

APPENDIX A

NOTICE OF VIOLATION

Pacific Gas and Electric Company
P. O. Box 7442
San Francisco, California 94120

Docket Nos. 50-275 and 50-323
License No. DPR-76 and
Construction Permit No. CPPR-69

As a result of the special inspection conducted during the periods of March 30- April 6 and April 25-29, 1983, and in accordance with NRC Enforcement Policy, 10 CFR Part 2, Appendix C, the following violations were identified:

A. 10 CFR 50, Appendix B, Criterion V, as implemented by Section 17.1.5 of the FSAR and the PG&E 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. The Howard P. Foley Quality Control Procedure for Processing and Control of Deviations and Nonconformances, QCP-3, Revision 5, states, in paragraph 4.3 that, "When a nonconformance is noted, it shall be processed in accordance with this procedure on a Nonconformance Report by the Quality Department. These reports require Pacific Gas and Electric Company review and acceptance." Paragraphs 4.3.1 through 4.3.10 of QCP-3 describe the review and approval cycle of the nonconformance report, culminating with paragraph 4.3.11, which states that, "When all of the above steps (paragraphs 4.3.1 through 4.3.10) have been completed the Nonconformance Report shall be forwarded to Quality Engineering who shall coordinate removal of the Hold Tag(s) and file the report in the Quality Files."

Contrary to the above, discussions held with the then Acting Quality Control Manager on March 31, 1983, identified that "Red Hold Tags", attached to structural steel I-beams at the 187' elevation of the Unit 2 Fuel Handling Building, and documented on Nonconformance Report No. 8802-803, Revision 1, were removed by him from approximately ten of the fifteen locations on or about January 29, 1983. The tags were removed prior to completion and approval of the entire nonconformance report. Nonconformance Report No. 8802-803 was formally approved, completed and signed on March 16, 1983.

This is a Severity Level V Violation (Supplement II), applicable to Unit 2.

2. The Howard P. Foley Quality Control Procedure for Welder and Brazer Qualifications and the Qualification of Welding and Brazing Procedures, QCP-5, Revision 8, states in paragraph 5.1 that, "Welder qualification shall be effective providing the welder has used the process qualified for within the following time periods: 6 months for welders qualified under Appendix "B", "C", "E", and "G" or 3 months for welders qualified under Appendix "I"."

Appendix C of the procedure describes the steps necessary to qualify a welder to the AWS D1.1, Structural Welding Code, latest revision, for groove welds of unlimited thickness. Successful completion of this qualification test also qualifies the welder for welding fillet welds on material of unlimited thickness. QCP-5 further states in paragraph 5.1.1 that, "The Quality Control Department shall monitor each welder for each process qualified within the time period above, to ensure that the welder's qualifications do not lapse."

Contrary to the above, as of March 31, 1983, H. P. Foley Company welder, (symbol "JX") had not completed the process requalification which was due to be completed on January 27, 1983. The welder was initially certified on February 29, 1980 to a AWS D1.1 Shielded Metal Arc Welding (SMAW) Process and monitored by Quality Control every six months afterwards, with the last process qualification performed on July 27, 1982. The welder was included on H. P. Foley Active Welders List and was performing as a qualified welder as of March 31, 1983.

This is a Severity Level IV Violation (Supplement II), applicable to Unit Nos. 1 and 2.

- B. 10 CFR 50, Appendix B, Criterion IX, as implemented by Section 17.1.9 of the FSAR and the PG&E Quality Assurance Manual, Section IX, states that, "Measures shall be established to assure that special processes, including welding, heat treating, and nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements."

The 1980 Edition of the ASME Boiler and Pressure Vessel Code, Section IX, "Welding and Brazing", Subarticle QW-322, "Renewal of Qualifications", states that, "Renewal of qualification of a performance qualification is required: (a) when a welder or welding operator has not used the specific process, i.e., metal arc, gas, submerged arc, etc., for a period of three months or more; except when employed on some other welding process, the period may be extended to six months; or (b) when there is a specific reason to question his ability to make welds that meet the specification. Renewal of qualification for a specific welding process under (a) above may be made in only a single test joint (plate or pipe) on any thickness, position, or material to re-establish the welder's or welding operator's qualification for any thickness, position, or material for which he was previously qualified.

Contrary to the above, on April 27, 1983, the NRC inspector identified that a H. P. Foley Company Welder (symbol S-4) had been improperly recertified, on February 19, 1983, to ASME Welding Procedure Specification (WPS) No. M-03, a Gas Tungsten Arc Welding (GTAW) process. Quality records indicated that recertification was accomplished by having the

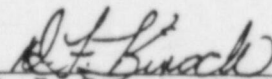
welder strike an arc with the nonconsumable tungsten electrode long enough for the H. P. Foley Quality Control Inspector to take amperage and voltage readings and record these on an In-Process Welding Inspection Report. The report also indicates that no weld rod was issued during this time. The signature of the Quality Control Inspector on the In-Process Welding Inspection Report indicates acceptance of recertification of the welder to the particular welding process. This particular welder was listed on the H.P. Foley Active Welders List dated April 27, 1983. An examination of employer payroll and weld rod withdrawal records indicated that this welder was promoted to foreman on January 18, 1983 and had performed no welding since that date, though he was considered qualified and able to perform, as a result of the recertification test on February 19, 1983.

This is a Severity Level IV Violation (Supplement II) applicable to Unit Nos. 1 and 2.

Pursuant to the provisions of 10 CFR 2.201, Pacific Gas and Electric Company is hereby required to submit to this office within thirty days of the date of this notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further items of noncompliance; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

MAY 19 1983

Date



D. F. Kirsch, Chief
Reactor Projects Section No. 3

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-275/83-13
50-323/83-10

Docket Nos. 50-275 and 50-323

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

Licensee: Pacific Gas and Electric Company
P. O. Box 7442
San Francisco, California 94120

Facility Name: Diablo Canyon Unit Nos. 1 and 2

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

Inspection Conducted: March 30 - April 6 and April 25-29, 1983

Inspectors:	<u><i>J. D. Carlson</i></u>	<u>5/19/83</u>
	J. D. Carlson, Senior Resident Inspector	Date Signed
	<u><i>G. H. Hernandez</i></u>	<u>5/19/83</u>
	G. H. Hernandez, Reactor Inspector	Date Signed
	<u><i>M. M. Mendonca</i></u>	<u>5/19/83</u>
	<i>for</i> M. M. Mendonca, Resident Inspector	Date Signed
Approved by:	<u><i>D. F. Kirsch</i></u>	<u>5/19/83</u>
	D. F. Kirsch, Chief Reactor Projects Section No. 3	Date Signed

Summary:

Inspection during the period of March 30-April 6 and April 25-29, 1983 (Report Nos. 50-275/83-13 and 50-323/83-10)

Areas Inspected: Unannounced special inspection by the two resident inspectors and one regional inspector of general and specific concerns expressed or implied by two former Howard P. Foley Company employees related to: excessive production pressure, control and handling of nonconformance reports, welding and welding inspection, and certification/qualification of personnel.

