U.S. NUCLEAR REGULATORY COMMISSION

PDR-016

RESPONSE TO FREEDOM OF INFORMATION ACT (FOIA) REQUEST

NRC FOIA REQUEST NUMBER(S): FOIA-84-743

RESPONSE TYPE: [ ] FINAL [X] PARTIAL 9 ch

DATE: JAN 22 1988

DOCKET NUMBER(S) (If applicable)

REQUESTER: Mr. Devine and Ms. Dyson

PART I. – RECORDS RELEASED OR NOT LOCATED (See checked boxes)

- [ ] No agency records subject to the request have been located.
- [ ] No additional agency records subject to the request have been located.
- [X] Agency records subject to the request that are identified in Appendix U are already available for public inspection and copying in the NRC Public Document Room, 1717 H Street, N.W., Washington, DC.
- [X] Agency records subject to the request that are identified in Appendix R are being made available for public inspection and copying in the NRC Public Document Room, 1717 H Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.
- [ ] The nonproprietary version of the proposal(s) that you agreed to accept in a telephone conversation with a member of my staff is now being made available for public inspection and coying at the NRC Public Document Room, 1717 H Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.
- [ ] Enclosed is information on how you may obtain access to and the charges for copying records placed in the NRC Public Document Room, 1717 H Street, N.W., Washington, DC.
- [ ] Agency records subject to the request are enclosed. Any applicable charge for copies of the records provided and payment procedures are noted in the comments section.
- [ ] Records subject to the request have been referred to another Federal agency(ies) for review and direct response to you.
- [ ] In view of NRC's response to this request, no further action is being taken on appeal letter dated _____.

PART II.A – INFORMATION WITHHELD FROM PUBLIC DISCLOSURE

- [X] Certain information in the requested records is being withheld from public disclosure pursuant to the FOIA exemptions described in and for the reasons stated in Part II, sections B, C, and D. Any released portions of the documents for which only part of the record is being withheld are being made available for public inspection and copying in the NRC Public Document Room, 1717 H Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.

Comments: The staff has informed us that these records are also responsive to your separate requests FOIA-84-744 and FOIA-84-776. Further, we are not providing records that were originated by your organization.

50-275
50-323

SIGNATURE, DIRECTOR, DIVISION OF RULES AND RECORDS

Donnie H. Grimsley

8801270176 880122
PDR FOIA
DEVINE84-743 PDR

NRC FORM 464 (Part I)
(9-86)

FREEDOM OF INFORMATION ACT RESPONSE FOIA NUMBER(S): FOIA-84-743 DATE JAN 22 1988

PART II B – APPLICABLE FOIA EXEMPTIONS

Records subject to the request that are described in the enclosed Appendices S AND T are being withheld in their entirety or in part under FOIA Exemptions and for the reasons set forth below pursuant to 5 U.S.C. 552(b) and 10 CFR 9.5(a) of NRC Regulations.

	1. The withheld information is properly classified pursuant to Executive Order 12356 (EXEMPTION 1)
	2. The withheld information relates solely to the internal personnel rules and procedures of NRC. (EXEMPTION 2)
	3. The withheld information is specifically exempted from public disclosure by statute indicated: (EXEMPTION 3)
	Section 141-145 of the Atomic Energy Act which prohibits the disclosure of Restricted Data or Formerly Restricted Data (42 U.S.C. 2161-2165).
	Section 147 of the Atomic Energy Act which prohibits the disclosure of Unclassified Safeguards Information (42 U.S.C. 2167).
	4. The withheld information is a trade secret or commercial or financial information that is being withheld for the reason(s) indicated: (EXEMPTION 4)
	The information is considered to be confidential business (proprietary) information.
	The information is considered to be proprietary information pursuant to 10 CFR 2.790(d)(1).
	The information was submitted and received in confidence from a foreign source pursuant to 10 CFR 2.790(d)(2).
	5. The withheld information consists of interagency or intraagency records that are not available through discovery during litigation. Disclosure of predecisional information would tend to inhibit the open and frank exchange of ideas essential to the deliberative process. Where records are withheld in their entirety, the facts are inextricably intertwined with the predecisional information. There also are no reasonably segregable factual portions because the release of the facts would permit an indirect inquiry into the predecisional process of the agency. (EXEMPTION 5)
X	6. The withheld information is exempted from public disclosure because its disclosure would result in a clearly unwarranted invasion of personal privacy. (EXEMPTION 6)
X	7. The withheld information consists of investigatory records compiled for law enforcement purposes and is being withheld for the reason(s) indicated. (EXEMPTION 7)
	Disclosure would interfere with an enforcement proceeding because it could reveal the scope, direction, and focus of enforcement efforts, and thus could possibly allow them to take action to shield potential wrongdoing or a violation of NRC requirements from investigators. (EXEMPTION 7(A))
X	Disclosure would constitute an unwarranted invasion of personal privacy (EXEMPTION 7(C))
	The information consists of names of individuals and other information the disclosure of which would reveal identities of confidential sources. (EXEMPTION 7(D))

PART II.C – DENYING OFFICIALS

Pursuant to 10 CFR 9.9 and/or 9.15 of the U.S. Nuclear Regulatory Commission regulations, it has been determined that the information withheld is exempt from production or disclosure, and that its production or disclosure is contrary to the public interest. The persons responsible for the denial are those officials identified below as denying officials and the Director, Division of Rules and Records, Office of Administration, for any denials that may be appealed to the Executive Director for Operations (EDO).

DENYING OFFICIAL	TITLE/OFFICE	RECORDS DENIED	APPELLATE OFFICIAL	
			SECRETARY	EDO
John B. Martin	Regional Administrator, Region 5	Portions - Appendix S In Entirety - Appendix T		X

PART II D – APPEAL RIGHTS

The denial by each denying official identified in Part II.C may be appealed to the Appellate Official identified in that section. Any such appeal must be in writing and must be made within 30 days of receipt of this response. Appeals must be addressed as appropriate to the Executive Director for Operations or to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should clearly state on the envelope and in the letter that it is an "Appeal from an Initial FOIA Decision."

FOIA-84-743
(9th Partial)

APPENDIX R

RELEASED RECORDS

1.	Undated	Nonconformance Report, DCO-83-SC-N007, Page 2 (1 page).
2.	Undated	Handwritten Notes (1 page).
3.	10/19/79	Ltr To Mr. V. Tennyson from J. Tompson, (5 pages).
4.	3/9/83	Inter-Office Communication to Quality Control Supervisors, From A. E. Moses, Subject: Inspection Signatures (1 page).
5.	5/31/83	Howard P. Foley Company Receiving Inspection Report (1 page).
6.	6/10/83	PG&E Nonconformance Report (1 page).
7.	10/6/83	Pullman Power Products Field Warehouse Requisition (? pages).
8.	8/15/83	Howard P. Foley Company Inspection Report (3 pages).
9.	10/20/83	Inter-Office Memo to J. Thompson/Q.A. Manager from L. R. Wilson/Quality Director, Subject: Level I Signatures (1 page).
10.	3/5/84	Problem Statement, Allegation #(s): 166, ATS No. (s): RV-84A-0021 (1 page).
11.	3/11/84	Double space report: Task: Allegation or Concern No. 166, ATS No.: RV-84-A-0021 (6 pages).
12.	3/16/84	Problem Statement, Allegation No(s): 142 (5 pages).
13.	3/23/84	LTR to Mr. John B. Martin, from J. O. Schuyler, Subject: Docket No. 50-275, OL-DPR-76, Diablo Canyon Unit 1, Welding of ASTM A-325 Type 1 Bolts (5 pages).

