

U. S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-361/80-05  
50-362/80-03  
Docket No. 50-361, 50-362 License No. CPPR-97, CPPR-98 Safeguards Group \_\_\_\_\_  
Licensee: Southern California Edison Company  
2244 Walnut Grove Avenue  
Rosemead, California 91770

Facility Name: San Onofre Unit 2 and 3

Inspection at: Construction Site, San Diego County, California

Inspection conducted: March 24-27, 1980

Inspectors: J. H. Eckhardt 5/19/80  
J. H. Eckhardt, Reactor Inspector Date Signed

G. Hernandez 5/19/80  
G. Hernandez, Reactor Inspector Date Signed

Date Signed

Approved By: R. T. Dodds 5/20/80  
R. T. Dodds, Chief, Engineering Support Section Date Signed  
Reactor Construction and Engineering Support Branch

Summary:

Inspection on March 24-27, 1980 (Report No. 50-361/80-05 and 50-362/80-03).

Areas Inspected: Routine, unannounced inspection by regional based inspectors of construction activities including: previous open items, cable installation, and pipe supports and restraints. The inspection involved 48 onsite inspector hours by two NRC inspectors.

Results: Of the areas inspected, no items of noncompliance or deviations were identified.

800717-0539

## DETAILS

### 1. Individuals Contacted

#### a. Southern California Edison Company (SCE)

P. A. Croy, Site Project Quality Assurance Supervisor  
R. R. Hart, Construction Manager  
D. B. Schone, Lead Engineering Site Representative  
\*W. L. Rossfeld, Construction Lead QA Engineer  
W. Petro, Assistant Project Manager  
S. S. Dziewit, QA Engineer  
V. A. Gow, QA Engineer  
E. McLaughlin, QA Engineer

#### b. Bechtel Power Corporation (Bechtel)

\*R. H. Cutler, Project Field Engineer  
\*C. A. Blum, Project Field QC Supervisor  
J. E. Geiger, Project QA Supervisor  
\*L. W. Hurst, Project Field QA Supervisor  
W. D. Nichols, Assistant Project Field Engineer  
A. L. Erickson, Project Field QC Engineer  
J. McAlary, Welding Field Engineer  
H. Bumgarner, Welding Field Engineer  
S. Scott, Field Engineer  
G. Austerman, Lead Pipe Support Group  
L. Garvey, Assistant Lead Pipe Support Group  
J. T. Lorenzen, Lead Construction Field Engineer  
T. R. Moskalyk, Construction Field Engineer

\*Denotes those attending exit interview.

### 2. Plant Tour

The inspectors toured various areas of the plant to observe work activities in progress, completed work, and construction status.

During this tour, the inspectors observed several installed concrete expansion anchor bolts with the alphabetic symbol shaved off the end of the bolt. The alphabetic symbol denotes the length of the anchor bolt and is used by QC inspectors to verify embedment depth after installation. The inspectors requested that the anchor embedment depth be verified for the following supports:

- (1) S2-AS-028-H-00D
- (2) S2-AS-028-H-00C
- (3) S2-AS-028-H-00B
- (4) S3-FS-076-H-007

The licensee stated that they would comply with the request and have the results available for review during a future inspection. This item is unresolved pending that review. (50-361/80-05/01)

3. Licensee Action on Previous Inspection Findings

The inspectors examined the action taken by the licensee on the following outstanding items:

- a. (Closed) Noncompliance (50-361/79-08/01) Pipe support No. S2-CS-001-H-020 was not installed in accordance with prescribed drawings.

Intermittent 5/16 inch fillet welds specified by the drawing for the strut to pipe sleeve connection were omitted.

The correction action identified in the licensee's response dated May 23, 1979 was reviewed. The inspectors verified that the specified action had been implemented and that appropriate instructions and training had been given to all pipe support inspectors. In addition, during this inspection fourteen (14) fixed pipe supports from the radwaste building and the Unit 2 containment were examined for compliance with licensee and ASME code requirements. No items of noncompliance or deviations were identified during this examination. This item is closed.

- b. (Closed) Open Item (50-361/80-01/01) Verification of snubber load settings was not required by procedure.

