U.S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-275/84-04 and 50-323/84-04

Docket Nos. 50-275 and 50-323

License Nos. DPR-76 and Construction Permit CPPR-69

Licensee: Pacific Gas and Electric Company

77 Beale Street, Room 1435

San Francisco, California 94106

Facility Name: Diablo Canvon Units 1 & 2

Inspection at: Diablo Canyon Site, San Luis Obispo County, California

Inspection Conducted: April 2-9, 1984

Inspector:

Reactor Inspector

Approved by:

Canter, Chief, Engineering Section

Summary:

Inspection during period of April 2-9, 1984 (Report Nos. 50-275/84-04 and 50-323/84-04)

Areas Inspected: Unannounced inspection by regional inspector of modification activities including safety related pipe support and restraint systems, steel structure and supports welding activities, and electrical raceway support systems.

The inspection involved 34 inspection hours by one inspector.

Results: Of the areas examined, a violation was identified in the area of safety related electrical raceway supports (failure to follow approved quality control procedures, see paragraph 5).

DETAILS

1. Individuals Contacted

- a. Pacific Gas and Electric Company (PG&E)
 - *R. R. Lieber, Field Construction Manager
 - *R. A. Hobgood, QC Supervisor
 - J. R. Bratton, Lead QC Engineer
 - *R. Kohler, Lead Civil Engineer Unit 2
 - *K. A. Nilson, Mechanical Field Engineer
 - *J. A. Walker, QA Auditor
 - D. O'Conner, Mechanical Field Inspector
 - R. E. Sizemore, Mechanical Field Engineer
 - G. D. Morrison, Electrical Field Inspector

Various other engineering and QC personnel.

- b. Pullman Power Products Corporation (Pullman)
 - H. W. Karner, Quality Assurance/Quality Control Manager

*Denotes attendees at exit meeting on April 6, 1984.

2. Area Inspection

A tour was made in Unit 2 containment of areas at elevation 140 ft. and of areas adjacent to reactor coolant pumps 2-1, 2-3 and 2-4. Construction work was in process in all areas.

Twenty-six bevel type welds examined by the inspector during this area inspection were found to satisfy the requirements of Pullman Power Products Engineering Specification Diablo (ESD) Number 223 (welding standards).

No violations of NRC requirements were identified.

- 3. Licensee Action on Previous Enforcement Items
 - a. (Open) Noncompliance (50-275/83-24/01 and 50-323/83-17/01) Incomplete Pipe Supports and Electrical Raceway Support In Accordance
 With Requirements

The licensee's corrective actions included the following:

1) For Unit 1 pipe support 46-9V, the locking devices have been installed on the top of the spring can and turnbuckle as required, and thread engagement on the turnbuckle corrected. The inspector examined the modified support 46-9V in the containment.

- 2) For Unit 2 spray ring supports 20-94R and 414-43R, the temporary wedge has been removed and the bolts and nuts tightened as required. Field construction management has issued memorandums: One, to all contractors emphasizing that modifications to pipe supports shall be performed only by Pullman personnel; and two, to Pullman reiterating that they comply with ESD-253 when performing modification to supports previously accepted by quality control. The inspector reviewed the documentation for the corrective work to the hangers since the scaffolding had been removed precluding access to the particular hangers for a field inspection. The inspector also examined the two memorandums identified above.
- 3) For Unit 1 electrical raceway support H-115-6-105, the inspector verified that the missing nut and washer were installed on the raceway support (concrete block wall throughbolt) and that QC accepted the work. Also, the inspector confirmed that training on this issue, blockwall raceway support mounting requirements, was given to QC personnel involved in the inspection of electrical raceway supports.

This item will remain open pending further inspection in the field.

b) (Closed) Noncompliance (50-275/84-01/01) - Deficiencies in Welds on Turbine Building Structural Steel

The licensee took action to perform repairs to six welds identified in our inspection report. These welds were all located in one area on weldment 794. The inspector verified the completion of the repairs to the welds by visual examination and review of the QC documentation of the repairs. This item is closed.