FOIA-84-743
(9th Partial)

APPENDIX S

PORTIONS OF RECORDS WITHHELD
EXEMPTIONS 6 AND 7(C)

1.	Undated	Handwritten notes (2 pages).
2.	Undated	Handwritten notes (1 page).
3.	Undated	Handwritten notes (4 pages).
4.	Undated	Handwritten notes No. 132 (1 page).
5.	Undated	Typed questions (2 pages).
6.	Undated	Telecon from M. M. Mendonca and M. Padovan, #196-199, RV-84A-0027, Handwritten (2 pages)
7.		The Howard P. Foley Company Inspection Report (2 pages).
8.	12/20/83	Allegation Data Form (4 pages).
9.	1/84	Allegation #166, ATS. NO. RV-84A-0021 (1 page).
10.	1/2/84	Ltr to Mark Padovan (29 pages).
11	1/4/84	Summary of Special Insp. Related Information (175 pages).
12.	1/17/84	Summary of Special Insp. Related Information (1 page).
13.	2/21/84	Allegation Data Form w/attachment dated 3/12/84 memo for file RV-84-A-0033 (2 pages).
14.	3/1/84	Allegation Data Form RV-84-0037 w/attachments (11 pages).
15.	3/1/84	Allegation Data Form RV-84-0036 w/attachments (4 pages).
16.	3/1/84	Allegation Data Form RV-84-A-0034 w/attachment (2 pages).
17.	3/5/84	Problem Statement, Allegation #26 (2 pages).
18.	3/16/84	Problem Statement, Allegation #139 w/attachments (4 pages).
19.	3/16/84	Problem Statement, Allegation #213 w/attachments (5 pages).
20.	3/22/84	Problem Statement, ATS No. RV84A0043/Q5-84-018 w/attachments (7 pages).
21.	3/23/84	Ltr to Albert Hensler from Ross A. Scarano, Subject: RV-84-A-0037 w/attachments (5 pages).

FOIA-84-743
(9th Partial)

APPENDIX T

RECORDS TOTALLY WITHHELD - EXEMPTIONS 6 & 7C

1. 6/13/83 Foley's Inter-office Communication (1 page).
2. 10/6/83 Memo Re: Correction of Quality Documents (1 page).
3. 12/14/83 Howard P. Foley Document Deficiency Notice (1 page).
4. Foley's Inter-office Communication (1 page).

RE: FOIA-84-743
FOIA-84-744
FOIA-84-776

APPENDIX U

RECORDS ALREADY AVAILABLE IN PDR

1.	9/6/83	SECY-83-366, Diablo Canyon Unit 1 Verification Program Staff Recommendations. Accession No. 8309270639. (14 pages)
2.	12/83	NUREG-0675, Supplement No. 21, "SER". Accession No. 8401170143. (275 pages)
3.	3/84	NUREG-0675, Supplement No. 22, "SER". Accession No. 8403300300. (400 pages)
4.	7/84	NUREG-0675, Supplement No. 25, "SER". Accession No. 8408160080. (122 pages)
5.	7/84	NUREG-0675, Supplement No. 26, "SER". Accession No. 8408220346. (204 pages)
6.	1/31/84	NRC meeting transcript, "Diablo on Review of Small Bore Piping Analysis". Accession No. 8402130076. (162 pages)
7.	2/14/84	ASLAB, "Joint Intervenors' Motion to Augment or, in the Alternative, to Reopen the Record, by Joel R. Reynolds. Accession No. 8402170053. (24 pages)
8.	3/20/84	ASLAB (ALAB-763), "Decision". Accession No. 8403210159. (122 pages)
9.	3/15/84	ASLAB, "Affidavit of James P. Knight". Accession No. 8403190102. (16 pages)
10.	3/15/84	ASLAB, "Affidavit of Dr. Mark Hartzman". Accession No. 8403190106. (22 pages)
11.	6/11/84	ASLAB, "Joint Intervenors' Reply to PG&E and Nrc Staff Responses..." by Joel R. Reynolds. Accession No. 8406150299. (19 pages)
12.	6/26/84	PG&E letter to NRC, from J. O. Schuyler to Harold R. Denton, No. DCL-84-239, "Joint Intervenor Allegations". Accession No. 8407050122. (172 pages)

RE: FOIA-84-743
FOIA-84-744
FOIA-84-776

APPENDIX U
(Continued)
RECORDS ALREADY AVAILABLE IN PDR

13. 6/1/84 PG&E letter to NRC from J. O. Schuyler to Darrell G. Eisenhut, No. DCL-84-203, "License Condition 2.c (11) - Final Report". Accession No. 8406110231. (66 pages)

14. 8/10/84 NRC Decision, CLI-84-12. Accession No. 8408140009. (29 pages)

15. 8/10/84 NRC Decision, CLI-84-13. Accession No. 8408140006. (25 pages)

16. 2/7/84 PG&E letter to NRC, from J. O. Schuyler to Eisenhut, No. DCL-84-046. "Small Bore Piping". Accession No. 8402090241. (52 pages)

17. 2/15/84 PG&E Letter to NRC, from J. O. Schuyler to John B. Martin, No. DCL-84-060, "Snubber Optimization Program". Accession No. 8402210061. (2 pages)

18. 4/84 PG&E letter to NRC, from Schuyler to Denton, No. DCL-84-131, "Response to Board Notification 84-071". Accession No. 8404190003. (121 pages)

19. 4/18/84 NRC letter to PG&E, from Eisenhut to Schuyler, "Order to Modify Facility Operating License No. DPR-76 (DCNPP, Unit 1)". Accession No. 8405020134. (5 pages)

20. 6/26/84 PG&E letter to NRC, from Schuyler to Eisnhut, No. DCL-84-238, "Additional Information Regarding Piping and Supports". Accession No. 8406290309. (20 pages)

GOVERNMENT ACCOUNTABILITY PROJECT
Institute for Policy Studies
1901 Que Street, N.W., Washington, D.C. 20009
(202) 234-9382

September 13, 1984

Director
Office of Administration
U.S. Nuclear Regulatory Commission
Washington DC 20555

FREEDOM OF INFORMATION ACT REQUEST
FOIA-84-743
Rec'd 9-17-84

To Whom It May Concern:

Pursuant to the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Government Accountability Project (GAP) request copies of any and all agency records and information, including but not limited to notes, letters, memoranda, drafts, minutes, diaries, logs, calendars, tapes, transcripts, summaries, interview reports, procedures, instructions, files, graphs, engineering analyses, charts, maps, photographs, agreements, handwritten notes, studies, data sheets, notebooks, books, telephone messages, computations, voice recordings, any other data compilations, interim and/or final reports, status reports, and any other records relevant to and/or generated in connection with the Safety Evaluation Report related to the operation of the Diablo Canyon Nuclear Power Plant, Unit 1 and 2, NUREG-0675, Supplement No. 26, which provided the NRC Staff's further findings on whistleblower charges. We request that each responsive document be identified by the allegation number(s) to which it may relate.

If any of the materials covered by this request have been destroyed and/or removed, please provide all surrounding documentation, including but not limited to a description of the action(s) taken, relevant date(s), and justification(s) for the action(s).

GAP request that fees be waived, because " findings information can be considered as primarily benefitting the general public," 5 U.S.C. §552(a)(4)(A). GAP is a non-profit, non-partisan public interest organization concerned with honest and open government. Through legal representation, advice, national conferences, films, publications and public outreach, the project promotes whistleblowers as agents of government accountability. We are requesting the above information as part of an ongoing monitoring project on the adequacy of the NRC's efforts to protect public safety and health at nuclear power plants.

For any documents or portions that you deny due to a specific FOIA exemption, please provide an index itemizing and describing the documents or portion of documents withheld. The index should provide a detailed justification of your grounds for claiming each exemption, explaining why each exemption is relevant to the document or portion of the document withheld. This index is required under Vaughn v. Rosen(I), 484 F.2d. 820 (D.C. Cir. 1973), cert. denied, 415 U.S. 977 (1974).

We look forward to your response to this request within ten days.

Yours truly,

Thomas Devine
Legal Director, GAP

Crystal Dixon
Crystal Dixon
Legal Intern

GOVERNMENT ACCOUNTABILITY PROJECT
Institute for Policy Studies
1901 Que Street N.W. Washington D.C. 20009
(202) 234-9382

September 13, 1984

FREEDOM OF INFORMATION
ACT REQUEST
FOIA-84-744
Rec'd 9-17-84

Director
Office of Administration
U.S. Nuclear Regulatory Commission
Washington DC 20555

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If any of the materials covered by this request has been destroyed and/or removed, please provide all surrounding documentation, including but not limited to a description of the action(s) taken, relevant date(s), and justification(s) for the action(s).