The licensee issued Procedure Change Notice (PCN) No. 1 to WPP/QCI-404 directing the fabrication shop pipe support construction field engineer to verify snubber load settings against the applicable drawing and, if different than specified, to deface the old settings and metal stamp or electric etch the new settings on the nameplate. This item is closed.

- c. (Closed) Noncompliance (50-361/79-29/01) Installed electrical cable exceeding minimum bend radius.

The Class 1E cable which had been doubled back on itself and stuffed into a conduit in order to take up excess slack had been replaced. The presently installed cable was inspected. During examination of other installed cable as discussed in paragraph 5, no cases of exceeding minimum bend radius were identified. This item is closed.

4. Safety Related-Pipe Support and Restraint Systems

a. Review of Quality Assurance Implementing Procedures

The following procedures and specifications for the design, erection, installation, and inspection of safety-related pipe supports were reviewed for compliance with licensee and ASME code requirements.

- (1) WPP/QC1 Number 26, Revision 6.0, Control and Identification of ASME Section III Pipe Support Material.
- (2) WPP/QC1 Number 200, Revision 11.0, Control of Welding Filler Material.
- (3) WPP/QC1 Number 202, Revision 7.0, Welding Control for AWS D1.1 Welding.
- (4) WPP/QC1 Number 414, Revision 5.0, Field Fabrication and Installation of Pipe Supports of Project Class A-I & P.
- (5) Specification Number CS-P206, Revision 7, Design Guide for Supporting Small Piping (2 inch and under).
- (6) Specification Number CS-P207, Revision 6, Pipe Support Field Fabrication and Installation.

No items of noncompliance or deviations were identified.

b. Observation of Work and Work Activities

The following safety related pipe supports were selected for examination:

Radwaste Building

<u>System</u>	<u>Support Number</u>
Component Cooling Water	SA-CC-132-H-007
	SA-CC-112-H-002
	S2-CC-243-H-023
	S2-CC-210-H-004
Boric Acid Make-up	S2-BM-003-H-011

Containment No. 2

<u>System</u>	<u>Support Number</u>
Component Cooling Water	S2-CC-006-H-015
	S2-CC-008-H-014
	S2-CC-072-H-003
	S2-CC-076-H-015
	S2-CC-076-H-017
Safety Injection	S2-SI-087-H-016
	S2-SI-087-H-005
Reactor Coolant Steam	S2-RC-017-H-031
	S2-ST-016-H-017

The supports were all of fixed design, quality class Q, seismic category I and ASME class 1, 2, or 3. The supports were examined to ascertain conformance to applicable drawings and specifications.

No items of noncompliance or deviations were identified.

5. Electrical Cable Installation

Electrical cable installation was examined to ascertain compliance with the following construction specifications and inspection instructions:

- CS-E01, Rev. 3, Installation of Electrical Cables in Conduit and Duct Banks
- CS-E02, Rev. 4, Installation of Electrical Cables in Cable Trays
- CS-E03, Rev. 3, Cable Splicing, Terminations, and Supports
- WPP/QCI-604, Rev. 7, Cable Installation
  - Appendix I, Rev. 3, Securing and Supporting Cables
  - Appendix II, Rev.2, Additional Work on Cable Tray with Cables Installed

The following installed cables, which included both instrumentation and control cables, were examined:

- Unit 2 - 2ARL03208, 2CRL09124, 2DRL09110, 2AA04060B, 2AA040301, 2BD04100B, 2BA060401, 2BRL10301, 2CRL10301
- Unit 3 - 3AA04130E, 3AA04160B, 3CD3R01, 3AD1R01, 3BY0207P1, 3BBZ100A, 3AY0106P1, 3ABE220A, 3AA040901

These cables were in the reactor protection, engineered safety features, and radiation monitoring systems. Specific attributes checked included cable identification, routing, protection, and terminations.

In addition, installation of cable 2BHL15401 from the Unit 2 cable spreading room to instrument 2FT-9852-B2 in the fuel handling building was observed. This hand pull of approximately 600 feet of cable was routed in both cable trays and conduit.

No deviations or items of noncompliance were identified.

6. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on March 27, 1980. The scope and findings of the inspection as noted in this report were discussed.