

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-275/87-31, 50-323/87-31

Docket Nos. 50-275, 50-323

License Nos. DPR-80, DPR-82

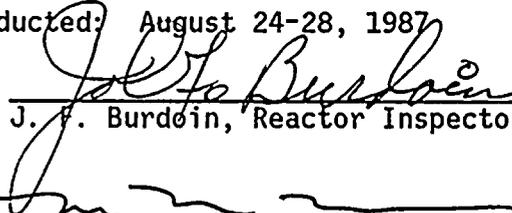
Licensee: Pacific Gas and Electric Company
77 Beale Street, Room 1451
San Francisco, California 94106

Facility Name: Diablo Canyon Units 1 and 2

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

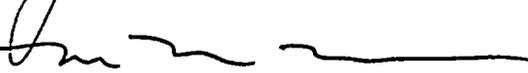
Inspection Conducted: August 24-28, 1987

Inspector:


J. F. Burdoin, Reactor Inspector

9/10/87
Date Signed

Approved by:


M. M. Mendonca, Chief
Reactor Project Section 1

9/10/87
Date Signed

Summary:

Inspection During Period of August 24-18, 1987 (Report Nos. 50-275/87-31 and 50-323/87-31)

Areas Inspected: An announced inspection by one regional inspector of various vital areas and equipment in the plant, and followup of temporary instruction, Part 21(s), open items and Nonconformance Reports. Inspection Procedures Nos. 25019, 25573, 30703, 36100, 71707, 92700 and 92701 were used as guidance for the inspection.

Results: No violations or deviations were identified.

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DETAILS

1. Individuals Contacted

Pacific Gas and Electric Company (PG&E)

- *J. D. Townsend, Acting Plant Manager
- *R. M. Lockett, Regulatory Compliance Engineer
- R. G. Oman, Assistant Project Engineer (Bechtel)
- F. W. Chan, Electrical Engineer
- *L. F. Womack, Operations Manager
- T. L. Grebel, Regulatory Compliance Supervisor
- M. W. Stephens, General Foreman, Instrumentation
- T. A. Nelson, Regulatory Compliance Engineer
- S. D. Wilson, Regulatory Compliance Engineer
- D. R. Bell, Quality Control (QC) Supervisor, General Construction

Various other engineering and QC Personnel.

*Denotes attendees at exit meeting on August 28, 1987.

2. Area Inspection

An independent inspection was conducted in Units 1 and 2 Turbine and Auxiliary Buildings. The equipment and areas inspected included:

- A. Five Emergency Diesel Generator Rooms.
- B. Six 4160 Volt Switchgear Rooms.
- C. Combined Two-unit Control Room.
- D. Four Containment Spray Pumps.
- E. Three Charging Pumps, Units 1/2.
- F. Four Safety Injection Pumps.
- G. Four RHR Pumps.
- H. Six Component Cooling Water Pumps.
- I. Six Auxiliary Feedwater Pumps.
- J. Six 480 Volt Vital Bus Rooms.
- K. Two Cable Spreading Rooms.
- L. Two Hot Shutdown Panel Areas.
- M. Two 480 Volt Load Center Areas.
- N. Turbine Building at Elevations 140'.

Housekeeping and equipment status were acceptable.

No violations or deviations were identified.

3. Followup of Part 21 Reports

The licensee's response to the following Part 21 reports were reviewed:



A. (Closed) 86-25-P Non-Environmentally Qualified Buchanan 724 Terminal Strips for Limatorque Operators

Arkansas Nuclear Power Plant (ANPP) reported under 10 CFR 21 that Buchanan 724 terminal strips were supplied as correct replacements for environmentally qualified (EQ) Buchanan 524 terminal strips used in Limatorque operators. Upon investigation into the environmental qualification of Buchanan 700 series (including 724) terminal strips, it became apparent the qualification of the terminal strips could not be established.

The inspector examined licensee's documentation which verified that Buchanan terminal strips are not used in EQ application at the Diablo Canyon Power Plant. In the case of EQ Limatorque operators, the cables are spliced at the Limatorque operators in lieu of using terminal strips.