GAP request that fees be waived, because " findings information can be considered as primarily benefitting the general public," 5 U.S.C. §552(a)(4)(A). GAP is a non-profit, non-partisan public interest organization concerned with honest and open government. Through legal representation, advice, national conferences, films, publications and public outreach, the project promotes whistleblowers as agents of government accountability. We are requesting the above information as part of an ongoing monitoring project on the adequacy of the NRC's efforts to protect public safety and health at nuclear power plants.

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We look forward to your response to this request within ten days.

Yours truly,

Thomas Devine
Thomas Devine
Legal Director

Crystal Dixon
Crystal Dixon
Legal Intern

GOVERNMENT ACCOUNTABILITY PROJECT
1555 Connecticut Avenue, N.W., Suite 202
Washington, D.C. 20036

(202) 232-8550

Freedom of Information Act Request

FREEDOM OF INFORMATION
ACT REQUEST
FOIA-84-776
Rec'd 10-4-84

Director
Office of Administration
Nuclear Regulatory Commission
Washington, D.C. 20555

To Whom It May Concern:

Pursuant to the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Government Accountability Project (GAP), requests copies of any and all agency records and information, including but not limited to notes, letters, memoranda, drafts, minutes, diaries, logs, calendars, tapes, transcripts, summaries, interview reports, procedures, instructions, engineering analyses, drawings, files, graphs, charts, maps, photographs, agreements, handwritten notes, studies, data sheets, notebooks, books, telephone messages, computations, voice recordings, computer run-offs, any other data compilations, interim and/or final reports, status reports, and any and all other records relevant to and/or generated in connection with the "Safety Evaluation Report" related to the operation of Diablo Canyon Nuclear Power Plant, Units 1 and 2 (Docket Nos. 50-275 and 50-323). This report was published by the NRC Office of Nuclear Reactor Regulation in July 1984.

This request includes all agency records as defined in 10 C.F.R. §9.3a(b) and the NRC Manual, Appendix 0211, Parts 1.A.2 and A.3 (approved October 8, 1980), whether they currently exist in the NRC official, "working," investigative or other files, or at any other location, including private residences.

If any records as defined in 10 C.F.R. §9.3a(b) and the NRC Manual, supra, and covered by this request have been destroyed and/or removed after this request, please provide all surrounding records, including but not limited to a list of all records which have been or are destroyed and/or removed, a description of the action(s) taken relevant to, generated in connection with, and/or issued in order to implement the action(s).

GAP requests that fees be waived, because "finding the information can be considered as primarily benefitting the general public," 5 U.S.C.§552(a)(4)(a). GAP is a non-profit, nonpartisan public interest organization concerned with honest and open government. Through public outreach, the Project promotes whistleblowers as agents of government accountability. Through its Citizens Clinic, GAP offers assistance to local public interest and citizens groups seeking to ensure the

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health and safety of their communities. The Citizens Clinic is currently assisting citizens groups, local governments and intervenors in connection with investigations of the Diablo Canyon Nuclear Power Plant in California.

We are requesting the above information as part of an ongoing monitoring project on the adequacy of the NRC's efforts to protect public safety and health at nuclear power plants.

For any documents or portions that you deny due to a specific FOIA exemption, please provide an index itemizing and describing the documents or portions of documents withheld. The index should provide a detailed justification of your grounds for claiming each exemption, explaining why each exemption is relevant to the document or portion of the document withheld. This index is required under Vaughn v. Rosen (I), 484 F.2d 820 (D.C.Cir. 1973), cert. denied, 415 U.S. 977 (1974).

Yours truly,

Thomas Devine
Legal Director

Richard E. Condit
Legal Intern

AAE
4-1-84
Allegation 731

PACIFIC GAS AND ELECTRIC COMPANY

PG&E — 77 BEALE STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211 • TWX 910-372-6587

J. O. SCHUYLER
VICE PRESIDENT
NUCLEAR POWER GENERATION

March 23, 1984

PGandE Letter No.: DCL-84-113

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
Diablo Canyon Unit 1
Welding of ASTM A-325 Type 1 Bolts

Dear Mr. Martin:

PGandE Letter No. DCL-84-067 dated February 17, 1984, provided the NRC Region V Staff with the basis for acceptance of welded ASTM A-325 bolting in pipe support design. PGandE Letter DCL-84-078, dated February 29, 1984, supplemented the information previously provided and identified additional testing to be performed on A-325 welded bolts by PGandE.

The enclosure to this letter provides the results of the PGandE testing program and describes further action regarding the welding of ASTM A-325 bolts.

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

Sincerely,

for J. O. Schuyler

Enclosure

cc: T. W. Bishop
D. G. Eisenhut
H. E. Schierling
Service List

8404200076 3pp. R-13

ENCLOSURE

WELDING OF A-325 TYPE 1 BOLTS

BACKGROUND

PGandE Letter No. DCL-84-067, dated February 17, 1984, provided the basis for acceptance of welded ASTM A-325 bolting in pipe support design. PGandE Letter No. DCL-84-078 dated February 29, 1984, supplemented the information previously provided and detailed a testing and examination program to demonstrate qualification of these welded bolt installations. In the February 29, 1984 letter, PGandE also identified two discrepancy reports prepared to document the inappropriate specification and application of welded A-325 bolting. These are PGandE Engineering Discrepancy Report No. 84-015-P and Contractor (Pullman Power Products) Discrepancy Report No. 5739.

The following summarizes results of the PGandE program associated with closure of these Discrepancy Reports and describes further action regarding the issue of welding 5/8" ASTM A-325 Type 1 bolts.

RESULTS

The results of PGandE action to close the Discrepancy Reports are described below:

Pipe supports using welded A-325 Type 1 studs were reviewed. This review revealed that ten pipe supports specified the welding of A-325 bolts to A-36 base material. All ten supports are on the CCW system and attached to the containment fan cooler support structure. These hangers are 43-4G, 43-5G, 43-6G, 43-7G, 43-8G, 43-9G, 59N-1G, 59N-2G, 59N-3G, and 59N-4G. Further review of the corresponding as-builts for these hangers showed that eight of the ten supports actually used A-325 welded studs, and two of the ten supports used A-307 welded studs.

To reinforce the assertions made that the A-325 Type 1 bolts were indeed weldable, PGandE performed additional tests at the jobsite. Four 5/8" A-325 studs were welded to A-36 plate using a full penetration weld, and welding parameters used for the existing installations. The welding procedure utilized low hydrogen E7018 electrodes and an ambient preheat.

These welds were subsequently examined using visual and liquid penetrant methods. The results of these examinations showed no cracking in the weld or heat affected zone of the A-325 stud material.

Further, these four test samples and 80 of the installed bolts were satisfactorily torque tested to a load equivalent to the 20,000 psi allowable stress for A-307 bolts established by the ASIC Manual.

The NRC witnessed the above welding examinations and torque testing and the torque testing of bolting on supports 43-6G, 7G, and 8G.

A chemical analysis of typical A-325 Type 1 bolts at the jobsite was also performed. The results showed a range of carbon from 0.39 to 0.41 percent, with only trace amounts of alloying elements.

The test results support the fact that 5/8" A-325 bolts in question can be satisfactorily welded to A-36 plate using low hydrogen type electrodes and that the as-built condition meets design requirements and applicable AISC requirements.

Even though the welded A-325 bolts have been demonstrated to be acceptable, PGandE has elected to revise these pipe supports to weld the base plates to the fan cooler structure in lieu of using the subject A-325 bolted connection. This decision was made to eliminate further questions which may arise concerning the application/acceptability of welded A-325 Type 1 bolts.