The inspection involved 242 inspection-hours by three NRC inspectors.

Results: Of the areas examined three items of noncompliance were identified: Failure to comply with procedural requirements for the processing of nonconformance reports (paragraph 5c), failure to requalify a welder in accordance with Code and procedural requirements (paragraph 5e), and failure to assure that measures are established to recertify welders in accordance with code requirements (paragraph 6).

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DETAILS

1. Individuals Contacted

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

- + F. W. Mielke, Chairman of the Board
- +*R. D. Etzler, Project Superintendent
- D. A. Rockwell, Assistant Project Superintendent
- W. A. Coley, Resident Electrical Engineer
- F. M. Russell, Resident Civil Engineer
- V. O. Smart, Electrical Inspector
- + R. T. Twiddy, Quality Assurance Supervisor
- + W. A. Raymond, Quality Assurance Manager
- + R. C. Thornberry, Plant Manager
- + J. D. Shiffer, Manager, Nuclear Plant Operations
- + R. Lockett, Regulation Compliance Engineer

b. Bechtel Power Corporation (Bechtel)

- +*J. W. Shryock, Site Completion Manager

c. Howard P. Foley Company (Foley)

- + F. Lench, Regional Vice-President
- + P. J. Bourque, Project Director
- +*A. E. Moses, Senior Project Manager
- +*R. Wilson, Quality Director
- + J. L. Thompson, Quality Assurance Manager
- + T. Canning, Quality Control Manager
- R. A. Carter, Assistant Quality Control Manager
- S. J. Ryan, Quality Assurance Engineer
- H. R. Rowland, Electrical Manager
- W. McCreery, General Superintendent
- L. Fidler, Quality Control Supervisor
- C. Agueda, Night Quality Control Supervisor
- R. G. Meek, Quality Control Supervisor
- G. Jackson, Ironworker Foreman
- R. Spencer, Quality Control Inspector

Several other Quality Control and Craft Personnel were also interviewed during the course of the special inspection.

- * Denotes personnel attending the exit management meeting of April 6, 1983.
- + Denotes personnel attending the exit management meeting of May 12, 1983.

2. Background

On March 3, 1983, the NRC became aware that a senior level individual, involved in Quality Control, had terminated employment with the Howard P. Foley Company at the Diablo Canyon site. At about the same time, the NRC became aware that a second individual involved in Quality Control had terminated employment with the H. P. Foley Company. In

order to establish whether the circumstances of that termination were related to the improper implementation of the H. P. Foley Quality Assurance Program, the senior level individual was interviewed, by an NRC Investigator and Branch Chief, on March 25, 1983. The interview was conducted under oath, in the presence of his attorney and the interview recorded by a qualified reporter. The concerns expressed or implied by the individual and the NRC findings are addressed in paragraph 5 of this report.

On April 5, 1983, representatives of the Attorney General of the State of California interviewed the two former H. P. Foley Company quality control employees that had terminated employment with the H. P. Foley Company on March 3, 1983. This interview included the former H. P. Foley Quality Control Manager who had been interviewed by the NRC on March 25, 1983. The testimony was recorded by a qualified court reporter and a transcript provided to the NRC. The concerns expressed or implied in the transcript are addressed in paragraph 5 of this report.

3. NRC Response

A team of three NRC inspectors conducted a special inspection at the Diablo Canyon Nuclear Power Plant site, during the period of March 30 - April 6 and April 25-29, 1983. This inspection included an examination of procedures; an examination of quality control inspector, auditor, and welder certifications; and interviews of personnel referred to by the former H. P. Foley Company employees in their testimony. The interviews of personnel at the site were conducted at the onsite office of the NRC resident inspector and included all personnel mentioned in the testimony and now presently employed by the H. P. Foley Company. The former Assistant Quality Control Manager for H. P. Foley, who terminated employment on the same day as the Quality Control Manager, was contacted (by telephone) to provide an opportunity for the individual to express his concerns or reservations with the quality of the H. P. Foley construction activities. Though an appointment was made and agreed upon with the individual, he failed to present himself for the interview. Further attempts by the NRC to contact this individual have not been successful.

4. NRC: Region V In-Office Inspection Effort

NRC inspection records were examined to address certain areas of concern, as expressed by the former H. P. Foley Company Quality Control Manager (H. P. Foley activities are addressed in approximately 50 NRC inspection reports between 1971 and 1983). The records related to NRC reviews of various aspects of the H. P. Foley Quality Assurance Program and its compliance with AEC/NRC regulatory requirements, including 10 CFR 50, Appendix B. The inspector noted that AEC/NRC Inspection Report dated May 6, 1971 (no inspection report number was assigned) examined the H. P. Foley Quality Assurance Program for the electrical and instrumentation currently in progress (Contract Specification No. 8807) and concluded that a suitable QA/QC program had been developed and was in place.

5. Summary of Concerns as Understood by the NRC

- a. Concern: The concern was expressed or implied that excessive production pressure, which allegedly manifested itself in the form of threats and intimidation toward quality personnel, subsequently resulted in by-passing of established quality control hold points and procedures.

NRC Findings: This concern was not substantiated.

A specific instance involving the violation of procedures for resolving a nonconformance report was identified. However, this item was not determined to be the result of harassment or threats by production management. This item is discussed separately in paragraph 5b.

To establish whether the concern of threats and intimidation toward quality personnel had substance, interviews were conducted with several H. P. Foley personnel including the Project Manager, the Acting Quality Control Manager, the Quality Assurance Manager, a number of Quality Control Supervisors, Inspectors, Iron Workers and Iron Worker Foremen. These interviews centered on whether any of these individuals had knowledge of any threats or intimidation directed toward themselves or quality and craft personnel in order to enhance production to the detriment of quality. While all personnel interviewed acknowledged a certain amount of pressure to expeditiously complete assigned tasks, none expressed any knowledge of threats or intimidation made either to themselves or in their presence. None of the personnel interviewed expressed any knowledge of directives from production management to by-pass quality control hold points, deliberately violate procedural requirements, and/or falsify quality records.

One item of noncompliance was identified during these interviews and is discussed in paragraph 5b.

- b. Concern: The specific concern was expressed that near the end of 1982 approximately ten "Red Hold Tags" attached to nonconforming material in the Fuel Handling Building were removed by the night shift Assistant Quality Control Manager in violation of procedural requirements.

NRC Findings: This concern was substantiated.

In addressing the specific concern that approximately ten "Red Hold Tags," had been removed from the Fuel Handling Building in violation of procedural requirements, the inspectors first attempted to locate and examine the subject tags. Testimony by the former Quality Control Manager indicated that the tags in question had last been seen in the H. P. Foley Quality Control Manager's office.

