Southern California Edison Company

P. O. BOX 800

2244 WALNUT GROVE AVENUE

ROSEMEAD, CALIFORNIA 91770

KENNETH P. BASKIN

VICE PRESIDENT

TELEPHONE

213-572-1401

January 6, 1984

U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Washington D. C. 20555

Attention: Mr. R. C. DeYoung, Director

Dear Sir:

Subject: Docket No. 50-362
IE Inspection Reports 50-206/83-21, 50-361/83-33 and 50-362/83-31
Response to Notice of Violation
San Onofre Nuclear Generating Station, Unit 3

Reference: Letter, J. B. Martin (NRC) to C. B. McCarthy (SCE), dated December 8, 1983

The referenced letter forwarded a Notice of Violation and Proposed Imposition of Civil Penalty based on inspections conducted by Messrs. A. E. Chaffee, J. P. Stewart and A. J. D'Angelo during the period of September 17 through October 28, 1983.

Pursuant to 10 CFR 2.201, the enclosed "Response to Notice of Violation (10 CFR 2.201)," to this letter provides the Southern California Edison Company (SCE) response to the Notice of Violation contained in the referenced letter. In addition to the five specific factors requested by the Notice of Violation, we have set forth a separate section (identified as Section 2) that provides the facts and circumstances surrounding the event.

Also enclosed is a check in the amount of $40,000 payable to the Treasurer of the United States, as called for by the Notice of Violation.

No check rec'd

IE: 1

I trust the enclosed "Response to Notice of Violation (10 CFR 2.201)" responds adequately to all aspects of the violations. If you have any questions or if we can provide additional information, please so advise.

Subscribed on the 6th day of January 1984 by

Kenneth P Baskin
KENNETH P. BASKIN
Vice President

Subscribed and sworn to before me this 6th day of January, 1984

OFFICIAL SEAL
AGNES CRABTREE
NOTARY PUBLIC — CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY
My Commission Expires Aug. 27, 1985

cc: J. B. Martin (USNRC Regional Administrator, Region V)
A. E. Chaffee (USNRC Resident Inspector, Units 1, 2 and 3)
J. P. Stewart (USNRC Resident Inspector, Units 2 and 3)
A. J. D'Angelo (USNRC Resident Inspector, Unit 1)

ENCLOSURE

RESPONSE TO NOTICE OF VIOLATION (10CFR2.201)

In accordance with 10 CFR 2.201, this enclosure provides the Southern California Edison Company's (SCE) response to Notice of Violation contained in the enclosure to Mr. J. B. Martin's letter of December 8, 1983.

The enclosure to the December 8, 1983, letter states:

"A. Technical Specification 6.8.1 requires, in part, that written procedures shall be established, implemented and maintained covering specific activities including the applicable procedures recommended in Appendix 'A' of Regulatory Guide 1.33, Revision 2, February 1978, and surveillance and test activities of safety-related equipment.

"San Onofre Nuclear Generating Station Operating Instruction SO23-0-36, Section 6.7, Control of System Alignments, provides instructions for altering system alignments when not specified in approved operating instructions. This procedure requires that such alignments be documented on a prescribed form and approved by both the SRO Operations Supervisor and the Shift Supervisor. Prior to approval, the individuals are required to evaluate the effect of an evolution against technical specification requirements.

"Contrary to the above, when coolant charging system manual isolation valves (Nos. S31208MU084 and S31208MU091) were closed on September 29, 1983, Operating Instruction SO23-0-36 was not implemented. Instead, the valve closures were made at the direction of the Shift Foreman who had been informally provided by the plant engineering and operations staff a list of valves to reposition to assure isolation of the chemical and volume control system in an attempt to locate and identify the source of apparent leakage from the reactor coolant system. The list of valves provided to the operations personnel was unsigned, and was not otherwise reviewed or approved. Rather, the Shift Foreman simply directed the Nuclear Plant Equipment Operator to reposition the valves as shown on the list provided by the engineering group after the valve numbers had been transferred onto an abnormal valve lineup form contained in procedure SO23-0-13. This procedure was superseded by procedure SO23-0-36 on September 13, 1983. However, even this superseded procedure was not properly implemented in that the form was not signed by a licensed senior reactor operator as required.

"...This violation and the one below have been evaluated as a Severity Level III problem (Supplement I)."

1. ADMISSION OR DENIAL OF ALLEGED VIOLATION:

SCE admits that on September 29, 1983, at 2118, coolant charging system manual isolation valves S31208MU084 and S31208MU091 were closed in accordance with the Abnormal Valve Lineup section of Operating Instruction SO23-0-13, "Work Authorizations," rather than Operating Instruction SO23-0-36, "Control of System Alignment," which had been issued on September 13, 1983, as an improvement in the administrative control of abnormal valve lineups.

