

OCT 23 1984

Docket Nos. 50-275, 50-323

Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, California 94106

Attention: J. D. Shiffer, Vice President  
Nuclear Power Operations

Gentlemen:

Thank you for your letter dated August 27, 1984, informing us of the steps you have taken to correct the items which we brought to your attention in our letter dated July 27, 1984. Your corrective actions will be verified during a future inspection.

Your cooperation with us is appreciated.

Sincerely,

*original signed*

T. W. Bishop, Director  
Division of Reactor Safety & Projects

bcc w/copy letter dated 8/27/84:  
Mr. Martin, RV  
Resident Inspector  
State of CA  
pink/green/docket file copies  
RSB/Document Control Desk (RIDS)  
Joan Zollicoffer

RV

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NRC

PACIFIC GAS AND ELECTRIC COMPANY

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REGION V

J. O. SCHUYLER  
VICE PRESIDENT  
NUCLEAR POWER GENERATION

August 27, 1984

PGandE Letter No.: DCL-84-293

Mr. John B. Martin, Regional Administrator  
U. S. Nuclear Regulatory Commission, Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, CA 94596-5368

Re: Docket No. 50-275, OL-DPR-76  
Docket No. 50-323  
Diablo Canyon Units 1 and 2  
Response to IEIR 50-275/84-13 and 50-323/84-05 -- Notice of Violation

Dear Mr. Martin:

NRC Inspection Report 50-275/84-13 and 50-323/84-05, dated July 27, 1984, contained one Severity Level IV violation. PGandE's response to this Notice of Violation is enclosed.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it in the enclosed addressed envelope.

Sincerely,

*J. O. Schuyler*  
For J. O. Schuyler

Enclosure

cc: Service List

*Dupe*  
*8409070143*

*1E-01*

## ENCLOSURE

RESPONSE TO NOTICE OF VIOLATION INNRC INSPECTION REPORT NOS. 50-275/84-13 AND 50-323/84-05

On July 27, 1984, NRC Region V issued one Severity Level IV Notice of Violation ("Notice") as part of NRC Inspection Report 50-275/84-13 and 50-323/84-05 for Diablo Canyon Units 1 and 2. This Notice is related to plant modifications resulting from the design verification program. The Notice cited the following:

- o A concern that three as-built drawings do not show the installed piping support while one installation has undersized welds.
- o A concern that the wrong base plate was grouted.
- o A concern that three electrical raceway supports were not installed as shown on the "as-built" drawings.

STATEMENT OF VIOLATION

"10 CFR 50, Appendix B, Criterion V, as implemented by Section 17.1.5 of the FSAR and PGandE Quality Assurance Manual Section V states in part that, 'Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings...and shall be accomplished in accordance with these instructions, procedures, or drawings...'

1. Pullman Power Products, Engineering Specification Diablo (ESD) Number 223 states as follows:

Paragraph 6.8.2.5, 'Fillet weld sizes for supports, A) the fillet weld size shall be as specified on the approved for construction drawing....As-Built is required to show weld size.'

Paragraph 6.1.6, 'All pipe supports shall be fabricated and installed in accordance with the approved for construction drawing(s).'

Contrary to the above, during inspections in April/May 1984, the following conditions existed in Unit 2:

a) Pipe Support 7-97V

'As-built' drawings were in error. The installation was correct, but two fillet welds were shown incorrectly on the drawing.

b) Pipe Support 7-56R

The 'As-Built' drawings did not correctly identify those undersize welds found on the pipe support. Two of the welds did not meet AISC recommended minimum size for fillet welds.

c) Pipe Support 5-5R

The weld at connection of item 5 to item 3 is undersized 1/16" for 1-1/4" of the 4" total weld length. The 'as-built' drawings did not reflect this condition.

d) Pipe Support 333-42R

Square butt stitch weld 1-1/2" long on 3" centers were found to be 3/8" to 1/2" short in length at four locations.

2. Howard P. Foley, Quality Control procedure, QCPC-10 for 'Grouting Installation,' states as follows:

Paragraph 3.1, 'The Project Manager shall be responsible for employing all measures necessary to accomplish the work in accordance with the requirements of the contract documents and this procedure.'

Contrary to the above, during inspections in April/May 1984, the following conditions existed in Unit 2:

Pipe Support 948-36G

Two identical plates are attached to the North and East walls of the containment. The grouting of the North plate to fill in the concrete/plate surfaces was required by ESD procedures because the bearing surface was affected. The East plate was inadvertently grouted without identifying that the grouting was in the wrong location.

3. Howard P. Foley, Quality Control procedure, QCPE-9 for 'Installation of electrical raceways, junction and terminal boxes', states as follows:

Paragraph 3.1, 'The Project Manager has the responsibility for employing all measures necessary to accomplish the work in accordance with the requirements of the contract documents and this procedure.'

