

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-275/84-20 and 50-323/84-09

Docket Nos. 50-275 and 50-323

License No. DPR-76
Construction Permit No. CPPR-69

Licensee: Pacific Gas and Electric Company
77 Beale Street, Room 1435
San Francisco, California 94106

Facility Name: Diablo Canyon Units 1 and 2

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

Inspection conducted: May 14-23, 1984

Inspectors:

G. H. Hernandez
G. H. Hernandez, Project Inspector

6/11/84
Date Signed

Approved By:

D. F. Kirsch
D. F. Kirsch, Chief
Reactor Projects Branch

6/11/84
Date Signed

Summary:

Inspection During the Period of May 14-23, 1984

Areas Inspected: A special, unannounced inspection by a regional-based inspector to assess alleged deficiencies identified by three alleged. Three anonymous alleged had identified seven alleged hardware deficiencies during a NRC conducted plant tour on April 11, 1984.

The inspection involved 59 inspection-hours by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

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DETAILS

1. Individuals Contacted

a. Pacific Gas and Electric Company (PG&E)

J. B. Hoch, Project Manager
M. R. Tressler, Assistant Project Engineer
R. R. Lieber, Field Construction Manager
D. A. Rockwell, Project Field Engineer
M. E. Leppke, Mechanical Engineer
J. Arnold, Resident Mechanical Engineer

b. Bechtel Power Corporation (Bechtel)

P. F. Mason, Special Project Engineer

c. Pullman Power Products Corporation (PPP)

H. W. Karner, Quality Assurance/Quality Control Manager

d. Others

Anonymous Allegers A, B and C
R. Parks, Volunteer Investigator for the Government Accountability Project (GAP)

2. Background

As a result of NRC:Region V participation in interviews with anonymous allegers during April 1984, in San Luis Obispo, California, three allegers offered to identify specific hardware deficiencies in the plant. A plant tour was arranged to allow these allegers the opportunity to point out deficiencies which they believed existed at the Diablo Canyon site. The seven items identified during the plant tour of April 11, 1984, and the NRC findings are addressed in paragraph 3. Additionally, the inspector reviewed the licensee's response to these items as documented in their letters to the NRC dated May 2, 1984 (PG&E letter No. DCL-84-170) and June 1, 1984 (PG&E letter No. DCL-84-200).

3. Details

a. NRC Tag No.1/Allegation No. 344:

The concern was expressed that the catwalk support channel and associated fishplates in Unit 1, Platform No. 77G, Elevation 163', located adjacent to Steam Generator No. 1-4 is in the wrong place and is not in accordance with the design drawings.

NRC Finding:

The inspector examined the catwalk support and the associated fishplates and found the support is installed in accordance with the



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design drawings (Drawing No. 6181-C1-13380, Revision 5, Detail 380A, dated 11/5/83).

No violations or deviations were identified.

b. NRC Tag No.2/Allegation No. 345:

The concern was expressed that the area adjacent to weld No. 157 on the Unit 1 Safety Injection Accumulator line (PG&E Designation No. 1-S6-254-10) to the cold leg line contained a grinding gouge and two areas of undercut on the weld.

NRC Finding:

The staff examined licensee documentation generated both prior to the plant tour and subsequent to the tour. This documentation included: the results of design minimum wall thickness calculations, the results of depth measurements performed on the alleged grinding gouge, inspector certifications and surface visual examination records. These records appeared to be in order and acceptable.

Subsequent to the tour, the subject weld was inspected by two licensee Welding Engineers, who are Certified Welding Inspectors, and who measured the depth of the grinding mark. The results of the licensee's evaluations are contained in letter No. DCL-84-170, dated May 2, 1984. Subtraction of the measured grinding mark depth from the worst case wall thickness results in a remaining wall thickness in excess of minimum wall requirements. The rationale for the licensee's calculations and conclusions was examined by the staff. Based upon these examinations, the staff concludes that the alleged discrepancy does not represent a violation of the code or licensee procedures.

Additionally, the licensee's Certified Weld Inspectors found that the alleged undercut was an area wherein the weld crown and the base material had not been fully blended when the weld was prepared for Preservice Inspection. Thus, the alleged undercut was not really undercut at all and does not violate any code or regulatory requirements. The inspectors' observations during the tour are consistent with the licensee's findings.

No violations or deviations were identified.

c. NRC Tag No.3/Allegation No.346:

The concern was expressed that a support in Unit No.1, Platform No. 65F, elevation 125', near Reactor Coolant Pump No.1-1 was welded to a wide flange beam with an obtuse angle that is in excess of that allowed for fillet welds and the welding procedure.