On March 30, 1983, the NRC inspectors conducted a search, of the H. P. Foley Quality Control Manager's office. The subject tags were not located. Discussions with H. P. Foley personnel indicated that the subject tags were probably destroyed after completion and approval of the associated nonconformance report. The H. P. Foley Quality Control Procedure for Processing and Control of Deviations and Nonconformances, QCP-3, does not require the retention of "Red Hold Tags" as quality records.

The interview with the new Assistant Quality Control Manager indicated that the "Red Hold Tags" in question dealt with nonconformances in the Unit 2 Fuel Handling Building where gouges had been made on about 15 structural steel beams during removal of grounding pads (connections to the structural steel for electrical equipment grounding). All of the nonconforming beams were documented on Nonconformance Report (NCR) No. 8802-802 and each beam was tagged with a "Red Hold Tag" referencing NCR No. 8802-802. The repairs of these gouges had proceeded to the point where much of the work was completed, though a few beams still required repair. The work on the already repaired beams had been accepted by Quality Control, but in accordance with procedural requirements, as contained in H. P. Foley Procedure No. QCP-3, none of the "Red Hold Tags" could be removed until the repair work on all of the beams was accomplished, accepted by Quality Control and the appropriate approval signatures obtained from H. P. Foley and PG&E engineering.

As indicated in the testimony of the former Quality Control Manager, craft personnel were and are extremely hesitant to work near or around "Red Hold Tags." Production supervision, on or about January 29, 1983, requested (of Quality Control) that "Red Hold Tags", attached to beams on which work had been inspected and accepted, be removed so that craft personnel could proceed with regularly scheduled work in the area. The new Assistant Quality Control Manager (at the time the night shift Assistant Quality Control Manager) upon reviewing the completed and accepted work, removed the "Red Hold Tags", for those beams where the work had been inspected and accepted by Quality Control. During the interview, the Assistant Quality Control Manager indicated that he did not, nor did he at the time of the interview, recognize this action as a violation of Quality Control Procedure QCP-3. The individual specifically stated that the removal of the "Red Hold Tags" (by him) was not done as a result of threats or intimidation by production management. The removal of "Red Hold Tags" prior to final approval of the entire nonconformance report appears to be a procedural violation of QCP-3. H. P. Foley Quality Control Procedure for Processing and Control of Deviations and Nonconformances, QCP-3, Revision 5, states in paragraph 4.3.11 that, "When all of the above steps (the steps delineating the review and approval cycle of the nonconformance report) have been completed the Nonconformance Report shall be

forwarded to Quality Engineering who shall coordinate removal of the "Red Hold Tags" and file the report in the Quality Files." The failure to comply with quality procedures for controlling and processing nonconformance reports is considered an apparent violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures or Drawings." (50-323/83-10/01)

- c. Concern: The concern was expressed or implied that H. P. Foley was not required to comply with Title 10 of the Code of Federal Regulations, Part 50 (10 CFR 50), Appendix B (Quality Assurance requirements).

NRC Findings: This concern was not substantiated.

An examination of H. P. Foley's Quality Assurance Program history indicates that H. P. Foley had a Quality Assurance Program in effect since September 4, 1970. On September 4, 1970, the Quality Assurance Manual for their first contract (Specification No. 8807) was approved by Pacific Gas & Electric. The program was developed using the criteria contained in the then recently issued 10 CFR 50, Appendix B. 10 CFR 50, Appendix B was issued by the AEC/NRC on June 27, 1970. The history of the contracts awarded to H. P. Foley, their areas of responsibility and the compliance of H. P. Foley's Quality Assurance to 10 CFR 50, Appendix B requirements up to 1974 is further described in item 5q of this report.

On October 16, 1974, the U. S. Atomic Energy Commission (AEC) issued their Safety Evaluation Report on the Diablo Canyon Nuclear Power Station Units 1 and 2. Paragraph 17.4 of this report states in part that:

"As a result of our detailed review and evaluation of PG&E's QA Program description contained in Section 17.2 of the FSAR and a series of discussions and meetings with the applicant, we conclude that the QA organization of PG&E has sufficient independence and authority to effectively conduct the QA Program without undue influence from those organizational elements responsible for cost and schedules."

In addition, Supplement No. 3 to the Safety Evaluation Report, dated September 18, 1975, in paragraph 17.3 states, in part, that:

"The quality assurance program for plant operation of Diablo Canyon, Units 1 and 2, complies with the guidance contained in WASH-1283 (May 24, 1974), "Guidance on Quality Assurance Requirements During Design and Procurement Phase of Nuclear Power Plants - Revision 1"; WASH-1284 (October 26, 1973), "Guidance on Quality Assurance Requirements During the Operations Phase of Nuclear Power Plants"; and WASH-1309 (May 10, 1974),

"Guidance on Quality Assurance Requirements During the Construction Phase of Nuclear Power Plants." This complies with our position on the implementation of guidance in quality assurance programs and is, therefore, acceptable.

Based on our evaluation as described in the Safety Evaluation Report and supplemented in this report, we now conclude that the Diablo Canyon Quality Assurance Program has the necessary controls to comply with the requirements of Appendix B to 10 CFR Part 50 and is, therefore, acceptable for controlling the operational phase of Diablo Canyon, Units 1 and 2."

Pacific Gas and Electric Company, in Chapter 3, paragraph 3.2.1, of the Final Safety Analysis Report (FSAR), states that:

"Appendix B to 10 CFR 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," requires that structures, systems, and components important to safety be designed and constructed in accordance with the quality assurance requirements described in Appendix B. Therefore, as described in Chapter 17 of the FSAR, the requirements of the Diablo Canyon Quality Assurance Program apply to all structures, systems, and components classified as Design Class I, this assures that plant features important to safety have met the requirements of Appendix B."

Chapter 17, of the FSAR states in paragraph 17.1.2 that:

"Pacific Gas and Electric Company's Quality Assurance Program requires that all contractors and suppliers of Design Class I items establish and maintain in effect quality assurance programs appropriate to the importance of their activities important to safety. Requirements for contractors' and suppliers' quality assurance programs are prescribed in design specifications. Specified requirements are based on 10 CFR 50, Appendix B. Contractors and suppliers are not permitted to proceed with their work until they have submitted a quality assurance manual describing their quality assurance program and have received approval from PG&E."

Based upon the above it is apparent that the H. P. Foley Company was required to implement a Quality Assurance Program as required by 10 CFR 50, Appendix B.

No items of noncompliance or deviations were identified.

- d. Concern: The concern was expressed or implied that H. P. Foley quality control inspectors and quality assurance auditors were not qualified in accordance with ANSI N45.2.6, "Qualifications

of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants", and ANSI N45.2.23, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants", respectively.

NRC Findings: This concern was not substantiated.

