Southern California Edison Company
P. O. Box 800
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Rosemead, California 91770

Docket No. 50-206
License No. DPR-13

APPENDIX A

NOTICE OF VIOLATION

As a result of the inspection conducted on June 2-5, 1981, and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified:

A. 10 CFR 50 Appendix B, Criterion IX, states in part: "Measures shall be established to assure that special processes, including...nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes...."

Design Change 80-07 - Safety and Environmental Analysis for Addition of Mechanical Penetrations for Sampling, third paragraph, states in part: "...The systems and equipment included in this design change will be designed, manufactured and installed as safety related quality class. Section III of the ASME Boiler and Pressure Vessel Code will be applied...."

Applicable Design Drawing No. 235398 - Sphere Penetration Sample Line Cap No. B16A & B states, in part: "Field weld...per ASME...Section III, subsection NE, Cat. B. radiograph required."

ASME B&PV Code, Section III, subsection NE, requirement NE-5111 states, in part: "...Radiographic examination shall be in accordance with Section V, Article 2...."

ASME B&PV Code, Section V, Article 2, requirement T-263(a), states in part: "...If the density of the radiograph anywhere through the area of interest varies by more than minus 15% or plus 30% from the density through the body of the penetrameter...then an additional penetrameter shall be used for each exceptional area or areas and the radiograph retaken."

ASME B&PV Code, Section V, Article 2, requirement T-263.1(c), states in part: "Where inaccessibility prevents hand placing the penetrameter on the source side...the penetrameter shall be placed on the film side of the part and a lead letter "F" at least as high as the identification number shall be placed adjacent to the penetrameter."

ASME B&PV Code, Section V, Article 2, requirement T-221.2 states in part: "...weld ripples shall be removed to such a degree that the resulting radiographic image cannot mask or be confused with the image of any discontinuity."

Contrary to the above, it was noted on June 2, 1981, that: (1) the radiographs taken for mechanical penetrations B16A and B did not contain an adequate number of penetrameters to assure sufficient radiographic sensitivity through the area of interest, (2) the radiographs did not show the lead letter "F" on the film even though the penetrameters had been placed on film side of the parts, and (3) the radiographs showed weld ripples that could mask discontinuities that may be present in the welds.

This is a Severity Level V Violation (Supplement II).

B. 10 CFR 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings states: "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, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

1. Southern California Edison Document AD12-A, Project General Design Criteria Manual, defines governing design criteria applicable to changes to the San Onofre Nuclear Generating Station, Unit 1 plant, to be accomplished under the Three Mile Island recommendation implementation project. This Design Criteria Manual states in Section 3.1.A: "Where the existing systems and equipment interface with newly designed systems and equipment, previously established criteria (FSAR and amendments) for San Onofre Unit 1 shall apply throughout the existing systems including the interface point. Beyond the interface point, for new systems and equipment, the criteria established in this design criteria manual shall apply."

   The Design Criteria Manual further states in paragraph 3.7: "To ensure that the total installed safety related system shall satisfy the single failure criteria, as stated in IEEE Standards No. 279 and 379, provisions shall be made for isolation or separation of the electric equipment and circuits of one redundant system from those of other redundant systems in accordance with the requirements of NRC Regulatory Guide 1.75 unless otherwise specified."

   Regulatory Guide 1.75 adopts IEEE Standard 384.

The Design Criteria Manual also states in paragraph 4.2 "The control systems, equipment and components shall comply with the applicable criteria, codes and standards (of) IEEE 384-1977 standard criteria for independence of Class 1E equipment and circuits."

IEEE 384 requires that "Where the control switchboard materials are flame retardant...the minimum separation distance shall be 6 inches (15.24 cm)."

Contrary to the above, on June 3, 1981 and June 4, 1981 it was found that the required 6 inch separation was not maintained between Class 1E and non-Class 1E circuits internal to new auxiliary feedwater instrumentation panels C-69 and C-70. A review of quality control inspection records disclosed that the requirements for separation and independence for safety related electrical circuits installed under the Three Mile Island recommendation implementation project were not included in quality control inspection criteria and cable routings to meet these requirements were not specified on installation drawings.

This is a Severity Level V Violation (Supplement II).

2. Bechtel Work Plan Procedure/Quality Control Instruction Number 20.12 specifies that, for safety related concrete expansion anchors, the applicable discipline quality control engineer shall participate in visual inspection, torque testing, and documentation of anchor installation.

   Contrary to these requirements, it was noted on June 4, 1981, that concrete expansion anchors providing seismic support for safety related auxiliary feedwater automatic initiation instrument panel C-69 did not have fully engaged and torqued nuts. Additionally, a review of quality control inspection records disclosed that these nuts had been installed without the required quality control inspections and documentation.

   This is a Severity Level V Violation (Supplement II).

Pursuant to the provisions of 10 CFR 2.201, Southern California Edison Company is hereby required to submit to this office within twenty-five days of the date of this Notice, a written statement or explanation in reply including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further items of noncompliance; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown. Under the authority of Section 182 of the Atomic Energy Act of 1954, as amended, this response shall be submitted under oath or affirmation.

Dated JUL 9 1981

William J. Wagner

W. J. Wagner, Reactor Inspector