No items of noncompliance were identified.

4. Modifications in Unit 2 Containment

The following modifications to Unit 2 containment annulus structural steel were visually examined by the inspector in the field to determine whether or not they met the requirements specified by the licensee's drawings, procedures, and specifications.

	Description	Location	Drawing
1)	Column Base	Col. 9.5 @ Elev. 91'	10207-C2-13-1216, R-0
2)	Diagonal Brace	Col. 15/15.3 @ Elev. 91'	-1238, R-0
3)	Torsion Connection	Col. 15 @ Elev. 101'	-1202, R-0
4)	Boxed Beam	Col. 15.5 @ Elev. 106'	-1212, R-0
5)	Stiffening Fish Plate	Col. 18 @ Elev. 106'	-1210, R-0
6)	Torsion Plate	Col. 17.8 @ Elev. 106'	-1234, R-0
7)	Beam Brace	Col. 1/18 @ Elev. 106'	-1226, R-0
8)	Torsion Connection	Col. 2 @ Elev. 101'	-1200, R-0
9)	Boxed Beam	Col. 3 @ Elev. 101'	-1215, R-0

The modifications appeared to comply with the design detail requirements.

No violations of NRC requirements were identified.

5. Modifications to Unit 1 Electrical Raceway Supports

A contract has been awarded by NRC Region V to the Lawrence Livermore National Laboratory (LLNL) to provide assistance in inspecting the plant modifications being implemented at Diablo Canyon as a result of the design verification program.

During inspection of modifications to Unit 1 electrical raceway supports, the following item of noncompliance was identified by the inspector:

- 1) Nonconformance documentation (support inspection work sheet) for "red tagged" electrical raceway support CSR-127-5-6 could not be located when requested by a NRC contract inspector. It appeared that the QC/NCR documentation for this support had been lost.
- 2) Class 1 welds on each of the following two electrical raceway supports were not inspected by quality control:

Support GE/GW-140-4-120 Support J-185-1-38

The above discrepancies were not processed in accordance with the following H. P. Foley Quality Control Procedures:

1) QCP-3 for "Processing and Control of Nonconformances," states as follows:

Paragraph 7.5 "All documentation generated through the implementation of this procedure shall be maintained in a readily retrievable manner as a part of the Quality Records System."

2) QCP-5A for "AWS Welding D1.1," states as follows:

Paragraph 11.5.1 "All Class I welds shall be visually inspected."

These failures to perform work in accordance with approved procedures are considered to be an apparent violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" (50-275/84-04/01).

One item of noncompliance was identified.

6. Follow up of Previous Inspection Items

a. (Closed) Item (50-275/82-35/01) Annulus Structural Steel Modifications Unit 1 Containment

This item was identified in inspection report 50-275/82-35 as remaining open pending subsequent inspections of ongoing modifications to the structural steel in the annulus area of Unit 1 containment. The periodic progress of these modifications have been reported in subsequent inspection reports since October 1982.

b. (Closed) Item (50-275/82-35/02) Fuel Handling Building Structural Steel Modifications

This item was identified in inspection report 50-275/82-35 as remaining open pending subsequent inspection of ongoing modifications to the structural steel in Unit 1 fuel handling building. The periodic progress of these modifications have been reported in subsequent inspection reports sing october 1982.

It has been determined from a review of the licensee's construction program and a tour by the inspector in Unit 1 fuel handling building and containment that the modifications to the structural steel in these areas have been completed. These items are closed.

No items of noncompliance or deviations were identified.

7. Exit Meeting

On April 6, 1984, the inspector met with the licensee's representatives identified in paragraph 1. During this meeting, the inspector summarized the scope of the inspection activities and reviewed the inspection findings as described in this report. The licensee acknowledged the concerns and the apparent violation identified in this report.