NRC Finding:

The inspector examined the applicable drawings (Drawing Nos. 6181-C1-1337, Detail 2, Revision 3 and 6181-C1-1338, Detail 2,

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Revision 3, both dated 6/23/83) and determined that the weld in question is a groove weld with a backing bar, as found during the April 11, 1984, plant tour and as it exists today. Therefore, fillet weld angle restrictions are not applicable because the weld in question is a groove weld. Additionally, the weld was found to conform to the H. P. Foley welding procedure and the applicable code.

No violations or deviations were identified.

d. NRC Tag No. 4/Allegation No. 347:

The concern was expressed that the stainless steel line on pipe support No. 97-3R (Unit No. 2) has such excessive overwelding that shrinkage or deformation has occurred at the weld areas. This overwelding was alleged to cause damage to the pipe due to a failure of the stress calculations to consider the residual effects of overwelding.

NRC Finding:

The inspector found that the licensee had already considered this issue on a generic basis and had provided acceptance criteria to their engineering staff. The licensee's acceptance criteria are based on NUREG/CR-0371 entitled, "Stress Indices for Girth Welded Joints, including Radial Weld Shrinkage, Mismatch and Tapered Wall Transitions," by E. C. Radabaugh, S. E. Moore, dated September 1978. These criteria are provided to their engineering staff for resolving identified cases of pipe concavity which appear excessive.

The licensee evaluated this particular support and found it met their acceptance criteria. On May 22, 1984, the inspector observed and verified licensee measurements and determined that the pipe (on pipe support No. 97-3R) met the aforementioned acceptance criteria.

The staff concludes that the licensee does consider the effect of overwelding, does perform calculations to assure that the pipe can perform as intended, and that the existing pipe concavity (deformation) does not violate code requirements.

No violations or deviations were identified.

e. NRC Tag No. 5/Allegation No. 348

The concern was expressed that the Bostrom-Bergen fabricated rupture restraint beneath the Unit 2 Pressurizer contains welds that are excessively rough and of such a profile that the welds would not conform to AWS D1.1.

NRC Finding:

The staff found that the licensee had previously considered these types of welds on a generic basis and provided for a revised acceptance criteria, as allowed by the AWS D1.1 Structural Welding



Code (paragraph 3.7.4). The licensee determined that these welds would perform the design function.

The extent of the licensee's examinations of Bostrom-Bergen shop welds, are detailed in letters DCL-84-114, DCL-84-119, and DCL-84-200, dated March 23, 1984, March 27, 1984, and June 1, 1984, respectively. The inspector examined the results of the licensee's considerations and concluded that the licensee's analysis of these types of welds appears to be reasonable and responsible. The inspector reviewed the calculations performed on these typical supports and found them acceptable.

No violations or deviations were identified.

f. NRC Tag No. 6/Allegation No. 349

The concern was expressed that overwelding on pipe support lugs (Unit No. 2 pipe support No. 50-26V) has caused excessive shrinkage (deformation) to the pipe. This excessive shrinkage, the accompanying residual stresses, and the eccentric loads were alleged not to be considered in the stress calculations.

NRC Finding:

The inspector found that the licensee had already considered this issue on a generic basis. Refer to the NRC finding of paragraph 3.d, above.

For pipe support No. 50-26V, the licensee determined that their acceptance criteria, as based upon NUREG/CR-0371, had not been exceeded.

On May 22, 1984, the staff verified the licensee's measurements, reviewed the stress analysis calculations, and determined that the pipe (on pipe support No. 50-26V) met the licensee acceptance criteria.

The staff concludes that the licensee does consider the effect of overwelding, does perform calculations to assure that the pipe can perform as intended by the designer, and that the existing pipe concavity (deformation) does not violate code requirements.

No violations or deviations were identified.

g. NRC Tag No. 7/Allegation No.350:

The concern was expressed that the eight lug attachment welds for two Unit No. 2 pipe supports Nos. 413-131R and 24-13R, were required to be full penetration welds on three sides by the design drawings.



However, the actual welds were not full penetration welds but instead are fillet welds, contrary to design requirements.

NERC Finding:

The inspector concurs with the allegation that the eight lugs are attached by fillet welds instead of the design specified full penetration welds (from three sides). However, during the tour with the allegations on April 11, 1984, the allegations were asked to make note that a "hold tag" was in place on both of the referenced pipe supports describing the exact situation noted above. The existence of the hold tag indicates that the licensee's quality program was functioning and had detected this discrepancy.

No violations or deviations were identified.

4. Conclusion

The inspector concludes that none of the seven items identified by the allegations, described above, constituted a violation of a code or regulatory requirements.