Exhibit 1
(34 pages)

[redacted]

January 2, 1984

Mr. Mark Padovan
Resident USNRC
P. O. Box 369
Avila Beach, CA 93424

Dear Mr. Padovan:

This letter is the information we discussed in my Dec. 23 phone conversation with you. I was a quality control inspector for Pullman Power Products, Diablo Canyon from July 25 to Dec. 15 of 1983. During this time I worked in the rupture restraint and piping support programs performing visual, dimentional, and welding inspections in unit 1 and unit 2.

Dates mentioned in this report before Dec. are approximate because all paperwork including personal notes, inspection logs and memos were confiscated by Pullman. Information copies of the documents that I needed to properly make this report were flatly denied by Pullman. However, should you find that this report has no legal standing without that data: could the NRC make those papers available to me so that I may assemble a legal report?

The allegations in this report have serious consequences. The incidents are presented in a chronology to show how Pullman provided for evaluation of deviations presented by myself and others.

Sept 20

1. Deviation from the requirements of contract specification 8711
2. Failure to notify purchaser (PG&E) of past and present deviations.
3. Failure to notify the Commission as required by 10 CFR 21.21 b)

Addressed memo to Harold Karner, Pullman's QA manager, regarding PG&E's contract specification 8711, Sec. 1, Para 7.10.1. The contract stated that all GTAW shall be performed with a power supply equiped with 1) High frequency for arc initiation, 2) Rheostat for stepless control of current.

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S-10

Research indicated that in the 1977 revision of weld procedures Pullman had failed to include this requirement in their updated Weld Procedure Specifications, WPSs. Further, PG&E approved of the Pullman changes to the weld procedures and in effect ceased to enforce PG&E's own procurement document.

In verbal discussion with Harold Karner I informed him that none of Pullman's GTAW machines could presently meet the specifications of 8711. Harolds reply was " if PG&E doesn't enforce the contract Pullman doesn't intend to." I then informed Harold that in lieu of the high frequency the welders were scratch starting each time the arc had to be initiated thus contaminating the weld with tungsten. I also told him of the defects I was seeing as a result of no current control devices and no off/on switch on the power supplies Pullman was using. The defects occur at the end of the weld cycle when the welder tries to extinguish the arc by pulling the tungsten electrode directly out of the area over the weld pool. The weld pool is kept molten as the arc elongates but then starts to freeze as the arc and magnetic field collapse, oscillating the still liquid pool, and creating a hole at the center point of the weld pool.

PG&E's contract writers were aware of these types of defects typical to GTAW when they wrote 8711 specifying the type of equipment to be used. Certainly a higher level of quality is obtained when using the proper equipment and if this higher level of quality was thought to be obtained when documents such as the FSAR were written: then a problem has occured.

No reply to my memo has been recorded as of my termination date 12/15/83.

Sept 22

1. Failure to impliment the quality assurance program as specified in 10 CFR 50, appendix B, criteria II & X.

A welder was going to start welding when I asked him to attach an argon flow meter near the torch in his GTAW process. The welder refused to cooperate saying that as long as there wasn't a holdpoint on the process sheet for it the inspector didn't have to check it. The welder's foreman and my QC supervisor were called in to mediate. The QC supervisor, Merle Edgerton, said he thought my inspection was a bit excessive. I reminded Merle that a 20 CFH flow rate was specified by the WPS and that if I was not allowed to check it, when I thought it necessary, then he could get someone else to do the job.

I was requested to perform inspections elsewhere and left.

Sept 26

1. Failure to issue and maintain adequate document control as required in 10 CFR 50, appendix B, criteria VI.

I requested a copy of Pullman's welding procedures at least five times from my superiors Gary Sawer, Jim Cunningham, Russ Nole, Pat Watson, and Harold Karner. Mr. Karner's response was that too many copies of the weld procedures had already been issued and that the logistics of controling them had become unmanagable.

Oct. 4

1. Failure to provide adaquate control over inspection and process monituring as required in 10 CFR 50, appendix B, criteria X.

I was requested to inspect a full penetration weld attaching a stanchion to a pipe. Upon arriving I found the craft had welded the cover plate on the free end of the stanchion. I didn't accept the work because I was not given an opportunity to evaluate the profile of the back side of the weld. QC supervisor, Russ Nolle, instructed me to accept the work. I protested that the cover should be removed by breaking the tack welds and the back side of the weld inspected. Russ would not permit the cover to be removed saying that the visual inspector had limitations that sometimes did not allow the inspector to view the back side of full penetration welds.

Started to notice that the welding machines were not calibrated on a regular basis and that tong type portable amp meters were not issued and were rarely seen in the field.

Oct 6

1. Over-extention of weld procedure to situation outside scope of original qualification limits. Violation of 10 CFR 50, appendix B, criteria IX.

I was asked to inspect the fit-up of a threaded stud being welded to the containment liner. After looking at the weld procedure being used I determined that welding small diameter studs was not included in the scope of the procedure. I called Harold Karner and pointed out that there was almost no similarity between the

original procedure qualified on pipe and the present application.

Harold assured me that the 7/8 procedure was qualified for the situation and that they had welded thousands of the studs using that procedure. I replied to Harold that if Pullman had intended welding thousands of them perhaps a procedure should have been qualified which specifically included the solutions to problems unique to welded studs. It was decided that since I had such deep reservations about the procedure being used another inspector was asked to perform the inspection.

Later, QC supervisor Russ Nolle came out to explain how WPS 7/8 was used to weld studs. Russ told me that the backing strip could be deleted provided a back grind was used. I countered Russ by pointing out that if back grinding was intended then the procedure would have included direction as to what the requirements of the back grind would be.

Further research on this subject has shown that the stud material most often being used by Pullman is a bolt material, A 307. The stud is made by taking an A 307 bolt and cutting off the head, then the bolt is cut with a chisel point and subsequently called a stud. The problem is that A 307 is not a P1 material and can not be used in the present Pullman welding procedure 7/8. (See attachments 1 & 2 for information copy of part of WPS 7/8.)

Further, bolting material A 307 was never intended as a welded stud because the only chemical limitations on the product are phosphorus and sulfur contents. Lastly, the material can not be traced because individual heats of steel are not identified in the finished product. (See attachments 3,4,&5)

Oct. 10

1. Work performed without instructions, procedures, or drawing control in violation of 10 CFR 50, appendex B, criterias V & VI.

I had noted that in the rupture restraint work in unit two fillet welds originally performed by American Bridge had enchroached on the areas around bolt holes that resulted in many bolts not seating properly. As a solution the fillet welds were ground back. However, I asked the RR engineer if measures were being taken to revise the weld sizes in the area of the bolts on the weld sheets. RR engineer, Dale Warren, replied that to his knowledge the drawings were not being revised.

Oct 12

1. Failure to update procedures to current criteria as required in procurement document 8833-XR, violation of 10 CFR 50, appendix B, criteria VI.

Upon rejection of out of tolerance washers to criteria set forth in ESD 243 pertaining to hardened steel washers, Dale Warren, the unit two RR engineer found that the information presented in the ESD was out of date. I relayed the information to Harold Karner, the QA manager, who then failed to notify other inspectors that the ESD was out of date and that new criteria was in effect. As of Dec. 15 ESD 243 had still not been revised and the other inspectors still did not know of the new criteria.

Oct. 17

1. Failure to provide for inspector evaluation of defects found in items verses the requirments of the procurement documents.
2. Misdirection to inspector by QC supervisor, denial to procurement documents, and itimidation for performing inspection activities as described in 10 CFR 50, appendix B, criteria I.

I had found defects in A-490 bolts sent to the field for installation in Rupture Restraint work being performed in unit two. The bolts had forging laps visable on the head and I had occasionally seen longitudnal quench cracks on the shaft. I consulted the procedures, ESD 243, and found that the ESD had no rejection criteria for the bolts.