To address this concern the inspectors reviewed the qualification program for quality personnel working for the Howard P. Foley Company. This examination indicated that the program for qualification of personnel was specified and controlled by H. P. Foley Quality Control procedure QCP-6 "Indoctrination and Training," Revision 5.0, prior to December 1982.

This procedure specified the indoctrination process and job-related training requirements leading to certification as a fully qualified inspector. However, this program did not specify levels of qualifications and educational requirements, as required by ANSI N45.2.6, for quality control inspectors, and ANSI N45.2.23, for quality assurance auditors. The inspector reviewed the licensee's quality assurance program that was in effect at the time (before December 1982) and determined that ANSI N45.2.6 and N45.2.23, were not a commitment of the licensee's program and thus were never imposed on the contractors. On May 4, 1981, the NRC issued generic letter 81-01 which required all licensees of operating plants and holders of construction permits to endorse ANSI N45.2.6 for quality control inspectors and ANSI N45.2.23 for quality assurance auditors. The licensee responded in a letter, dated July 14, 1981, and committed to implement the above standards with minor exceptions prior to full power licensing of Unit No. 1. In August 1982, the licensee conducted a quality assurance audit (PG&E Audit No. 20801) of the H. P. Foley Quality Assurance Program and an audit finding was written against the H. P. Foley Quality Control/Quality Assurance Training Program for inspectors and auditors. In response to the audit findings, H. P. Foley generated a new procedure (QCP-6A) for qualification and certification of quality control inspectors and supervisors that follows the guidelines of ANSI N45.2.6. In addition, a new procedure has been drafted addressing the qualification of quality assurance auditors in accordance with ANSI N45.2.23.

The inspector reviewed the H. P. Foley qualification records for the Quality Control Manager, Quality Control Inspectors, Supervisors, Quality Assurance Auditors, Lead Auditors and the Quality Assurance Manager. Under the requirements of H. P. Foley Quality Control Procedure QCP-6, in effect at that time, the qualification records were satisfactory. However, a problem with implementing the new certification process required by the new procedure (QCP-6A) was identified by the licensee. In late December 1982, the H. P. Foley Company contracted with Cataract Engineering Company to supply

additional quality control personnel. These personnel were certified to a certain level by Cataract based on experience and verified by an investigative service. However, the resumes of the individuals, in some cases, did not support the certifications in some areas. This problem was identified by licensee Quality Assurance Audit No. 83043A, performed in February 1983, and further documented on Nonconformance Report No. 8802-824, dated March 17, 1983. Currently the licensee, the H. P. Foley Company, and Cataract Engineering Company are resolving the problem by verifying past employment of the personnel in question. In the interim, personnel with a potential resume problem are not being used in the field as quality control inspectors. This nonconformance report (NCR No. 8802-024) also notes that between December 7, 1982 and March 10, 1983, Level I inspection did not require a Level II co-signature, and further notes that, "This nonconformance encompasses both H. P. Foley direct inspection personnel and sub-contracted, Cataract Engineering Company personnel." The resolution of these licensee audit findings will be examined during a future inspection. (50-275/83-13-01)

No items of noncompliance or deviations were identified.

- e. Concern: The concern was expressed or implied that as a result of increased construction activity starting in September 1982 and the accelerated hiring of craft personnel, welders hired during this period might not be properly certified.

NRC Findings: The specific concern that welders hired since September 1982 might not be properly certified was not substantiated, however an apparent item of noncompliance with welder certification was identified during this examination and is detailed below.

To address this concern the inspectors examined H. P. Foley's Quality Control Procedure for Welder and Brazer Qualifications and the Qualifications of Welding and Brazing Procedures (QCP-5, Revision 8, dated 1/28/82) and determined that the procedure provides a system for qualifying welders and maintaining a continuous record of qualification status of all welders. The procedure references and appears to comply with the latest edition of the AWS D1.1, Structural Welding Code, for documenting test results and describes the steps necessary to qualify a procedure and a welder in accordance with Code requirements.

An examination of the qualification records for seventeen welders (ironworkers, pipefitters, and electrical welders) established that all of the welders certified since September 1982 had been properly certified and monitored in accordance with requirements of QCP-5. However, the inspector noted that one electrical welder (symbol "JX"), initially certified on February 27, 1980 to an AWS D1.1 Shield Metal Arc Welding (SMAW) Process, had last been monitored by Quality Control on

July 27, 1982. H. P. Foley procedural requirements specify that Quality Control must perform process monitoring for AWS D1.1 welding every six months for each welder to assure that welder qualifications do not lapse. This welder was found to be included in the H. P. Foley Active Welder's List and was performing work as a qualified welder as of March 31, 1983.

H. P. Foley procedure QCP-6 states in paragraph 6.4 that, "A list of qualified welders and brazers shall be maintained by the Quality Control Department. The list shall be revised whenever there is a change in status." In paragraph 5.1, the procedure states that, "Welder qualification shall be effective providing the welder has used the process qualified for within the following time periods: 6 months for welders qualified under Appendix "B", "C", "E", and "G"; or 3 months for welders qualified under Appendix "I"." Appendix C of the procedure describes the steps necessary to qualify a welder to the AWS D1.1, Structural Welding Code, latest revision, for groove welds of unlimited thickness. Successful completion of this qualification test also qualifies the welder for welding fillet welds on material of unlimited thickness.

QCP-5 further states in paragraph 5.1.1 that, "The Quality Control Department shall monitor each welder for each process qualified within the time period above to ensure that the welder's qualifications do not lapse." This welder's (symbol "JX") qualifications had effectively lapsed on January 27, 1983. The failure to assure that welder qualification is maintained in accordance with procedural and code requirements is considered an apparent item of noncompliance with 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." (50-275/83-13-02) (50-323/83-10-02)

- f. Concern: The concern was expressed that the final typed version of Nonconformance Report (NCR) No. 8802-819, dated March 4, 1983, varied substantially from the original rough draft of the NCR. This NCR documents a situation where, on March 2, 1983, H. P. Foley Quality Control Inspectors, assigned to attend weld rod ovens in the Fuel Handling Building, left the site before assuring that all weld rod was returned. On this day (March 2, 1983), the site was evacuated due to inclement weather and deteriorating road conditions.

NRC Findings: This concern was not substantiated.

To address this concern, the inspectors examined the final typed copy and earlier revisions of Nonconformance Report No. 8802-819. This examination did not identify any substantial change in the sentence structure or wording which could reasonably be interpreted as changing the intent, meaning or description of the nonconforming condition or of the recommended disposition. During this examination of the nonconformance report and related data, the inspector noted that Inspection Report (IR) No. 8802-1344, written by a H. P.