This item is closed.

B. (Closed) 87-13-P Main Steam Check Valves, Retaining Nut Problem

During the first refueling outage of Unit 1 at the Diablo Canyon Power Plant, Surveillance Test Procedure V-18 entitled "Check Valve Inspection" was performed on the main steam line check valves (immediately downstream of the MSIVs). The inspection revealed that the retaining nut that attaches the check valve disc to its tail link was loose or missing on two of the four check valves.

The licensee to correct the problem redesigned the disc nut locking device and installed the new design on each unit during the units' first refueling outages.

The following Nonconformance Report (NCR), design change notices (DCNs), and Quality Control Instructions (QCIs) issued as corrective measures for this problem were examined to verify the completion of the licensee's corrective actions:

NCR, DC1-86-MM-N128 - Main steam check valve MS-1-4062, locking nut missing
 DCN, DC1-SM-37286 - Revised disc nut locking device
 DCN, DC2-SM-38286 - Revised disc nut locking device

QCI Unit 1

86-1595
 -1596
 -1597
 -1598
 -1607
 -1609
 -1611
 -1613

QCI Unit 2

87-0294
 -0295
 -0296
 -0297
 -0305
 -0306
 -0307
 -0308



The documents were found to be in order and acceptably documented the licensee's actions to correct this problem.

This item is closed.

No violations or deviations were identified.

4. Followup of NRC Temporary Instructions (TIs)

TI 2515/73 (IE Bulletin 85-03 "Motor-Operated Valve Common Mode Failures During Plant Transients Due to Improper Switch Settings")

The inspector as a followup to Inspection Report 50-275/87-11 and 50-323/87-10 selected as a sample, the following ten motor operated valves, from the 19 valves at Unit 2 for which torque/limit switch adjustments had been made during the Unit 2 refueling outage in the Spring of 1987.

The work orders under which the torque/limit switch adjustments were accomplished for the selected valves are listed below:

<u>Valve Nos.</u>	<u>Work Order Nos.</u>	<u>Valve Nos.</u>	<u>Work Order Nos.</u>
8106	C-0003906	8974A	C-0003886
8107	C-0003961	FCV-37	C-0003833
8807A	C-0003888	FCV-95	C-0003988
8803B	C-0003897	LCV-106	C-0003914
8821B	C-0003963	LCV-109	C-0003966

The inspector examined the work orders for task (work) description, safety/plant impact, initial review/signoff, QC inspection holdpoints/signoff, summary comments, operability test/signoff, completion verification, etc. The test data results sheets were examined to verify that the closing thrust for both manual and electrical operation was greater than the required closing thrust but less than the stud yield point thrust. The records and thrust values were in order and acceptably addressed TI and Bulletin concerns.

The requirements of TI 2515-73/IE Bulletin 85-03 not addressed in this report or Inspection Reports 50-275/86-31, 87-11, 87-20, and 87-23 will be inspected during a subsequent inspection(s) and reported under Open Item TI 2515/73.

No violations or deviations were identified.

5. Nonconformance Reports (NCRs)

The following two NCRs were examined and the licensee's corrective actions were found to be acceptable:

- ° DCO-86-EM-N132 - Incorrect Termination of EQ Conductors
- ° DCO-86-EM-N136 - 8703 Motor Lead Extension Wire



No violations or deviations were identified.

6. Followup of Open Items

A. (Open) 50-275/87-01-02, Control of Up-to-Date Vendor Manuals

The review and examination of licensee's procedures and corrective action to remedy this deficiency were commenced during this inspection. However, inspection in this area was incomplete and shall be continued during a future inspection.

B. (Open) 50-275/21-72-01; Review Licensee's Response to EDS/PAC QA Findings

The review of the licensee's actions in this area was commenced during this inspection. However, inspection is incomplete at this time and shall be continued during a future inspection.

No violations or deviations were identified.

7. Exit Meeting

The inspector conducted an exit meeting on August 28, 1987, with the members of the plant staff as indicated 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 identified in the report.