I rejected the bolts and then proceeded to search for the procurements referenced in the ESD to find the proper status of the items in question. While making copies of an ASTM standard in the office Russ Nolle asked me outside for a discussion. Russ said that I would no longer be allowed to look at or make copies of: the AISC Construction Manual, the ANSI or ASTM Standards, or the ASME Codes. By seeking information in those documents you are beyond your scope as an inspector, "you have your ESDs."

I replied that ESD 243 did not address inspection criteria for A-490 bolts. Russ said to me "any conditions found outside of the scope of the ESDs shall be accepted." I told Russ that I would not be able to abide by that and if the ESDs did not cover the situation, then, I would seek inspection criteria elsewhere. Russ got pissed and said that he and Harold Karner have "had it up to here," pointing to his neck. "You got one foot out the door, Mr. Lockert, one more wrong move and you're gone."

Oct 20

1. Deviation from the technical requirements included in the procurement documents 8833-XR and AWS D1.0-69.
2. Failure of both PG&E and Pullman to regularly review the status and adequacy of the QA program in violation of 10 CFR 50, appendix B, criteria II.

I had reviewed Pullman's ESD 202, Welding Electrode Control, verses my own copy of AWS D1.1-83, Structural Welding Code. In the area of storage of low-hydrogen electrodes I had found a discrepency in that Pullman's requirements were below those specified in the code.

I sent a memo to Frank Lyautey, assistant QA manager, telling him what I had found and asking him to check his copy of AWS D1.0-69, the document referenced in 8833-XR, to see if we really had a problem. Pullman's ESD stated that the minimum required storage temperature for low-hydrogen electrodes was 225° F while I had noticed that AWS required 250° F.

Some time later I was contacted by Frank and informed that I was correct in that the 69 version of the code also required the higher temperature. Frank went on to assure me that he had personaly checked the logs and that no violations had occured and that he was issuing a memo immediately to notify all other concerned parties.

Oct. 24

1. Over-extension of welding procedures outside the scope of original qualification limits. Misuse of prequalified procedures per AWS in violation of 10 CFR 50, appendix B, criteria IX.

I examined the procedure qualification requirements of AWS D1.1 and compared them to Pullman's Rupture Restraint welding program. It appeared to me that Pullman had taken a WPS qualified under the ASME Sec. IX criteria and transfered the qualification to the AWS criteria. To my knowledge this is permissible in that the mechanical requirements of the PQR (tension and bend tests) are transferable to both codes.

However, one of the main points in the application of the WPS to field welding is that joint design is an essential variable in the AWS D1.1 code while in ASME it is not. I started to look at the process sheets coming out to the field and noticed that

Pullman was welding a variety of seven different joint designs and calling it all out as one WPS 7/8.

A closer examination of Pullman's RR welding program revealed that they were working with two documents: WPS 7/8 and a Welding Technique Specification called AWS 1.1 (see attachments 6 thru 11 and 12 thru 14.) The welding procedure 7/8 when applied to AWS welding only qualifies the original joint design used in the PQR because joint design is an essential variable. The Welding Technique Specification AWS 1.1 has been used as some kind of prequalified procedure not able to stand on its own but in some way attached to WPS 7/8.

A close look at AWS 1.1 will show how the nature of this document changes:

1. The title of the document says "Welding Technique Specification" but notice that it also called a WPS on pages 2 & 3 (upper right corner).

2. Note that the supporting PQRs are prequalified. Why would a technique specification require any qualification record? A technique specification has no legal bearing under any code but a WPS surely would.

3. The permissible base metals listed include A-515 and A-588. The former is not listed under the steel specification requirements of AWS D1.1, Table 4.1.1 and the latter requires special welding procedures for impact loading or weathering applications (see note 6 of Table 4.1.1.)

In order for Pullman to use prequalified joint designs for its use in rupture restraints all mandatory code requirments must be met as shown in AWS D1.1, Table E1, not to mention the least of which is a written WPS. Pullman can not use prequalified joint designs because "Welding Technique Specification AWS 1.1" is not a WPS nor does WPS 7/8 extend into the realm of prequalified procedures because it does not incorporate all aspects of D1.1 either.

My first comments on the apparent discrepency were with Russ Nolle. Russ said not to get excited because someone had already caught it in an audit. (Could Russ be refering to audit # 35 performed by Harold Hudson back in March of 83?)

Oct. 25

1. Attempt to decieve Pullman QC inspector of PG&E's violation of its own procurement documents.
2. Failure to notify the Commission of deviation from procurement document 8711, violation of 10 CFR 21.21.

I was still concerned that work was being performed outside the scope of 8711, PG&E's contract with Pullman for piping and pipe supports. Recently, I had heard of 200 welds in schedule 10 stainless steel pipe that had failed to meet radiographic standards. I researched the problem by asking the reader of the radiographs, Pullman's Level III NDT Mike Mckray, what types of defects he was seeing. Mike told me that many of the defects appeared to be grouped either at the start or end of weld passes and that because of the thickness of the pipe defects (porosity mostly) larger than the head of a pin had to be rejected.

Thinking that the lack of dated GTAW equipment might be contributing to the problem I called PG&E's NPO Welding Engineer Dave Stupi. Dave had asked for several days to research the 8711 contract himself so that this was my second contact with him. Dave told me that 8711 was a very old document written at least ten years ago and that I had probebly stumbled on an old copy that had never been updated. Dave refered me to another PG&E engineer and said I was not to include him in any more discussions on the matter.

Nov 2

Presented Harold Karner, Pullman QA Manager, written notification of my finding with regards to rupture restraint welding with the WPS 7/8 & AWS 1.1 combination.

Nov. 8

1. Failure to recognize a significant condition adverse to quality, failure to take corrective action, violation of 10 CFR 50, appendix B, criteria XVI.

I performed an inspection directly underneath the unit two pressurizer in which I observed old work that would be absolutely unacceptable under any code. Welds were on Rupture Restraints

originally built by another contractor, American Bridge, with the manual SAW or, possibly, FCAW process. I brought my concerns to Russ Nolle but he said no, nothing can be done about it because it was another contractor and already accepted.

Nov. 16

1. Failure to take corrective action to preclude repetition of significant condition adverse to quality in violation of 10 C F R 50, appendix B, criteria XVI.
2. Failure to provide evaluation in a timely manner and coercion to perform inspections to procedures shown to reasonably questionable, violation of 10 C F R 50, appendix B, criteria II.

Two weeks before I had informed Harold Karner the problems I was having justifying the welding being performed on rupture restraints. Now I was being asked to inspect again to procedures I had shown were questionable.

I told my leadman, Jim Cunningham, what I had found and that I had not received a proper response from Mr. Karner. Untill I get one I don't feel I should go inspect. Jim told Russ Nolle and Russ acompanied me to Harold's office.

I explained to Harold my situation. Harold said I was entitled to my opinion but that PG&E had already approved the present procedures. Further, he said I had a choise: I could go out and inspect or I could look for a new job. I informed Harold that I had done everything in my power to get a quality problem corrected and that if he was going to threaten me with my job then I had no real choise but to go and inspect.

Dec. 8

Temporarily assigned to the area 10 fab shop. The area 10 fab shop also houses the welder qualification test bay so that I had the opportunity to witness some of the welders as they performed their tests. After some questions I had directed at the the welders, I noticed that there were perhaps six or seven welders proceding through the activities of the test with no QC interaction.

Later on, in the afternoon, after observing more testing with no QC participation I walked into the small office area and struck up a conversation with the production foreman, Art Savacou. I asked Art where the QC inspector was at. Art replied they didn't have one at the moment but that he and Pat Watson had "an understanding." I thought that was pretty interesting so I asked Art if he was qualified as an inspector. Art replied no.

Dec. 9

1. Failure to provide for assurance that all prerequisites for testing have been met, violation of 10 CFR 50, appendix B, criteria XI.

I learned this morning that the QC normally assigned to the welder qualification tests had quit on Dec. 7 at 09:00. After further observance of tests being performed with no QC interaction, I checked the requirements of Pullman's Quality Assurance Manual and reviewed the statements in ASME, Sec III.