Foley Quality Control Inspector on March 3, 1983, initially documented the weld rod problem and provides a very descriptive explanation of the cause of the nonconformance as well as a proposed disposition. Neither the condition description nor the proposed disposition (as contained in Foley Inspection Report No. 8802-1344) varied substantially from the nonconformance report wording. The major difference was that the nonconformance report contained additional instructions and actions to prevent recurrence of the identified problem. The documentation of Inspection Reports findings on Nonconformance Reports is in accordance with Foley Quality Control Procedure No. QCP-3, Revision 5.0, "Processing and Control of Deviations and Nonconformances."

No items of noncompliance or deviations were identified.

- g. Concern: The concern was expressed or implied that, in general, nonconformance reports and their associated "Red Hold Tags" were not being properly controlled and processed.

NRC Findings: This concern was not substantiated.

The NRC inspectors performed a documentation examination of all of H. P. Foley's nonconformance reports, written in February and March 1983, for the Fuel Handling Building modifications. From these nonconformance reports, approximately ten uncompleted reports were selected and the proper posting of the associated "Red Hold Tag" confirmed by locating the actual tags in the field. The inspectors also compared the rough drafts of all of the above mentioned nonconformance reports to the final typed versions. This examination indicated that there were no significant changes between the initial drafts and the final versions of the reports.

Subsequently, the inspectors examined the documentation and technical resolution of all of the above noted nonconformance reports to determine if the resolutions appeared acceptable. All resolutions were determined to be acceptable and technically adequate, except for one report, as detailed below.

Nonconformance Report No. 8833R-54, dated March 23, 1983 describes a situation where Nondestructive Examination of fillet welds for structural steel connections in the Unit No. 1 Fuel Handling Building identified number of weld discrepancies. The type of weld discrepancies identified included cracks, linear indications, and undercut and involved 16 structural steel connections. The inspector notes that each connection contains over 60 welds. The section of the NCR entitled "Disposition including means to prevent recurrence" required the removal of the weld discrepancies in accordance with Foley's weld repair procedures, and contained the further amplification, "To change the rod issue period to 3 hours to prevent moisture pickup and/or add portable rod ovens until the rainy season ends." This disposition was approved and signed by the responsible licensee personnel.

The apparent implications of this type of weld discrepancy did not appear to be evaluated by the licensee or H. P. Foley for generic consequences. Discussions with Foley quality supervision and engineers indicated that they would discuss this item with licensee construction and engineering personnel to determine whether the disposition was properly evaluated in accordance with quality and regulatory requirements. This item is considered unresolved pending examination of the licensee's evaluation of this subject. (50-275/83-13-03 and 50-323/83-10-03)

- h. Concern: The concern was expressed or implied that, due to the large increase in construction personnel the quality of welding has degraded.

NRC Findings: This concern was substantiated in part.

The concern regarding welding quality has been addressed by routine NRC inspection reports that have identified procedural noncompliance (Reference: NRC Inspection Report Nos. 50-275/83-08 and 50-323/83-07) with regard to H. P. Foley welding activities. The noncompliances identified indicated a problem with training and procedural adherence, both by the welders and Quality Control Inspectors. As a result of the NRC findings, the licensee has taken action to resolve the identified weld discrepancies by instituting a reinspection and training program, increased licensee surveillances of H. P. Foley welding activities, and reorganization of H. P. Foley's Quality and Production Management. The issue of welding quality is further addressed in paragraph 5p of this report, in addition to the referenced NRC inspection reports.

No additional items of noncompliance or deviations were identified.

- i. Concern: The concern was expressed or implied that the installation and routing of instrumentation tubing and electrical conduit and associated supports were performed without design drawings.

NRC Findings: The concern was substantiated in part, however, no safety concern was identified.

A review of the installation program indicated that instrumentation tubing and electrical conduits were generally field routed. This procedure requires that the craftsman route the tubing and conduit per allowable pre-specified guidelines (slopes, curvature, joining locations, etc. through the "best" route available). This method was specified to accommodate obstructions (hangers, re-bar and support installations, etc.) that may exist in the field. A review of the programs utilized by the licensee for installation of supports and routing of electrical conduit and instrumentation tubing is given below.

- (1) Electrical Conduit Supports: From the start of construction, supports have been designed by engineering at PG&E's General Office and installed per those designs. These designs have been formalized in controlled drawings Nos. 050029 and 050030. These drawings initially were issued on January 20, 1969 and June 7, 1971, respectively. These drawings provide notes, symbols and typical details of Raceway and Wire Supports, and Class IE Electrical Raceway Supports, respectively. Therefore, electrical conduit supports appear to have been controlled and installed by the use of the pre-established design details described above.
- (2) Instrumentation Tubing Supports: At the start of construction, installation occurred without a formalized set of controlled drawings, however, an engineering review of each as-built installation was performed by licensee engineering personnel after installation. On April 3, 1974, the licensee adopted a controlled drawing No. 049238 which contained acceptable instrumentation supports and design methods. Also at this time, the licensee required as-built drawings of all instrumentation tubing supports; and for those supports that were not detailed in controlled drawing No. 049238 an engineering analysis was performed. After April 3, 1974, instrumentation tubing supports were built and inspected for compliance with the drawing of acceptable supports and design methods.

Therefore, the concern was substantiated in part in that no unique design drawing exists for each electrical conduit and instrumentation tubing run or support. However, this condition is acceptable since other compensating control measures were and are implemented.

Additionally, the conduct of inspections per the Systems Interaction Program (SIP) provides assurance that failures in a non-safety related system will not adversely impact on adjacent safety related systems. This includes instrumentation tubing and electrical conduit, so that additional assurance of the acceptability of actual field routing is provided by the SIP Program.

No items of noncompliance or deviations were identified.

- j. Concern: The concern was expressed or implied that the Quick Fix Design Change (QFDC) procedure and Engineering Disposition Request (EDR) program are used to bypass quality control functions.

NRC Findings: This concern was not substantiated.

A review of the QFDC and EDR programs determined that both of these programs are used for in-process design changes or clarifications. These programs are designed to expedite work on modifications in order that when a problem was encountered,

or there was a question on the engineering interpretation of a design, the QFDC or EDR programs, respectively, could be used to obtain a response from engineering before quality control would be directed to perform their inspection.

The QFDC procedure draws its authority from PG&E's Procedure for Civil Structural Design Modification (No. CE-DC-5). Section 3.6 of this procedure states that, "General Construction may as-built in accordance with their guidelines or obtain approval from the Onsite Project Engineering Group (OPEG) or Home Office." With this authority, PG&E General Construction has required H. P. Foley to establish a procedure for the QFDC.

H. P. Foley Procedure QCP-17, Appendix F, prescribes the requirements for the control of QFDC's. This procedure describes how modifications of approved issued drawings are to be initiated. The intent of this procedure is to provide a system for controlling and approving design changes in a timely manner. This system may be used to address such things as errors, omissions on drawings, interferences, simplification of work, in-process work correction and drawing interpretation. The system assures that any design changes, generated in accordance with the requirements and limitations of this procedure, are properly addressed.

