

PACIFIC GAS AND ELECTRIC COMPANY

PG&E

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J. O. SCHUYLER
VICE PRESIDENT
NUCLEAR POWER GENERATION

March 29, 1984

PGandE Letter No.: DCL-84-124

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

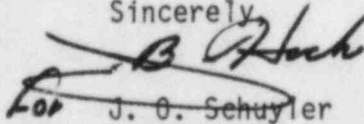
Re: Docket No. 50-275, OL-DPR-76
Docket No. 50-323
Diablo Canyon Units 1 and 2
IE Inspection Report 83-37 and 83-25 -- Notice of Violation

Dear Mr. Martin:

NRC Inspection Reports 50-275/83-37 and 50-323/83-25, dated February 29, 1984, included a notice for a Severity Level IV violation. PGandE's response to this notice 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

Enclosure

cc: Service List

8404130003 840329
PDR ADOCK 05000275
Q PDR

IE-28 1/1

ENCLOSURE

RESPONSE TO NOTICE OF VIOLATION IN NRC
INSPECTION REPORT NOS. 50-275/83-37 AND 50-323/83-25

On February 29, 1984, NRC Region V issued a Severity Level IV Notice of Violation as part of NRC Inspection Report Nos. 50-275/83-37 and 50-323/83-25 on Diablo Canyon Units 1 and 2.

The Notice cited:

- o Twenty-eight Pullman employees began inspecting and accepting weldments prior to completion of required training and certification as welding inspectors.

DEFICIENCIES IN THE TRAINING AND CERTIFICATION OF PULLMAN WELDING INSPECTORS

["As a result of the inspection conducted on November 14-18 and November 28 - December 9, 1983, and in accordance with NRC Enforcement Policy, 10 CFR Part 2, Appendix C, the following violation was identified:

Section 17.1.5 of the FSAR (dated October 1978) and the Pacific Gas and Electric Company Quality Assurance Manual Section V (dated August 15, 1978) 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...."

Engineering Standard Diablo (ESD) No. 237, "Quality Assurance Inspector Training Program," dated February 26, 1974, states in paragraph 2.3 that, "All personnel engaged as Field QA Inspectors involved in the inspection of weldments, interpretation of Engineering Specifications and Welding Procedures, and documentation work, shall be required to complete an indoctrination period as described in Section 4 of this specification." Paragraph 4.1 states that, "The indoctrination period for the Field Q.A. Inspectors described in Section 2.3 shall contain as a minimum, but not necessarily limited to, the following courses:

Visual Inspection
 Welding Inspection
 Basic Q.A.

Welding Procedures
 Welding Processes

Other courses offered as optional are:

Welding
 Basic Power Plan Instruction
 Introducing Nuclear Power

Steam Power Plant Fundamentals
 Welding & Piping Engineer. Technology
 (I.C.S.)

The Visual Inspection and Welding Inspection tests shall be administered and controlled by the N.D.E. Training Officer. All N.D.T. training, qualifications and certifications will be covered by ESD-235."

Paragraph 4.2 states that, "Tests used for the indoctrination courses for Field Q.A. Inspectors shall be:

1. For Basic Q.A. Test-ESD's.
2. For Weld Procedure Test-Approved Welding Procedures.
3. For the Weld Process Test, Welder Qualificatin Card and Pipefitter's Manual.
4. For Welding Inspection Qualifications, General Welding Information.
5. Visual Inspection Qualifications-General Dynamics NDT Introduction."

A Nuclear Services Corportion (NSC) Audit dated October 27, 1977, identified in Criterion IX, Finding No. 3 (of the audit) twenty-eight individuals which were alleged to have begun performing their duties without fulfilling the Pullman Power Products procedural requirements for certification and qualification of Quality Assurance (Welding) Inspectors.

Contrary to the above requirements of the FSAR and Pullman procedures, the inspector identified on November 15, 1983 that in virtually all cases the individuals hired after September 25, 1973, named in the NSC audit finding (who were assigned to perform welding inspections), began inspecting and accepting weldments, before completing the required training, taking the required examinations, and before being certified as a welding inspector. It is noted that the Pullman Power Products response to this Nuclear Services Corporation finding states, in part that, "All current inspectors have been qualified by test as outlined in ESD-237. The requirement for qualification and certification of field inspector were added in ESD-237 on September 25, 1973 to reflect the requirements of ANSI N45.2.6, just published. Persons hired before this time were not necessarily tested at time of hire. Subsequent to 1973, the records indicate that all inspection personnel received required training and examination." However, the Pullman response is silent with regards to inspectors performing inspections prior to certification.