Wrote memo to Pat Watson, the area 10 leadman/welding qualification supervisor, noting that Bill Bailey was gone and that I had observed an apparent lack of QC participation in the testing. I reminded Pat that the QA Manual's paragraph KFP 15.2 specifically stated that a field inspector shall be assigned to the test shop and that ASME, Sec III, paragraph NA 3764.1 d would not allow a production foreman to determine the quality of production welders.

When Pat came on his walk through the fab shop I handed him the memo. Pat after reading the memo would not accept it and walked off. Sometime later Pat returned and finally accepted the memo.

At approximately 14:00, Frank Lyautey and Chris Neary appeared and wanted to know what was going on. Frank is the assistant QA manager and Chris is Pullman's welding engineer from Williamsport, PA. I related the story and told Frank that I had notified the proper person in the chain of command about the apparent discrepency. Frank explained that Bill Bailey had quit and that a new inspector was scheduled to start in the welder qualifications on the 12th. In the absence of either inspector, Pat Watson was performing duties as field inspector in the test shop.

I admitted to Frank that I had seen Pat Watson in the test bay twice on Thursday, the 8th, but that for the majority of the time I had noted no QC at all. Frank assured me there

was no problem and then Pat Watson joined us and he assured me the inspections had been performed. I asked Pat what his intensions were regarding the welders I had seen qualifying with no QC around. Pat said he had no requalification tests in mind because there was no quality problem. Frank then asked me to join Chris Neary and add any comments I had to Chris' revision of Pullman's rupture restraint welding.

My discussion with Chris covered his intensions to:

1. Restrict application of WPS 7/8 to the original joint design shown in the PQR. (Note that there is no joint shown in the PQR but only a reference to sheet 2 of 10 ?)

2. Use of prequalified procedures for all other applications.

After examination of Chris' notes I brought up the point that he intended to use the same eight or nine prequalified joint designs they had been using before but that he was still grouping them all under one procedure number, AWS 1.1. I said this could be confusing and that it did not appear to satisfy the requirement of a written procedure for each procedure. For instance, how can a single bevel corner joint have the same written procedure and number as a double V butt weld that requires back grinding and welder access from both sides?

I reminded Chris that under AWS joint design is considered an essential variable. Chris did not see that this was a problem.

Dec. 12

I reviewed the events leading up to the confrontation on the 9th and determined that there still existed some doubt as to wether the qualification tests had been performed properly. Frank Lyautey and Pat Watson had personally assured me that there was no problem, yet, they had not willingly showed me evidence of the inspection records. In my own mind several questions remained to be answered:

1. Why had I observed the qualification tests being performed with no QC including Pat Watson present?

2. Why did Art Savacou the production foreman who had appeared to be running the show refer to an "understanding" with Pat Watson.

3. Did Harold Karner know of the problems I had witnessed in the test shop.

I refered to the QA Manual and found instructions that said the QA manager was to be informed of problems affecting quality. I initiated DCN 1/1640-021 that told of what I had observed and that it appeared Pullman was performing work outside the scope of its own QA Manual. The Deficient Condition Notice required an engineers signature to be submitted so I asked Mike, the area 10 engineer, to cosign the DCN.

Mike declined tc sign the DCN because it showed no hard evidence of a hold point being passed. Mike did say, however, that if I did provide evidence then he would sign the DCN.

Dec.13

1. Failure to provide inspector access to records showing that a function pertaining to quality was adequately performed, in violation of 10 CFR 50, appendix B, criteria I.

After informing RR engineer Dale Warren that I would not accept their previous performance of a stich weld observed on the construction of square beams, I decided that I would inspect the records of the test shop during the time of Bill Bailey's absence.

I went to the test bay and explained to Art Savacou that I had reason to doubt that the welder qualification test surviellance inspections i.e. materials, process, position, fitup, root-pass, WPS parameter verification, final visual, bend tests had been performed.

Art refused me access to the records saying that only his direct supervision could look at the records. I informed Art that by doing so he was denying a QC inspector the right to inspect records. Art's reply was "what are they going to do - put me in jail?"

I left the test bay and contacted Pat Watson asking to see his records for Dec. 7,8,&9 concerning welder qualifications. After some discussion Pat showed me what he had, the records showed a summary of the welders who had qualified, who passed, who failed. I told Pat that this was just a summary and that the records did not show wether the required inspections had been performed. Upon leaving, I reminded Pat that I was still waiting for a written response to the memo.

Dec 14

1. Failure to notify authorized personnel of changes in Quality Assurance Program in violation of 10 CFR 50, appendix B, criteria VI.

For the events of the morning supposedly causing my termination see Pullman's Termination Notice to Payroll Dept., pages 1 and 2 and my grievance addressed to Mr. Stieger, pages 1-5. (Attachments 15 through 21)

In the afternoon after checking a portable rod oven that had yielded repeated violations of the minimum temperature allowable for low-hydrogen electrode storage, I asked the welder to get another rod can because this one appeared defective. The QA rod room attendent came over after checking the can and asked what the problem was. I replied that it was below the 250 F min. required by AWS D1.1.

He said that the ESD only required 225 F. I replied that ESD 202 had been changed back in October. The QA rod room attendant didn't believe me because he had n't recieved a memo on the subject. I showed him my copy of D1.1 and he agreed that was what the code read but that he couldn't change the rod oven temperatures until he recieved word from his supervisor.

Dec. 15

See page four of grievance (attachment number 21.)

The events I have presented have been shown to be in disregard of procurement documents, codes and standards, and Federal Regulations. Of course, only the Commission has the right to interpretation of the Federal Regulations but that does not mean that each person involved in the nuclear industry is denied their own inference.

I have provided what documentation I could and I ask that the NRC provide me access to the records on site so that I may provide you with the necessary hanger and rupture restraint numbers for your own investigation. All events and conversations are true and accurate to the best of my knowledge.

Respectfully,

ALLEGATION 65, 167
166, 138
DFK 3/2/84

PACIFIC GAS AND ELECTRIC COMPANY

PG&E + 77 BEALE STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211 • TWX 910 372-6587

J. O. SCHUYLER
VICE PRESIDENT
NUCLEAR POWER GENERATION

February 29, 1984

PGandE Letter No: DCL-84-080

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
Diablo Canyon Unit 1
SECY 84-61, Items 65 and 167

Dear Mr. Martin:

At the January 19, 1984 exit interview at Diablo Canyon Power Plant, the NRC raised questions regarding contractor quality records. In response to those questions, PGandE is providing the enclosed description of the program for H. P. Foley Company quality records review and turnover to PGandE.

With regard to Pullman Power Products ("Pullman") records, Pullman turned all quality records over to PGandE in 1977 and 1981. A small portion of these records has been returned to Pullman to facilitate modifications performed following the turnover.

Quality records of all other contractors have been turned over to PGandE.

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: D. G. Eisenhut
H. E. Schierling
Service List

8403130369 12pp.

FILE

84-061

ENCLOSURE

PGandE RESPONSE ON FOLEY

QUALITY ASSURANCE RECORDS

I. REQUEST FOR INFORMATION

On January 17 and 19, 1984, representatives of NRC Region V requested Pacific Gas and Electric Company (PGandE) to describe the program for H. P. Foley Company (HPF) quality records review and turnover to PGandE.

II. PROGRAM DESCRIPTION

The program for review and turnover of Unit 1 records from HPF to PGandE consists of the following elements:

A. Record Definition
B. Record Review
C. Verification That Records Cover All Activities and Work
D. Turnover Program
E. Records Storage

The details of these elements, including a discussion of past and current practices, follow:

A. RECORD DEFINITION

PGandE contract specifications for HPF work require the contractor to retain all quality-related records for a period of ten years and contain a listing of typical types and categories of quality records consistent with 10CFR50, Appendix B. At the end of this ten year period, the contractor is required to contact PGandE and obtain direction for records disposition. A typical specification disclosing records retention is attached (Attachment 1).

PGandE will provide additional written direction to HPF by March 5, 1984, further defining quality records and identifying those records which are to be turned over to PGandE.