Further, this procedure establishes that H. P. Foley Quality Control is to provide inspection and documentation of work performed in accordance with this procedure and other applicable procedures. Therefore, the QFDC explicitly requires quality control inspection.

H. P. Foley Procedure (QCP-1) prescribes methods for the use of Engineering Disposition Requests (EDR), which are H. P. Foley prepared documents that request engineering interpretation of design and are sent to PG&E for evaluation and resolution. The responsible Resident Engineer for PG&E then prepares a disposition and transmits the EDR back to H. P. Foley. H. P. Foley uses the disposition to resolve the situation, and the work proceeds with the EDR attached to the work package for clarification.

Therefore, the QFDC and the EDR program are controlled and do not by-pass quality control functions.

No items of noncompliance or deviations were identified.

- k. Concern: The concern was expressed or implied that high ozone levels in the Fuel Handling Building might impact on the quality of work in this area.

NRC Findings: The concern was not substantiated.

Air quality in the Fuel Handling Building was identified as a potential problem in February 1983. This concern was identified to CAL-OSHA who investigated the problem and measured not only ozone concentrations but also the levels of

carbon monoxide, welding fumes, arsenic levels, and grinding dust, in the Fuel Handling Building. The CAL-OSHA findings indicated that there was "no significant amount of ozone or carbon monoxide and that there were no employee overexposures". These findings were confirmed by the NRC through telephone conversations with CAL-OSHA and are contained in CAL-OSHA report No. 54226 dated February 10, 1983. Therefore, there is no evidence to substantiate the concern that high levels of air pollution existed or resulted in deficient work.

No items of noncompliance or deviations were identified.

- l. Concern: The concern was expressed or implied that excessive work hours were adversely affecting the quality control inspection effort.

NRC Findings: This concern was not substantiated.

An examination of tabulated work-hours for H. P. Foley Quality Control Inspectors and Supervisors, between December 7, 1982 and March 8, 1983, indicated that 90% of all Quality Control Inspectors and Supervisors worked more than 60 hours a week during this period, with three inspectors working 80 hours a week or more. The relationship between excessive work-hours for Quality Control personnel and the effect on the quality of their inspection effort cannot be precisely established, though the NRC has previously identified problems with H. P. Foley's welding activities in the Fuel Handling Building (Reference: NRC Inspection Report No. 50-275/83-08 and paragraph 5p of this report). Excessive work hours are clearly undesirable, and discussions with licensee representatives indicated that actions have been taken to reduce the amount of overtime. Licensee and contractor actions in this area will be assessed in the NRC followup to the notice of violation issued in NRC Inspection Report No. 50-275/83-08.

No items of noncompliance or deviations were identified.

- m. Concern: The concern was expressed or implied that H. P. Foley's Quality Assurance/Quality Control organization was not independent.

NRC Findings: The concern was not substantiated.

10 CFR 50, Appendix B, Criterion I, "Organization", states, in part that, "That persons and organizations performing quality assurance functions shall have a sufficient authority and organizational freedom to identify quality problems; to initiate, recommend or provide solutions; and verify implementation of solutions. Such persons performing quality assurance functions shall report to a management level such

that this required authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations, are provided. Because of the many variables involved, such as the number of personnel, the type of activity being performed and the location or locations where activities are performed, the organizational structure for executing the quality assurance program may take various forms provided that the persons and organizations assigned the quality assurance functions have this required authority and organizational freedom. Irrespective of the organizational structure, the individual(s) assigned the responsibility for assuring effective execution of any portion of the quality assurance program at any location where activities subject to this Appendix are being performed shall have direct access to such levels of management as may be necessary to perform this function."

A review of the H. P. Foley organization up to March 29, 1983, indicated that although the organization was structured such that Production and Quality Management reported to the H. P. Foley Senior Project Manager, a dotted line (communication) relationship existed from the Quality Assurance Manager to a regional Vice President in H. P. Foley's corporate offices in Martinez, California. Therefore, the H. P. Foley Company's organization met the requirements stated above in that access to high levels of management was available to the Quality Department. Discussions with the Quality Assurance Manager indicated that he was aware of the availability of this option. On March 29, 1983, a Quality Director position was created, which has responsibility for both Quality Assurance and Quality Control functions. The Quality Director and the Senior Project Manager now report to the newly created position of onsite Project Director. The dotted line (communication) relationship from the Quality Director to the regional Vice-President in Martinez, California is an option still available to the Quality Department.

No items of noncompliance or deviations were identified.

- n. Concern: The concern was expressed or implied that material from Bostrom-Bergen Company was received without the necessary documentation.

NRC Findings: The concern was substantiated, however this item was the subject of previous NRC enforcement action (Reference: NRC Inspection Report No. 50-323/82-09) and corrective action has been verified by the NRC (Reference: NRC Inspection Report No. 80-323/82-13).

On December 14, 1981 an allegation concerning acceptance of Bostrom-Bergen supplied material by the H. P. Foley Company, without the proper documentation was received by the NRC. Subsequent investigation of this allegation (see NRC Inspection Reports Nos. 50-323/82-06, 82-08 and 82-09) resulted in the

issuance of an item of noncompliance on June 14, 1982, documenting the failure of H. P. Foley to follow quality procedures in the processing of nonconforming material. In response to the item of noncompliance, the licensee directed the contractor to perform a 100% audit of all Class I purchase orders dating back to 1978, to revise the contractor's procedures to ensure that proper controls exist for controlling of nonconforming material until receipt of proper documentation, and to conduct training sessions for personnel in regard to these procedure changes. As documented in NRC Inspection Report No. 50-323/82-13, the NRC inspector verified implementation of the licensee's specified corrective actions and concluded that the licensee's actions were proper and satisfactory.

No additional items of noncompliance or deviations were identified.

- o. Concern: The concern was expressed or implied that water had been seen in and around buried electrical conduits in the intake structure.

NRC Findings: The concern was substantiated in part. However, as a result of problems identified by the licensee on February 29, 1980 the licensee has taken action to divert, control, and minimize water damage to those conduits.

On February 29, 1980 a potentially reportable deficiency was reported to the NRC, (Reference: PG&E Nonconformance Report No. DCI-80-RE-003) wherein the licensee identified the insulation failure of a number of electrical conductors routed to the Unit 1 intake structure. These insulation failures apparently occurred as a result of damage to, or breakage of, the buried conduits carrying the conductors. This deficiency, if left uncorrected, would have affected the operation of safety-related Auxiliary Salt Water System equipment for Unit 1 located in the intake structure. As a result, PG&E directed that electrical conduits and cables be repaired, with the conduits run in a concrete envelope on top of a concrete leveling pad. In addition, concrete dikes were installed to divert and control water, and the design of the concrete envelope was reviewed by soil consultants for seismic considerations. It has been determined that since that period no failures of insulation or circuits have been identified in that area of the intake structure.