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US NUCLEAR REGULATORY COMMISSION MS
1450 MARIA LANE SUITE 210
WALNUT CREEK CA 94596

1984 JUN 25 PM 1:20

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JUN 25 1984

THIS IS A CONFIRMATION COPY OF THE FOLLOWING MESSAGE:

4159433708 TDRN WALNUT CREEK CA 190 06-22 0628P EST
PMS RICHARD PARKS
CARE SANDRA SILVER RPT DLY MGM, DLR
MOTHERS FOR PEACE
1760 ALISAL AVE
SAN LUIS OBISPO CA 93401
THIS IS A COPY OF THE MESSAGE SENT TO THOMAS DEVINE IN WASHINGTON
D.C.

RESPONSIVE TO YOUR REQUEST OF JUNE 5 1984 WE HAVE BEEN AND CONTINUE
TO BE PREPARED TO COORDINATE A SITE VISIT AT DIABLO CANYON BY
TELEPHONE TODAY WE AGAIN OFFERED TO ESCORT A TOUR (OF UNIT 2) AT A
MUTUALLY CONVENIENT TIME THIS WEEKEND MR PARKS ADVISES THAT YOUR
CLIENTS WILL NOT POINT OUT WHAT YOU HAVE CHARACTERIZED AS SIGNIFICANT
SAFETY DEFECTS UNLESS 2 ADDITIONAL CONDITIONS ARE MET 1. THE
INSPECTOR MUST TAKE PHOTOGRAPHS AND INCLUDE THEM IN HIS REPORT AND 2.
MAKE WRITTEN NOTES OF HIS FINDINGS AND CONCLUSIONS TO "VOUCH FOR"
WHATEVER IS FOUND BY YOUR CLIENTS MR PARKS ADVISES THESE CONDITIONS
ARE "MARCHING ORDERS" FROM YOU

AS I INFORMED MR PARKS OUR INSPECTOR WILL HAVE A POLAROID CAMERA WILL
TAKE PHOTOGRAPHS AS HE FINDS NECESSARY OR APPROPRIATE SHOW THEM TO
THE CLIENT AND GAP REPRESENTATIVE AND RETAIN ALL PHOTOGRAPHS FOR
AGENCY FILES

~~IT IS THE POLAROID CAMERA'S FUNCTION TO BE REQUIRED TO TAKE NOTES
AND MAKE WRITTEN NOTES OF HIS FINDINGS AND CONCLUSIONS TO YOUR REVIEW AS
MOTHERS FOR PEACE WILL BE REQUIRED TO BE PRESENT AT YOUR FACILITIES
FOR THIS VISIT~~

L W SHOLLENBERGER
REGIONAL COUNSEL
USNRC
1450 MARIA LANE SUITE 210
WALNUT CREEK CA 94596

18130 EST

MGMCOMP

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JUN 1984



U.S. NUCLEAR REGULATORY COMMISSION
Office of Inspector and Auditor

Date of transcription July 16, 1984

Report of Interview

Dennis Kirsch, Chief, Reactor Projects Branch, Division of Reactor Safety and Projects, Region V, upon interview concerning two allegations that, by omission, he made false and/or misleading statements knowing that they each could have influenced the Commissioners in their decision as to whether to permit low power testing at Diablo Canyon nuclear facility, provided the following information:

The first allegation concerned an omission on the part of Kirsch to include in IE Report 83-37 a discussion of Nuclear Services Corporation's (NSC) audit finding that "while a Quality Assurance Program exists, the program does not meet the requirements of 10 CFR 50, Appendix B..." or the interview and February 2 affidavit of Harold Hudson, who confirmed NSC's finding.

Kirsch offered that Hudson's interview and affidavit were not discussed because the questioned report (83-37) was meant to address the inspection effort conducted during the periods November 14 thru 18 and November 28 thru December 9, 1983. Hudson's interview was conducted January 6, 1984, and his affidavit was dated January 31, 1984 and was received by Region V on February 6, as a part of the GAP 2.206 petition dated February 2, 1984. Although report number 83-37 was not issued until February 29, 1984, the matters raised in the Hudson allegations were not within the scope of that report.

Regardless of the above facts, as stated in the conclusion of 83-37 (extract at Exhibit 1), it was the NRC's opinion that the "NRC audit findings do not provide a basis for concluding that the Pullman - Kellog Quality Assurance Program suffered a major breakdown during the time period of NSC audit." Since the NSC audit, there have been numerous inspections, which included some violations, but not so many as to be out of the ordinary. Further, although the NRC does not agree with Hudson's gross conclusion/position, specific examples of past QA breakdowns submitted by him in his affidavit of January 31, 1984 have been incorporated into the Region V allegation tracking system and have been resolved and closed in SSER 22 (see extracts attached at Exhibit 2 and 3, respectively) or will be resolved. In conclusion, the staff has concluded that there is no reason to address Hudson's gross assertion because he is simply wrong.