B. RECORD REVIEW

Foley quality records have been continuously reviewed by HPF and PGandE since 1970. During the entire period of HPF involvement at Diablo Canyon, each HPF quality control (QC) discipline supervisor has been responsible for performing an independent technical record review of quality records associated with work performed in that discipline. This responsibility has continued until the present and is documented in HPF Procedure QCP-17. However, a significant change in record review methodology occured in June 1983. The details are provided in Section B.2.

B.1 REVIEW OF HPF 1970 - 1977 RECORDS

From 1970 to 1977, HPF's work was limited to electrical installation activities. During this period, the quality of the physical work and corresponding documentation was continuously inspected and audited by PGandE's General Construction Quality Control (GC/QC) and Quality Assurance (QA) organizations. The audits covered construction activities, equipment installations, documentation packages, and other quality-related elements. During that period, GC/QC performed 90 audits while QA performed 34 audits. Additionally, HPF conducted its own extensive program to audits and inspections of records. Indeed, in the period 1970 to 1977 alone, HPF conducted some 600 audits of records activities.

In particular, a series of 18 audits of HPF records management were performed in 1976. These audits specifically centered on document control, quality, adequacy, and retrievability. These random sample audits consisted of detailed technical reviews of electrical quality records, including discrepancy reports. The audits resulted in no nonconformance reports (NCRs) or modifications; however, some of the clerical and/or administrative findings prompted a further review of records to verify proper record quality.

The review of all remaining records was completed in early 1977 and has been documented in a 90-page audit report. Findings identified during this review were resolved without plant modification. Follow-up audits were performed by PGandE to verify that HPF had properly identified and implemented corrective action. As a result, PGandE has a high level of confidence that HPF has adequate documentation to support the quality of the Diablo Canyon work.

B.2 REVIEW OF HPF 1977 - 1984 RECORDS

In 1977 HPF's scope of work was enlarged to include the installation of mechanical equipment, instrumentation, HVAC, as well as miscellaneous civil and architectural installation. Nonetheless, from 1977 through 1981, the vast majority of HPF activities was concentrated on electrical and instrumentation work, including TMI related work. However, beginning in 1982, HPF's work activity increased significantly due to construction activities associated with modifications arising from the Corrective Action Program (detailed in the PGandE Phase I Final Report).

During the period from 1977 through 1983, HPF QA and PGandE QA and QC performed 358 audits of HPF's construction activities and associated documentation.

The increase in HPF's work force (from 403 in September 1981 to 3,371 at the peak of construction in August 1983) prompted additional actions to assure that HPF quality records documented during this period were adequate. Accordingly, in the Spring of 1983, PGandE directed HPF to perform a review of the technical and administrative adequacy of all HPF records completed during and after September 1981. The "cutoff" date of September 1981 was chosen in order to assure that all quality records completed during and after the increase in HPF work were included in the review. This new review program was applied both to previously-reviewed and accepted records closed between September 1981 and June 1983 and to new records completed after June 1983. The results of the review of these "new" records completed after June 1983 are not part of the sample used to draw conclusions concerning the adequacy of pre-September 1981 records. The results of this new review provide important information concerning the adequacy of all HPF quality records and quality work.

The review was divided into two parts--technical and administrative. The technical review verified that quality records properly documented the installation as described by current design documents. The administrative review verified that the records were properly prepared by qualified individuals. The administrative review included verification that records were properly corrected, all blanks were filled, sheets were properly numbered, and proper reference was made to procedures and other documents. The administrative review also verified that inspectors were certified or qualified, initials were in accordance with the signature register, and records received proper management approval.

B.2.1 RESULTS OF HPF POST-SEPTEMBER 1981 RECORDS REVIEW

The technical review of records required for fuel load and for operational modes 3, 4, and 5 is now complete. Very few additional records are required to be reviewed for modes 2 and 1. The administrative review of all quality records is approximately 35% complete. Both of these reviews have identified a total of 32 deficiencies. Resolution of these deficiencies has resulted in the identification of the following items which required or may require physical rework or modification:

1. One electrical raceway support was added due to an overspan condition.

2. Five electrical raceway supports required re-stenciling to correct identification numbers.

3. Cable traceability could not be readily established for 31 circuits.

The remainder of the findings were resolved without physical rework or modification. Resolution involved clarification and correction of records, physical inspection and verification of the adequacy of installations and, in some cases, review and acceptance by Engineering of the as-built condition of plant installations.

No significant systematic or generic problems were identified in this review. The one electrical raceway support which required physical work as a result of the review does not indicate any systematic or generic problem when one considers the large number of installations for which quality records were reviewed. Nor did the electrical raceway support re-stenciling represent a significant finding, since the physical work required was not necessary for the supports to meet all design requirements.

As for the cable traceability matter, this particular item had not previously been reviewed in detail. Accordingly, prior to power ascension, HPF will verify traceability of all design Class I cable installations.

B.3 REMAINING REVIEW ACTIVITIES OF HPF RECORDS

In response to questions from representatives of NRC Region V concerning HPF records review and turnover, PGandE proposes the following program for the remaining record review activity. The program is based upon the results of the post-September 1981 records review as discussed in Section B.2.1. This four-part program will provide added assurance that the quality records documenting HPF's work are of acceptable quality. The program includes reviews by HPF and PGandE and spans the entire time period associated with HPF work. Further, this program provides for both technical and administrative reviews of the records where appropriate. However, some categories of work have been excluded from further review as noted in Attachment 2.

1. HPF post-September 1981 records review. HPF will revise the procedures for the post-September 1981 records review program to enhance its effectiveness, and will complete the program prior to commercial operation.

2. HPF pre-September 1981 records review. HPF will perform a detailed document review to assure that records were properly prepared. This will be done prior to commercial operation.

3. HPF review of cable traceability. To provide further assurance of appropriate documentation of Class I cable installation, HPF will verify their traceability prior to power ascension.

4. PGandE records review. PGandE will perform a review of document packages turned over by HPF to assure they have been properly prepared. This review will include inspection, on a random basis, of construction items which are complete and accepted by HPF to verify that HPF quality records adequately document installation according to design documents.

The details of this four-part program follow.

B.3.1 HPF POST-SEPTEMBER 1981 RECORDS REVIEW.

HPF will complete its post-September 1981 records review. This review has been structured to the criteria and scope as described in Attachment 2. Based upon the review completed to date, the following changes are being made to record review procedures:

(1) Clarification of the definition of conditions which require issuance of an NCR.

(2) Clarification of the definition of approval levels and documentation requirements for quality record changes and/or corrections.

(3) Additional training of HPF document analysts in HPF's quality administrative procedures.

The following actions, which will be reviewed and approved by PGandE, are being taken:

(1) PGandE will direct HPF to modify their Procedure QCP-3, Processing and Control of Deviations and Nonconformances, to further clarify conditions which require the issuance of a Nonconformance Report, including programmatic problems not directly associated with the quality of installation and their related corrective actions. This item is scheduled to be completed by March 15, 1984.

(2) HPF instructions which outline the document review process will be revised to specify the approval levels and documentation required for changes or corrections to quality records. This is scheduled to be completed by March 15, 1984.

(3) HPF has incorporated into its training program for document analysts, specific directions which assure a uniform method of conducting document reviews. Training materials, such as specifications and procedures as well as any discussion on applicable quality administrative instructions, are documented and placed in a training file for each individual.

The HPF review of records completed after September 1981 will be completed prior to commercial operation.

B.3.2 HPF PRE-SEPTEMBER 1981 RECORDS REVIEW

HPF is performing a review of records completed prior to September 1981. The criteria and scope of the review is provided in Attachment 2.

This HPF review has been initiated, and will be completed, including record turnover, prior to commercial operation. An interim report on progress of the review, including any findings and their significance, will be provided prior to power ascension.

B.3.3 HPF REVIEW OF CABLE TRACEABILITY

To provide assurance of appropriate documentation of Class I cable installation, HPF will verify traceability prior to power ascension. This verification effort will include a review of each pull package by circuit.