No items of noncompliance or deviations were identified.

- p. Concern: The concern was expressed or implied that the quality of welding was not adequate in the Fuel Handling Building. In addition, it was alleged that 80% of all nonconformances were being identified in the Fuel Handling Building.

NRC Findings: This concern was substantiated, in part. As a result of NRC inspection from February 28 to March 4, 1983

(Report Nos. 50-275/83-08 and 50-323/83-07) a number of problems regarding Fuel Handling Building (FHB) welding were identified and a notice of violation issued. In response, the licensee instituted a program to reinspect 10% of the recent Fuel Handling Building welding, the findings of which subsequently led to a 100% reinspection. Preliminary results of this reinspection indicate that about 2% of the FHB welds require added filler metal and another 8% require grinding of weld metal. This general concern will be followed and considered in the licensee's response to the Notice of Violation and during subsequent inspections.

In order to determine whether the concern regarding the high percentage of nonconformances in the Fuel Handling Building was accurate, the inspectors examined all nonconformances written during the month of February. This examination determined that the percentage of nonconformance reports concerning identified problems in the Fuel Handling Building, versus total number of nonconformance reports written on all H. P. Foley construction activities, was approximately 45% (as opposed to the alleged 80%). Therefore, this portion of the concern could not be substantiated. However, the quality of the welding activities in the Fuel Handling Building is a known item of concern to the NRC and will be continue to receive above average inspection effort.

No items of noncompliance or deviations were identified.

- q. Concern: The concern was expressed or implied that prior to 1974, there was no formal Quality Assurance Program, no nonconformance reports (NCRs) written, and a weakness existed in Quality Control functions (no inspection of tool calibration, electrical raceways, weld rod control, welding procedure and material receipt).

NRC Findings: This concern was not substantiated.

The inspector examined the quality programs for H. P. Foley prior to 1974. The inspector's examination determined that, for each contract awarded to H. P. Foley by PG&E, there existed a Quality Assurance Manual and implementing Quality Control procedures. A description of the various H. P. Foley quality programs follows:

The first contract specification awarded to H. P. Foley was specification Number 8807. This basic electrical contract specification was approved by PG&E on September 4, 1970. The quality program for this specification addressed:

- 1) Receipt, storage, handling, and inspection of electrical equipment, conduit, and wire.
- 2) Installation of electrical equipment, conduit, cable trays, wire and grounding.

- 3) Document control and drawing control
- 4) Control of test instrumentation equipment and tools
- 5) Quality Assurance Organization and qualification of personnel
- 6) Maintenance of installed equipment
- 7) Discrepancy reports and reject tags (predecessor to NCR and hold tags)

Welding or weld rod control was not addressed in this procedure until January 1974. The reason that no welding or weld rod control procedures existed, during this period, was that H. P. Foley was not required by contract (Contract No. 8807) to perform welding. When H. P. Foley was awarded cleanup Contract Specification Number 8771 (in January 1974), welding and weld rod control requirements were included in both Contract No. 8807 and Contract No. 8771.

Prior to 1974, H. P. Foley had one additional contract with PG&E (specification No. 8802). This contract was for small electrical components, raceway, and instrumentation installation and was approved by PG&E on August 8, 1972. This specification included a Quality Assurance Manual and implementing quality control procedures addressing:

- 1) Receipt, handling, storage, installation and maintenance of electrical equipment, cable trays and conduits
- 2) Wire pulling, testing and termination
- 3) Document and drawing control
- 4) Test instruments and control
- 5) Calibration of test instruments.

No welding or weld control was required by this specification. Additionally, the inspector noted that a Discrepancy Report process was in effect at the time and served the same function as the current NCR process. Therefore, the Quality Assurance Manual and Quality Control procedures did include provisions contrary to each of the expressed or implied concerns.

No items of noncompliance or deviations were identified.

- r. Concern: The concern was expressed or implied that the "mirror image" concept used in the construction of Unit No. 1 and Unit No. 2 was confusing and resulted in excessive craft errors.

NRC Findings: This concern was not substantiated. However, it should be recognized that the "mirror image" concern did contribute to the design problem that resulted in the suspension of the Unit No. 1 fuel load/low power test license in November 1981. This subject is being addressed in a comprehensive program for the reverification of the plant design and is outside the scope of this special inspection.

In addressing the concern that the "mirror image" concept caused confusion and craft errors during the installation of equipment and systems in the field, the inspectors interviewed H. P. Foley Company production and quality control personnel to determine their impressions of this concern. None of the individuals interviewed indicated that this concern was valid.

No items of noncompliance or deviations were identified.

- s. Concern: The concern was expressed that the inspector-to-worker ratio was inadequate prior to 1974.

NRC Findings: The concern was not substantiated.

An examination of the H. P. Foley organization and Quality Assurance/Quality Control manpower levels prior to June 4, 1974 indicated that there were 23 persons involved in quality assurance/quality control functions during this period. The organization consisted of four supervisors, fifteen inspectors, and four clerks. According to the former H. P. Foley Company employees (Reference: State of California transcript, page 23) in 1973 the H. P. Foley Quality Department consisted of, "A manager, assistant manager, and two or three inspectors." Based on the findings of the NRC inspectors as noted above, this portion of the concern could not be substantiated.

The testimony of the two former H. P. Foley employees further indicates that craft personnel during this period totaled, "two or three hundred electricians." Using these numbers, the inspector-to-craft ratio (using 19 inspectors to 300 craft workers) would be 1:16. Interviews conducted with H. P. Foley management indicated the inspector to craft ratio actually varied anywhere from 1:10 to 1:20 during this period because of varying workload and the fact that Quality Control Inspectors only examined Class I work, as opposed to Class II work which received no quality control inspection. Class II identifies structures, systems and components which are not nuclear safety related.

Although the NRC has no regulations regarding appropriate ratios of Quality Assurance/Quality Control inspectors to craft

personnel, the NRC did perform a nationwide survey on this subject in June 1981. The survey results were inconclusive. The ratio of inspector to craft varied anywhere from 1:1.7 (WNP-2) to 1:26 (Palo Verde). In addition to the contractor QA/QC organizations, the licensee maintains their own QA/QC organization which provides for surveillance and audit of contractor activities. Furthermore, the licensee maintains a staff of personnel, assigned to each of the Resident Electrical, Mechanical, Civil and Startup Engineers, who also provide for inspection and overview of the work performed by site contractors. These personnel further increase the inspector/craft ratio.

The inspector considers that a substantial conclusion regarding the adequacy of the inspector-to-craft ratio at Diablo Canyon during this period cannot be established with certainty.

No items of noncompliance or deviations were identified.

