepared on that date, and provided to the licensee. The UT wall thickness measurements indicated eight inch diameter schedule 120 piping was installed during construction of the plant, instead of the schedule 160 piping identified in the applicable design drawings and documents."

"This is a Severity Level IV violation (Supplement I)."

RESPONSE

1. Reasons for the violation, if admitted.

SCE admits that a nonconformance report (NCR) was not promptly issued to document the fact that the piping wall thickness adjacent to weld 5002-7 was less than design requirements. Although sufficient information upon which to initiate an NCR was available to SCE on January 5, 1989, the NCR was not issued until January 12, 1989.

### Sequence of Events

On January 3, 1989, the ISI contractor, Westinghouse, used ultrasonic test (UT) equipment to measure the thickness of weld 5002-7 to be certain that a substitute calibration block being proposed for use with this weld was of the appropriate thickness. This UT measurement was not part of the ISI program to determine the condition of pressure retaining components, rather it was done to support that program. On January 4, when Westinghouse obtained a copy of the Code Data Report that indicated line 5002 was schedule 160 (nominal thickness of 0.9 inches rather than the measured 0.7 inches), Westinghouse performed a second measurement confirming the thickness to be about 0.7 inches.

When Westinghouse personnel informed the SCE ISI Engineer of their results the morning of January 5, SCE received a rough sketch from Westinghouse which indicated that the piping thickness was 0.7 inches. Westinghouse did not state that the measurement had been verified and SCE personnel believed that a single measurement had been taken. Further, Westinghouse personnel considered that it was inappropriate to document the measurement on a standard data sheet (which would have listed exact calibration and measurement data), and labeled the sketch "For Information Only".

Later on January 5, SCE ISI personnel discussed the Westinghouse results with cognizant QA/QC engineers, and discussed whether line 5002 should be subject to a more rigorous determination of pipe wall thickness. Subsequently, the SCE ISI Group Lead Engineer judged that it would be appropriate for the pipe to be examined further (i.e., to conduct a more formal inspection) prior to the issuance of an NCR since the existing plant conditions (Mode 6 with the reactor vessel head removed and less than 20 psig on line 5002) would not have challenged the integrity of schedule 120 piping. In retrospect, this was an error in judgement caused by incomplete understanding of Site policy regarding the timing of issuing NCRs.

Independently, on January 5 the Nuclear Quality Control (NQC) Manager was advised of the Westinghouse information. Notwithstanding that the information was not validated by SCE personnel and was provided by Westinghouse as "For Information Only", he judged that it constituted a nonconforming condition and directed NQC personnel to confirm that an NCR was being written by the ISI group. NQC personnel failed to follow through on this instruction in a timely manner.

On approximately January 10, SCE ISI personnel briefed the cognizant Station Technical personnel and discussed the Westinghouse sketch. Given the plant configuration (Mode 6, etc.) and the recommendation of the ISI personnel to have further pipe measurements, it was concluded that an exigent situation did not exist and additional measurements were scheduled to determine whether a nonconforming condition actually existed.

On January 11, NQC performed a complete, systematic UT pipe wall thickness examination along the length of line 5002. On January 12, NCR number SO-P-6896 was issued.

### Procedural Requirements

SCE's investigation into this event also included a review of the timing by which NCRs, in general, are issued. Procedure SO123-XV-5.0 does not set a time limit on when to issue an NCR. Although information/data may be suspect, Site policy encourages the issuance of an NCR whenever sufficient information exists to indicate that a condition may be nonconforming.

Further, SCE notes that the reference in the Notice of Violation to the NOTE in procedure SO123-XV-5.0, Step 6.2.2, which states "... Validation of an NCR should normally occur within 24 hours...", is not applicable to the issuance of an NCR. The 24-hour period is a goal, not a time limit, for the subsequent validation of an NCR once it is issued. SCE has not established a time limit deadline because the subsequent validation of a nonconforming condition should be performed in a time frame commensurate with the safety significance of the potentially nonconforming condition and existing plant conditions.

### Summary

SCE has concluded that:

- (1) some SCE personnel (e.g., the ISI group) did not fully understand the Site policy to issue an NCR whenever information exists that a condition may be nonconforming. As such, an NCR should be issued, with subsequent validation of the nonconforming condition performed in a time frame commensurate with the safety significance of the condition and existing plant conditions; and
- (2) NQC personnel recognized that an NCR should be issued on January 5 but failed to follow through on instructions to have the NCR issued in a timely manner.

## 2. Corrective steps that have been taken and the results achieved.

NCR number SO-P-6896 was issued on January 12, 1989. Subsequent investigation has determined that although the initial design intent was for line 5002 to be schedule 160, the design was changed to schedule 120 prior to completion of construction in 1967. SCE has reconfirmed the stress calculations that schedule 120 piping is appropriate for line 5002.

Appropriate SCE personnel have received additional instructions on the prompt initiation of NCRs. Further, steps have been taken to ensure that data indicating potentially nonconforming conditions are expeditiously and accurately communicated between contractor and SCE personnel. As a result, subsequent to this event, the threshold for issuance of NCRs has improved.

3. Corrective steps that will be taken to avoid further violations.

To ensure the uniform application of existing Site policy on when to initiate an NCR, a memorandum from the Station Manager will be prepared to reemphasize NCR requirements to appropriate Station personnel.

Applicable design documents and drawings will be revised as appropriate to reflect that line 5002 is schedule 120 piping.

4. Date when full compliance will be achieved.

Full compliance was achieved on January 12, 1989, when nonconformance report NCR SO-P-6896 was issued.

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