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

EXPLANATION AND CORRECTIVE ACTION TAKEN

In our investigations, 17 of the 28 individuals cited by the NSC Audit were welding inspectors. The other eleven were non-destructive test inspectors who were fully qualified to perform ND Testing prior to beginning those activities. In responding to the Notice, Pullman Welding Inspectors have been placed into three categories according to their time of hire:

- A. Four individuals were hired to perform weld inspections from the start of work through August 1973. All inspectors were shown to be qualified to perform visual weld inspections based on a review of documentation of previous work experience and education. Prior to September 1973, no requirement or guidance existed within the industry directing the documentation, qualification, or certification of inspectors.
- B. Documentation of weld inspector qualification and inspector assignments was reviewed for all inspectors hired during the period from September 1, 1973 through December 1980. Seventeen inspectors were found to have performed inspections prior to documentation of completion of the training and testing required by ESD-237. These seventeen inspectors were hired between September 1, 1973 and October 3, 1975. After October 3, 1975 no inspectors performed inspections prior to documentation of qualification per ESD-237.

A reinspection program was initiated to determine if welds inspected by these 17 individuals meet the requirements of B31.1, B31.7, or the current ASME Section III code. For those inspectors who are considered qualified based upon their education and experience, 20% or more of welds inspected prior to their compliance with the ESD-237 procedure are being reinspected. The inspection is limited to accessible welds only. For those individuals considered unqualified prior to meeting the requirements of ESD-237, all accessible welds inspected prior to qualification are being reinspected.

Based on a review of documented previous work experience and education, all individuals except Mr. Guy and Mr. Cubbage were found to be qualified for weld inspection duties. A listing of the 15 inspectors considered qualified based on previous experience is provided in Attachment A.

The scope of inspections performed by Mr. Guy and Mr. Cubbage prior to documentation of qualification and reinspection results are shown on Attachment B.

- C. One hundred and seven individuals were hired to perform weld inspections during the period from January 1, 1981, to the present. A sample of the records for 21 inspectors indicated that all inspectors were documented to be qualified in accordance with ESD-237 prior to performance of inspections, with two exceptions. In both of these cases, documentation occurred one day following the first inspection. This is considered to be an administrative delay and the results provide confidence that the requirements of ESD-237 have been fully implemented from October 3, 1975 to date.

For each individual who performed inspections prior to the training and testing requirements of ESD-237 the following is or will be identified:

1. No. of inspections - The number of inspections performed prior to documentation of completion of training and testing requirements.
2. No. to be Reinspected - The number of welds to be reinspected to comply with the requirements of the reinspection program. All accessible welds accepted by Messrs. Guy and Cubbage will be inspected. If a large percentage (5%) of accessible welds originally accepted by any inspector is rejected and requires repair during the reinspection, then all welds inspected by that individual will be examined.
3. Reinspected - The number of accessible welds which have been reinspected.
4. Suspect - Weld items in this category include such items as minor arc strikes, 1/32" undersized welds on a small portion of weld circumference, and conditions which require further surface preparation.

During the inspection program, inspectors have examined 1036 welds. Of these, 59 fall into the suspect category. The suspect welds will be reexamined by supervisory level welding inspectors. If the suspect condition is verified by the supervisors, the condition of those welds will be forwarded to Engineering for evaluation. Presently, 42 weldments are under consideration by the supervisors. Seventeen welds have been sent to Engineering for evaluation and disposition. As of this date, no welds have required repair.

CORRECTIVE ACTION WHICH WILL BE TAKEN

Weldments are being examined for acceptability by qualified inspectors in accordance with the above discussion. Should any welds be found unacceptable, they will be repaired in accordance with the existing approved procedures.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PGandE has been in full compliance with procedure ESD-237 since October 3, 1975. A high level of confidence in the quality of the work to be reinspected is established by the fact that:

1. All code Class A, B, and C welds were inspected using NDE methods by qualified individuals in addition to the visual inspections performed by Mr. Guy.
2. In some cases, the welding inspection was witnessed by the Authorized Nuclear Inspector.
3. All Design Class 1 piping has been hydro-tested and, in some cases, reinspected for the base line data as a part of the Inservice Inspection Program.

PGandE plans to complete all corrective action within 30 days of the date on this submittal. A final report detailing the results of all inspection activities and the disposition of suspect welds will be submitted at that time.

Attachment AREINSPECTION PROGRAM

<u>Name</u>	<u>No. of Inspections</u>	<u>Minimum No. to be Reinspected</u>	<u>No. Already Reinspected</u>	<u>Suspect</u>
Allmendinger	69	14	29	1
Bloom	2	2	2	0
Bowlby	387	78	117	9
Boyd	192	39	51	1
Finch	289	58	107	4
Jennings	423	85	96	6
Kaz	3	3	3	0
Kincade	84	17	14	0
Page	195	39	35	1
Pennie	294	59	81	2
O'Brien	2	2	2	0
Sarvwatari	313	63	72	2
Silver	47	10	11	0
Thomas	17	10	10	0
Willard	367	74	135	16

Attachment BREINSPECTION PROGRAM

<u>Name</u>	<u>No. of Inspections</u>	<u>No. to be Reinspected</u>	<u>No. Already Reinspected</u>	<u>Suspect</u>
Guy	300	300	260	16
Cabbage	23	23	11	1