6. Additional NRC Inspections

During the course of interviewing individuals referenced in the testimony of the former Quality Control Manager and the Assistant Quality Control Manager, the NRC inspectors became concerned that methods used by the H. P. Foley Company for recertifying welder or welding operators might not meet the intent of the ASME Code. This report identifies a similar problem wherein a welder was not recertified within the time limits specified by the AWS Code, as well as, contractor procedural requirements. This item is the subject of NRC enforcement action and is addressed in paragraph 5e of this report. This new NRC concern deals with the methods employed by H. P. Foley to recertify welders or welding operators.

The 1980 Edition of ASME Boiler and Pressure Vessel Code, Section IX, "Welding and Brazing", Subarticle QW-322, "Renewal of Qualifications", states that, "Renewal of qualification of a performance qualification is required: (a) when a welder or welding operator has not used the specific process, i.e., metal-arc, gas, submerged arc, etc., for a period of three months or more; except when employed on some other welding process, the period may be extended to six months; or (b) when there is a specific reason to question his ability to make welds that meet the specification. Renewal of qualification for a specific welding process under (a) above may be made in only a single test joint (plate or pipe) on any thickness, position, or material to re-establish the welder's or welding operator's qualification for any thickness, position, or material for which he was previously qualified."

A review of forty H. P. Foley welder certifications determined that all welders were certified or recertified in accordance with H. P. Foley's Quality Control Procedure, QCP-5 "Welder and Brazing Qualifications and the Qualification of Welding and Brazing Procedures." However, the inspector noted that one welder, (symbol

S-4, recertified on February 19, 1983, to an ASME Welding Procedure Specification (WPS) No. M-03, a Gas Tungsten Arc Welding (GTAW) process), apparently was recertified by having the welder strike an arc with the nonconsumable tungsten electrode long enough for the H. P. Foley Quality Control Inspector to take amperage and voltage readings and record these readings on an In-Process Welding Inspection Report. The report also indicates that no weld rod was issued during this time. The signature of the Quality Control Inspector on the In-Process Welding Inspection Report apparently accepts the recertification of the welder to the particular welding process. This particular welder was found to be on the H. P. Foley Active Welders List, dated April 27, 1983. The NRC inspectors are aware that this particular individual did not perform welding after this certification. A review of employer payroll and weld rod withdrawal records indicated that this welder had been promoted to Foreman on January 18, 1983 and had not performed welding since that date. However, it is of concern that he had been placed on the Active Welder's List and was considered ready and able to perform welding based on the re-certification of February 19, 1983.

For those welders that were re-certified and had not used a welding process for 3 months or more, the inspectors observed that the In-Process Welding Inspection Report fails to indicate whether the welders were recertified by making a test joint (on a plate or pipe) or by in-process welding in accordance with the Code. Thus, the inspector is concerned that the discrepant welder requalification process described above, may have been used to recertify welders currently appearing on the Active Welders List.

It appears that measures were not established to assure that recertification of welders was accomplished in accordance with the Code and the requirements of 10 CFR 50, Appendix B, Criteria IX, "Control of Special Processes". This is an apparent item of noncompliance (50-275/83-13-04 and 50-323/83-10-04).

7. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, or items of noncompliance, or deviations. An unresolved item was identified during this inspection and is discussed in paragraph 5g of this report.

8. Exit Interview

During the course of the special inspection, the inspectors had numerous discussions with licensee and Foley personnel determine whether or not the concerns were substantiated. On April 6, 1983, the inspectors met with the licensee's Project Superintendent and discussed the findings of the special inspection at that point. A final discussion was held on May 12, 1983 wherein the three items of noncompliance (see Appendix A to the cover letter) and the one unresolved item were identified. As noted in the above, the majority of the concerns were not substantiated. However a number of noncompliances were identified, which, coupled with previously noted problems with this contractor and other noted items (high overtime for QC personnel, greatly accelerated hiring and construction rates) give us cause for concern. Accordingly, additional licensee management actions are warranted. The NRC will evaluate the effectiveness of actions taken following receipt of the licensee's response to the Notice of Violation and the additional requested information.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

JUL 8 1983

NOTICE OF SIGNIFICANT LICENSEE MEETING

Name of Licensee: Pacific Gas and Electric Company

Name of Facility: Diablo Canyon

Docket Number: 50-275/323

Date and Time of Meeting: [REDACTED]
6:00 P.M.

Location of Meeting: NRC Region V Office Conference Room (third floor)
1450 Maria Lane
Walnut Creek, California

Purpose of Meeting: Reactor Coolant System Piping Minimum Wall Thickness, Presentation of Data by Licensee and Discussion with NRC Personnel

NRC Attendees: J. B. Martin, Regional Administrator, Region V
J. L. Crews, Technical Assistant to the Administrator, Region V
L. J. Chandler, Council, Office of the Executive Legal Director
T. W. Bishop, Chief, Reactor Projects Branch 2, Region V
D. F. Kirsch, Reactor Projects Section 3, Region V
J. D. Carlson, Senior Resident Inspector
M. M. Mendonca, Resident Inspector
P. J. Morrill, Reactor Inspector, Region V
G. W. Knighton, Chief, Licensing Branch No. 3

Licensee Attendees: G. Maneatis, Executive Vice President
H. Friend, Project Completion Manager
C. Dick, Project Quality Assurance Manager
S. Skidmore, Manager of Quality Assurance
R. Etzler, Project Superintendent
R. Locke, Counsel for the Licensee
R. Thornberry, Plant Manager
J. Hoch, Project Manager

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Other
Attendees: Representative(s) of the Independent Verification
 Program -- Teledyne and Stone & Webster
 Representative(s) of the Governor of the State of
 California
 Representative(s) of the Joint Intervenors

Distribution:
NRC Attendees Listed
D. G. Eisenhut, NRR
B. C. Buckley, NRR
H. E. Schierling, NRR
B. H. Faulkenberry, RV
Docket Service List (attached)

July 14, 1983

Docket Nos. 50-275 and 50-323

AGENDA

Licensee: Pacific Gas and Electric Company

Facility: Diablo Canyon

Date and July 14, 1983

Time of 6:00 P.M.

Meeting:

Location: NRC Region V Offices
Conference Room (third floor)
1450 Maria Lane
Walnut Creek, California

Subject: Reactor Coolant System Piping Minimum Wall Thickness Measurements,
Presentation of Data by Licensee and Discussion with NRC Personnel

1. Introduction, scope and purpose of meeting - J. B. Martin, Regional Administrator, Region V
2. Licensee Introductory Remarks - G. A. Maneatis, Executive Vice President, PG&E
3. Presentation by PG&E Personnel
Discussion of the PG&E report submitted to the NRC on July 4, 1983
4. Presentation by Independent Verification Program Personnel
5. Discussion with NRC staff personnel
6. Comments by the Representatives of the Governor and the Joint Intervenors.
7. Concluding remarks for the licensee G. Maneatis, Executive Vice President, PG&E
8. Concluding Remarks - J. B. Martin, Regional Administrator, Region V

NOTE: A transcript will be taken for this meeting.