Contrary to the above, during inspections in April/May 1984, the following condition was identified:

a) Electrical Raceway Support GW-115-3-122

Two new S-6 braces were required by the design and only one was installed.

b) Electrical Raceway Supports C-119-1-2

Support was installed reversed from that portrayed on the design drawings: The 'as-built' drawings were revised to reflect installation error without proper documentation.

c) Electrical Raceway Supports FW-85-1-300

The conduit clamp was not in place on support FW-85-1-300 (Type S-239) and the span exceeded the 8 foot maximum criteria for this specific hanger.

This is a Severity Level IV violation (Supplement II)."

EXPLANATION AND CORRECTIVE STEPS TAKEN

Each item identified in the Notice is discussed separately.

The first four items (1a through 1d) involve piping supports:

- 1a. A drafting error was made on the as-built drawing for piping support 7-97V. Although the support was installed correctly, the QC inspector erroneously accepted the as-built drawing during inspection of the support. When the error was identified, Pullman Power Products (PPP) Discrepancy Report No. 8673 was written. The report required revising the as-built to correct the drafting error. Corrective actions were completed on July 26, 1984, when the discrepancy report was closed.
- 1b. Piping support 7-56R was installed in October 1976 and later inspected and accepted by the QC department. The inspectors failed to identify the undersized welds. PPP Discrepancy Report No. 8700 was written to document the condition. The welds are currently being upgraded to meet AISC requirements. The as-built will be corrected to show the actual weld size.
- 1c. Paragraph 6.8.2.5.C of ESD 223, dated May 12, 1983, requires that undersized existing welds be shown on the as-built. Although the actual weld size did not appear on the as-built, piping support 5-5R and its design drawings were accepted by QC inspectors. PPP Discrepancy Report No. 8591 and PGandE Discrepancy Report No. M-4696 were written to document the condition. The as-built drawing has been revised to show the actual weld size.
- 1d. Design drawings for pipe support 333-42R required 1-1/2" long square butt stitch welds on 3" centers. At four locations, the welds were 3/8" to 1/2" short in length. PGandE Discrepancy Report No. M-4706 and PPP Discrepancy Report No. 8706 were written to document the condition. The welds are currently being reworked per Engineering direction.

Item 2 involved a base plate with improper grouting between the plate and containment wall:

2. Due to field conditions, grout was required under the North base plate on piping support 948-36G. The QC inspector failed to verify grouting as required. PPP Discrepancy Report No. 8735 was written to document this condition. The base plate is in the process of being grouted and/or shimmed, as directed by Project Engineering.

Contrary to the condition of the support as described in the Notice, the East Base Plate was not grouted.

The following three items involve electrical raceway supports:

- 3a. A modification to electrical raceway support GW-115-3-122 required the addition of two S-6 braces. Although only one S-6 brace was installed, the H. P. Foley QC inspector accepted this modification. After the error was identified, H. P. Foley Discrepancy Report No. 8802-1277 was written to document the condition and direct Foley Construction to install the second S-6 brace as required by the design drawings.
- 3b. Contrary to the description in the statement of violation, there was no installation error on electrical raceway support C-119-1-2. The design required the use of existing anchor bolts and P1000 unistrut members. The relation of these to each other is as shown on the as-built. Procedures allow the members to be mounted on opposite sides to eliminate interferences and facilitate installation.
- 3c. The conduit clamp for electrical raceway support FW-85-1-300 had been removed from the general lighting conduit. This also created an overspan condition. PGandE Discrepancy Report No. E-2843 was generated to document this condition and instruct H. P. Foley to install a conduit clamp. The missing conduit clamp has been replaced on raceway support FW-85-1300.

It should be stressed that the items identified on this Notice are not indicative of a QC Inspection breakdown or inadequacies in the construction QA program, but rather a result of isolated oversights by individual qualified inspectors. This conclusion is based on an evaluation of the discrepancy root causes for generic implications, which included the following:

- a. The PGandE surveillance program for completed work has revealed an extremely low rejection to compliance ratio for contractor inspectors.
- b. The oversights identified in the Notice represent a very small percentage of work performed on the supports. For example, almost 400 linear inches of weld are present on support 5-5R, yet only 1 1/4 inches of undersized (1/16 inch) weld was not identified on the as-built drawing.

In each instance where the job performance of an individual construction craftsman or QC inspector contributed to this Notice, that individual was retrained to prevent future violations. Retraining of individuals in order to enhance job performance is standard practice at Diablo Canyon.

CORRECTIVE STEPS WHICH WILL BE TAKEN

The following corrective steps are being taken:

1. Two welds on pipe support 7-56R are being upgraded to meet AISC minimum requirements. The as-built drawing will be revised to show the actual weld size.
2. The subject welds on pipe support 333-42R are being reworked per Engineering's direction.
3. The subject base plate on pipe support 948-36G will be grouted and/or shimmed.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance will be achieved by September 14, 1984.