SCE admits that the valve closures were made at the direction of the Shift Foreman. This direction was also approved by the Plant Superintendent. The direction followed review of the abnormal valve lineup pursuant to the Abnormal Valve Lineup section of Procedure SO23-0-13, against both applicable P&ID's and administrative procedures. However, the review was not adequate in that it did not include all Technical Specification considerations.

SCE admits that the valve lineup list was informally provided to the Shift Foreman in that it was not transmitted by signed correspondence. The valve lineup list was, however, reviewed and approved by the Shift Foreman, as he later attested.

2. STATEMENT OF FACTS AND CIRCUMSTANCES:

The facts and circumstances surrounding this violation are as follows:

a. On September 29, 1983, at 0629, with Unit 3 in Mode 1 at approximately 23% power, an RCS water inventory balance was completed in accordance with Procedure SO23-3-3.37. This surveillance indicated an unidentified leakage of 1.27 gpm, which exceeded the 1.0 gpm limit of Technical Specification Limiting Condition for Operation (LCO) 3.4.5.2. It was immediately recognized, however, that this surveillance had incorrectly omitted the inventory of coolant leaking to the Reactor Coolant Drain Tank (RCDT). This omission had the effect of making the identified leakage to the RCDT appear as unidentified leakage. Accordingly, it was concluded that the results of this surveillance were invalid and a second surveillance was commenced at 0645.

b. At 0929, during the performance of the second surveillance, the RCS total leakage was determined to be 1.31 gpm with 1.19 gpm being unidentified leakage. The second surveillance was then terminated, since it was felt that the unidentified leakage after the 4 hour surveillance period would exceed the 1.0 gpm limit of LCO 3.4.5.2. At 0930, in accordance with LCO 3.4.5.2, Action Statement 'b', actions were immediately initiated to reduce the unidentified leakage to less that 1 gpm within 4 hours. In addition, an Unusual Event was declared in accordance with Emergency Plan Implementing Procedure SO23-VIII-1, and the NRC Operations Center was notified pursuant to 10 CFR 50.72.

c. The necessary steps under Emergency Operating Instruction SO23-3-5.7 were immediately initiated and at 0946, the Chemical and Volume Control System (CVCS) was isolated by remote manual valves in the letdown line in accordance with this procedure and personnel were dispatched to the containment to search for the source of the leakage. At 1030, a leakage calculation, performed since CVCS was isolated, indicated that the leakage had not abated and was from the RCS. Charging and letdown flows were subsequently reinitiated. Personnel who had entered the containment reported that small leakages past fittings were found (on the order of 0.01 gpm) but none which could satisfactorily explain a leakage rate of approximately 1.0 gpm.

d. Therefore, in accordance with LCO 3.4.5.2, Action Statement 'b', Unit 3 was placed in Mode 3 at 1205 on September 29, 1983. In preparation for continued cooldown, the RCS was then borated to the shutdown margin required for hot shutdown, which exceeds the shutdown margin for cold shutdown conditions. Cooldown was then commenced in parallel with continuing efforts to locate the leakage source.

e. At 2118 during swing shift on September 29, 1983, charging flow was isolated by closing manual isolation valves S31208MU084 and S31208MU091 in accordance with an Abnormal Valve Lineup prepared from a list of valves provided to the Shift Foreman by the Plant Superintendent. The lineup was documented and reviewed in accordance with the Abnormal Valve Lineup Section of Procedure SO23-0-13, "Work Authorizations." Although a new Abnormal Valve Lineup Procedure, SO23-0-36, "Control of System Alignments," had been issued on September 13, 1983, to improve review of abnormal valve lineups relative to Technical Specification requirements, SO23-0-13 had not been revised with the issuance of SO23-0-36, training in the use of SO23-0-36 had not been

provided to operating shifts, and consequently SO23-0-13 was utilized for this abnormal valve lineup. Although our administrative processes can provide for a specified delay in the implementation date of procedures until training has been accomplished, in this case, our administrative process was not implemented to provide for a specified delay in revision of SO23-0-13 until training was accomplished on SO23-0-36.

f. The abnormal valve lineup provided to the Shift Foreman had been developed as a progressive effort to locate the leakage source during an emergency. It was reviewed against applicable P&ID's and administrative procedures, and it was implemented at the direction of the Shift Foreman. However, signing of the Abnormal Valve Lineup, documenting the Shift Foreman's approval, was not accomplished until September 30, 1983, after the erroneous lineup was corrected.

g. At 0145 on September 30, 1983, as the leak rate check with these valves secured was being completed, the graveyard Shift Supervisor recognized that the shutting of S31208MU084 and S31208MU091 violated the Technical Specifications. Shutting of these valves represented isolating flow from the charging pumps to the RCS and in Mode 3 is inconsistent with LCO's 3.1.2.2 (boration flow paths), 3.1.2.4 (charging pumps), and 3.5.2 (ECCS subsystems). He immediately ordered the valves to be opened. The valves were opened at 0157.