The second allegation concerned an omission on the part of Kirsch to advise the Regional Administrator of an apparent breakdown in corrective action for pipe rupture restraints. To begin with, Hudson first raised the issue of pipe rupture restraints during a January 6, 1984 interview with Kirsch (extracts at Exhibit 4). His allegations were addressed in 19 pages of SSER 22, although

Investigation on July 10, 1984 *Smith* at Walnut Creek, CA File # 84-26
by Ronald M. Smith, Senior Criminal Investigator, OIA Date dictated July 10, 1984

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ATTACHMENT G



reference is made there to whip restraints which are the same thing as rupture restraints. Again, GAP is wrong on its facts because their allegation presumes that there was in fact a corrective actions breakdown, a position with which the NRC totally disagrees.

By way of background, Kirsch noted that the issue was first raised by a 50.55(e) report to which PG&E had committed, as reported in paragraph 11, IE Report 50-275/79-07. Followup on the issue was addressed in IE Reports 79-13 (paragraph 5), 79-17 (paragraph 6b), 79-22 (paragraph 5), 79-26 (paragraph 4c), and 80-02 (paragraph 4) with the matter being closed in IE Report 81-04 (paragraph 3b). Accordingly, Kirsch was very familiar with the issue and did not consider Hudson's comments to concern anything the NRC was not already quite aware of.

Investigator Note: Kirsch was also asked if he had information concerning several of the other allegations raised in the Devine Report of Interview dated July 2, 1984, and referred to hereafter with the same item numbers appearing in that interview report.

Item 2 - Kirsch was present at the March 19 meeting, had reviewed the allegations and had already interviewed Hudson, Lockert and two anonymous [^]allegers. GAP never produced the other allegers. As to the "significant issues" raised by GAP in their 2.206 petition (Exhibit 5), the first and third are being addressed in IE Report 84-11, soon to be issued. NRR is handling the second and fourth (the fourth is not viewed as being significant). The fifth is somewhat factually askew. The procedural change involved not looking at "shop welds" which had previously been reviewed under other procedures prior to deliver of the materials. Thus the inspection effort could be concentrated on Pullman field welds only.

Item 3 - Kirsch talked with Hudson on January 6 (4 or 4½ hours), 9 (about three hours) and 12 (2-3 hours), 1984. Kirsch only took the allegations for the purpose of resolving them. Thomas Bishop had told Kirsch that he had talked with Hudson before also.

Item 4 - No additional comment beyond what he understood Martin to have given.

Item 8 - Reiterated that ANSI - N45.2.6 was not the applicable standard and that IE Report 83-37 resulted in a Notice of Violation for a failure to qualify QC inspectors in accordance with the established Pullman internal procedures.

Item 9 - In Kirsch's opinion there was no statement to correct because he didn't know of any that needed correction.

Item 10 - The perceived problems were identified by Kirsch on forms used by him to record allegers comments. He also showed the recorded comments (allegations) to the allegers to confirm their accuracy as so documented.

Item 12 - Paragraph 5.4, SSER 22 was authored by Region V but was not based on anything having to do with Quick Fix and the Onsite Plant Engineering Groups (OPEG), which was an NRR matter. Region V's effort was only concerned with the Document Control Center at PG&E General Construction and with Foley, the



electrical contractor on site. Therefore, the statement was correct within that frame work. Quick Fix and OPEG belonged to NRR.

Item 13 - NRR item.

Item 14 - The transcripts were made commercially from tape copies provided by Clewett (GAP), who was the only one taping at the meeting. Contrary to the GAP assertion, Lockert's concern with supervision (Nolte) was addressed at pages 33, 58 and 59 of the transcript, with specific mention of Nolte on pages 58 and 59 (Exhibit 6). In sum, Kirsch did not delete anything from the transcript nor did he think anyone else had.

Item 15 - At the time of the January 5 interview of Lockert, which was the basis for the A307 issue, a team was already at Diablo looking at the same issue. The finding, as reported in SSER 22, was that the alleged practice was alright from a technical view point. Karner had made the statement (referenced by GAP) not because they were technically unacceptable but because he was tired of dealing with questions concerning whether they were acceptable. Further, the whole matter has been presented to the ASLB.

Exhibits:
As stated