B.3.4 PGandE RECORDS REVIEW

In addition to the HPF review, PGandE will perform its own administrative review of documentation packages turned over to PGandE by HPF. This review will parallel the HPF record turnover and will include:

(1) Verification that all documentation packages listed on HPF's index are included.

(2) Verification that all documentation packages have been certified by HPF as being complete and correct.

(3) An audit of the documentation packages. Each package in the sampling will be completely reviewed to ensure that the package contents are complete, correct, legible, and included according to the package index.

(4) Cross-references will be developed of Foley NCRs to Foley work packages using PGandE's computer-based Records Management System (RMS). This work will be completed during entry of all contractor documents into the RMS.

Verification of all reviews will be documented on Document Review Reports (DRRs). During the review process, document packages and/or individual documents identified as missing, incomplete, incorrect, and/or illegible will be referred to HPF for corrective action. PGandE will perform follow-up reviews on the corrections of the deficiencies noted and, if generic problems are apparent, they will be investigated and resolved.

Additionally, PGandE GC/QC will continue to inspect, on a random basis, construction items which are complete and accepted by the contractor to confirm the following:

(1) Installation meets latest design documents.

(2) Inspection records are complete regarding inspection activities.

(3) Procedure and specification requirements are met.

(4) Required backup documentation is supplied (e.g., weld records, megger test records, pull tension calculations).

C. VERIFICATION THAT RECORDS COVER ALL ACTIVITIES AND WORK

To verify that all required quality records are in place and available for transfer to PGandE, HPF will perform crosschecks between work initiation documents and existing quality records. This program will be controlled by approved procedures and completed for each work package and work activity prior to record turnover to PGandE.

D. TURNOVER PROGRAM

Previous direction to HPF regarding quality records turnover has been provided by PGandE correspondence. The following procedures and instructions provide additional direction for records turnover:

(1) PGandE Quality Assurance Policy Statement - Quality Assurance Manual, Section XVII, Quality Assurance Records.

(2) PGandE Procedure for Receipt, Review, Indexing, and Storage of Records - Quality Assurance Department Records Management Handbook, Part II.

In addition, the following procedures and instructions have been recently prepared to provide further direction for records turnover.

(1) General Construction Instruction QCFI-3, Document Review of Contractor Generated Records.

(2) General Construction Instruction QCFI-4, Contractor's Record Turnover.

(3) HPF Procedure QCP-34, Safekeeping, Processing, and Turnover of Quality Assurance Records (this procedure has been approved by PGandE).

(4) HPF Quality Assurance Instructions (QAIs) implementing QCP-34. PGandE will review and approve these QAIs to verify proper implementation of QCP-34.

In addition, a PGandE turnover task force has been established to review federal, industry, and PGandE documentation requirements regarding contractor records. This task force is currently creating a generic turnover interface procedure which outlines the QA Program records turnover requirements. All existing turnover procedures and instructions will be reviewed and revised to comply with the turnover interface requirements outlined in the generic turnover interface procedure.

E. RECORDS STORAGE

Currently most HPF quality records are stored in 1 hour fire-rated file cabinets. The HPF records storage building is being upgraded to include automatic halon fire suppression and alarms. The facility upgrade will be completed by March 31, 1984. In the interim, a continuous security and fire watch will be posted in addition to the existing strict access control.

After the facility has been upgraded, all completed HPF quality records will continue to be stored in 1 hour-fire rated file cabinets within the facility. As HPF quality records are turned over to PGandE, the records will be removed from the HPF vault and stored in the QC/QC records storage vault which meets the ANSI N45.2.9 single storage facility criteria.

ATTACHMENT 1

The following quote, taken from PGandE specification 8802 is a typical section in PGandE specifications on the use and maintenance of contractor records:

4.1211 Records: Contractor shall use, collect, and maintain records and data essential to document the quality of material supplied and work performed under this Specification. Records are considered one of the principal forms of objective evidence of quality,and procedures shall assure that records are complete and reliable. All records shall be collected and filed at one location at manufacturing shops or at the work site. Records collected shall include, as a minimum, the following: drawings, specifications, purchase orders, work orders, inspection reports, test reports, work performance records, work procedures, qualification records for procedures, equipment and personnnel, nonconformance reports, corrective action records, and audit records. Inspection and test reports shall indicate the nature of observations or tests, and acceptable limits of observations or tests, the results, the type of nonconformances observed, and the identity of the observing personnel. Work performance records shall indicate acceptability of the work and/or material or necessary corrective action in cases of nonconformances. All records shall be preserved by Contractor for use by Company for ten years. If Company has not requested custody of the records and documents before the end of the ten-year period, Contractor shall request disposition instructions from Company. Until such time as they may be transferred to Company, the records and documents shall be available for inspection and review by Company and regulatory agencies. Upon request, duplicate copies of records and documents for specific items shall be provided promptly by Contractor to Constructor.

ATTACHMENT 2

CRITERIA AND SCOPE OF HPF REVIEW OF RECORDS

I. CRITERIA

A. All appropriate spaces on the records shall be filled in, pages shall be in numerical order, and the records package shall be complete.
B. All data on the records shall be clear and legible.
C. Signatures, initials and dates shall be authorized, approved, and affixed where required.
D. Records shall be accurate and properly identified. Appropriate inspection report references shall be affixed.
E. Records shall be indexed and packaged for turnover to PGandE.

Any problems identified will be promptly corrected in accordance with the modified document review process procedures and, if required, will be documented in accordance with the modified nonconformance procedure.

II. SCOPE

With the exception of certain categories of records in specific time periods, all records will be reviewed. These exceptions include records of installations for which other documents confirm installation and/or performance to the extent necessary to validate proper plant operation and maintenance. The following is a list of record categories that are excluded from the review.

A. Wire Terminations. Performance is proven by instrument loop tests, electrical dry run tests, and startup functional tests. These tests are performed and documented by PGandE. Terminations are as-built and recorded on PGandE Engineering record drawings.

B. Wire Installation. Performance is proven by instrument loop tests, electrical dry run tests, megger tests, and startup functional tests. These tests are performed and documented by PGandE. The as-built configuration of circuits is recorded on PGandE record drawings.

C. Raceway Installation. All raceways were walked down in 1982 and 1983 by Project personnel to verify spacing and location of supports. The resulting recorded data were reviewed and accepted or modifications were issued. In 1983, Project personnel walked down all Design Class I raceways to verify separation of redundant circuits. Therefore, installations completed prior to 1982 are documented and known to be correct and no further review of these documents is planned. Records completed in 1982 and later will be reviewed.

D. Raceway Support Installation. All raceway supports were walked down and as-built by Project personnel in 1982 and 1983. The resulting data were reviewed and accepted by Engineering or modifications were issued. Therefore, all installations completed prior to 1982 are documented and known to be correct and no further review of these documents is planned. Records completed in 1982 and later will be reviewed. Welding and anchor bolt installation quality was not verified as a part of these walkdowns and engineering evaluations. However, the quality of anchor bolt installations has been verified by other reviews and our findings are documented in letters to the NRC dated January 27, February 7, and February 16, 1984. Therefore, all welding records associated with these installations will be reviewed.

E. HVAC Duct Installation. The HVAC system has been tested by Project personnel and consultants to verify air flows at all locations comply with design criteria. The results are documented. Also, startup tests have been performed, documented, and results accepted. The duct configuration and location are as-built and shown on PGandE drawings.

F. HVAC Support Installation. All HVAC supports were walked down and as-built by Project personnel in 1982 and 1983. The resulting data were reviewed and accepted by Engineering or modifications were issued. Therefore, all installations accomplished prior to 1982 are documented and known to be correct and no further review of these documents is planned. Records completed in 1982 and later will be reviewed. Welding and anchor bolt installation quality was not verified as a part of these walkdowns and engineering evaluations. However, the quality of anchor bolt installations has been verified by other reviews and our findings are documented in letters to the NRC dated January 27, February 7, and February 16, 1984. Therefore, all welding records associated with these installations will be reviewed.