3. REASONS FOR THE VIOLATION:

The cause of this violation was personnel error in not reviewing the abnormal lineup relative to all Technical Specification requirements. Failure to perform an adequate review may have been contributed to by the fact that training in SO23-0-36 had not been provided and the Abnormal Valve Lineup Section of SO23-0-13 had not been revised with the issuance of SO23-0-36. However, the fundamental error was one of oversight by the personnel involved.

4. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

Manual isolation valves S31208MU084 and S31208MU091 were opened at 0157 on September 30, 1983, restoring the charging system flow path consistent with LCO's 3.1.2.2 (boration flow paths), 3.1.2.4 (charging pumps) and 3.5.2 (ECCS subsystems).

Procedure SO23-0-13, Revision 10, was modified by Temporary Change Notice (TCN) 10-14 on September 30, 1983, to refer users of this procedure to Procedure SO23-0-36 when performing abnormal system alignments. Special training in the use of Procedure SO23-0-36 was completed at shift briefings for all affected Operations personnel on November 4, 1983.

Additional training in the use of administrative procedures including SO23-0-36 was included in the operator requalification program completed on December 9, 1983. This training included, but was not limited to, operating personnel responsibilities and authority, recordkeeping, and control of systems and work. It emphasized adherence to administrative procedures and thoroughness of reviews relative to Technical Specification requirements. This training was overseen by a special Management and Operations Task Force set up specifically for that purpose.

Additionally, appropriate disciplinary action has been taken for individuals involved.

5. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

Simulator training for operators will be modified to include plant situations requiring prompt action while remaining in compliance with administrative procedures and formal communication requirements. Operator training in the use of administrative procedures is being enhanced and will be made more comprehensive.

The need for management oversight and direction during abnormal circumstances had been recognized prior to the Unusual Event of September 29, 1983. Although it was intended that such coverage be maintained throughout this Unusual Event, such coverage was not provided as planned. Consequently, the program to provide such coverage has been formalized. This coverage will be provided by operations management to oversee the pace and direction of activities and to ensure that good interdisciplinary communications are maintained.

Additionally, Shift Technical Advisor approval of abnormal valve lineups, in addition to approval by two SRO's, is now required by procedure to provide a more thorough review of Abnormal Valve Lineups relative to Technical Specification requirements.

6. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved on September 30, 1983, with the restoration of the charging system valve lineup and the issuance of the change to Operating Instruction SO23-0-13.

The enclosure to the December 8, 1983, letter states:

"B. Technical Specification 3.5.2 requires, in part that when the unit is in Mode 1, 2 or 3, two independent Emergency Core Cooling Systems (ECCS) subsystems shall be OPERABLE with each subsystem comprising of, among other things, one OPERABLE charging pump.

"Technical Specification 3.1.2.2 requires that when the unit is in Mode 1, 2, 3 or 4 at least two of the following boron injection flow paths and one associated heat tracing circuit shall be OPERABLE:

"a. Flow paths from one or both boric acid makeup tanks via

1. The associated gravity feed connection(s) and/or

2. The associated boric acid makeup pump(s) via charging pump(s) to the RCS

and/or

"b. The flow path from the refueling water storage tank via charging pump(s) to the Reactor Coolant System.

"Technical Specification 3.1.2.4 requires that when the unit is in Mode 1, 2, 3 or 4, at least two charging pumps shall be operable.

"Technical Specification 3.0.3 requires, in part, that when a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour, action shall be initiated to place the unit in a MODE in which the specification does not apply.

"Contrary to the above, when the coolant charging system manual isolation valves where shut on September 29, 1983, the charging system was isolated from the primary coolant system thereby violating Technical Specification 3.0.3 in that the Limiting Conditions for Operation for Technical Specification 3.5.2, Technical Specification 3.1.2.2, and Technical Specification 3.1.2.4 were not met, and action was not initiated within one hour to place the unit in a mode in which the specification did not apply.

"Collectively the above violations have been evaluated as a Severity Level III problem (Supplement I) (Cumulative Civil Penalty - $40,000 assessed equally between the violations.)"

1. ADMISSION OR DENIAL OF ALLEGED VIOLATION:

SCE admits that on September 29, 1983, the charging system was isolated from the primary coolant system thereby violating Technical Specification 3.0.3 in that the Limiting Conditions for Operation for Technical Specification 3.5.2, Technical Specification 3.1.2.2 and Technical Specification 3.1.2.4 were not met, and, since operators were unaware the abnormal valve lineup thus violated the Technical Specifications, action was not initiated within one hour to place the unit in a mode which the specification did not apply.

2. STATEMENT OF FACTS AND CIRCUMSTANCES:

See Section A.2 above.

3. REASONS FOR THE VIOLATION:

This violation was also caused by the personnel error discussed in Section A.3, above.

4. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

See Section A.4 above.

5. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

See Section A.5 above.

6. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

See Section A.6 above.