SUMMARY REPORT

FOR

REGIONAL EVALUATION

DIABLO CANYON, UNIT 2

DOCKET NO. 50-323

PREPARED BY

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

30 NOVEMBER 1984

SUMMARY REPORT FOR REGIONAL EVALUATION OF DIABLO CANYON UNIT 2, DOCKET NUMBER 50-323

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Item 1

INTRODUCTION AND SUMMARY

Introduction and Purpose

This construction status and operational readiness summary report has been prepared to provide information to the Directors of the Office of Inspection and Enforcement (OIE) and Nuclear Reactor Regulation (NRR) of the findings and results of the Regional office's evaluation of Diablo Canyon Unit 2 readiness for operation. This report is being prepared concomitant with a SALP evaluation which covered the period January 1, 1983 through June 30, 1984 and was conducted October 17, 1984.

Plant Summary Data

Docket Number: 50-323

Construction Permit: DPR-76; December 9, 1970

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

Plant Location: San Luis Obispo, California
7 miles South of Los Osos/Bay Wood Park

IE Region: V

Architect Engineer: Pacific Gas and Electric Company

Nuclear Steam Supply System Vendor: Westinghouse

Constructor: Pacific Gas and Electric Company

Reactor type: PWR

Design Electrical Rating: 1106 MWE

Corporate Contact: J. Shiffer, Vice President
Nuclear Power Operations (415-781-4211)

Site Contact: R. Thornberry, Plant Superintendent
(805-595-7351)

NRC Project Manager: H. Schierling (FTS 492-700)

IE Resident Inspector: M. Mendonca (805-595-2354)

Local Public Document Room: Cal Poly State University
Documents and Maps Department
San Luis Obispo, California 93401
(Diablo Canyon Nuclear Power Plant)

Item 2

HISTORY OF DIABLO CANYON POWER PLANT, UNIT 2

Planning for Unit 2 of the Diablo Canyon Power Plant (Diablo Canyon, or DCPP) began in the mid-1960s. On February 16, 1968, PGandE applied to the CPUC for certificate of Public Convenience and necessity for Uniit 2 (Application No. 50028), and following hearings, the CPUC granted the requested certification for Unit 2 on March 25, 1969 (Decision No. 75471). PGandE filed an application for a construction permit with the Atomic Energy Commission (AEC) (now the Nuclear Regulatory Commission (NRC)) for Unit 2 on June 28, 1968. After meetings with the Advisory Committee on Reactor Safeguards (ACRS) and hearings before the Atomic Safety and Licensing Board (ASLB), the AEC issued a construction permit for Unit 2 on December 9, 1970.

Construction began shortly after issuance of the construction permit and continued through September 28, 1973, when PGandE submitted the operating license application for both Units 1 and 2. Included in the FSAR was a description of an offshore fault mapped by two Shell Oil Company geologists, Hoskins and Griffiths (Hosgri). The USGS, acting as a consultant for the NRC, determined that the potential ground motion from the Hosgri fault should be applied to the design of the Diablo Canyon Plant. Early in June 1977, PGandE filed a report with the NRC containing PGandE seismic evaluation of the NRC postulated Hosgri earthquake for the Diablo Canyon units.

Seismic safety hearings before the ASLB resulted in a Partial Initial Decision on September 27, 1979. This decision found that seismic modifications to the plant would enable Diablo Canyon to withstand an earthquake of 7.5 magnitude along the Hosgri Fault. A Partial Initial Decision by the ASLB would normally have resulted in the issuing of an operating license, however, the NRC was delaying the licensing of all new plants at the time of the ASLB decision pending resolution of issues which resulted from the Three Mile Island accident of March 28, 1978.

During this period of delay additional hearings on Diablo Canyon were held before the Atomic Safety Licensing Appeals Board (ASLAB) in October and November of 1980. Those hearings reviewed the adequacy of the Diablo Canyon Security Plan and heard new seismic evidence based on data from the October 1979 Imperial Valley Earthquake. The ASLAB found in their decision of September 9, 1981, that the security plan conformed with all applicable provisions of the Atomic Energy Act of 1954 and the NRC's security regulations. In a further decision dated June 16, 1981, ASLAB affirmed the seismic adequacy of Diablo Canyon.

On July 14, 1980, PGandE filed an application for a fuel load and low power test license for Unit 1 and Unit 2. Following the NRC Staff issuance of their Safety Evaluation Reports on TMI Safety requirements, ASLAB hearings on fuel load and low power testing were held during May 1981. The ASLB found in a Partial Initial Decision dated July 17, 1981 that Diablo Canyon was ready for fuel load and low power testing. In August 1981 the NRC Staff briefed the NRC

Commissioners on unconnected issues such as shift staffing. Also in August a satisfactory Emergency Planning Exercise was conducted.

At this point in time all issues necessary to permit issuance of a low power license for both Units 1 and 2 were resolved except for completion of construction and a final IE inspection and recommendation of issuance of the license. On September 22, 1981, the Low Power License for Unit 1 was issued by the NRC. Construction completion for Unit 2 was scheduled eight months after Unit 1.

On November 19, 1981, the NRC issued an Order (CLI-81-30) suspending PGandE's authority to load fuel and to operate and test the Diablo Canyon facility at power levels of up to 5% of rated power (low power testing). The order required the establishment of an Independent Design Verification Program (IDVP) to verify the adequacy of the design process.

During the design verification review, Unit 2 review was separated from Unit 1 for the first time since the filing of the operating license application. In addition to normal design activities, Unit 2 personnel established a program known as the Internal Review Program (IRP) to address the Unit 1 findings (such as those identified by the IDVP). An additional program to address Unit 1 allegations to determine their applicability to Unit 2 was also established. The Unit 2 normal design process, the IRP, and the Allegation Review Program are being reviewed by Nuclear Reactor Regulation (NRR) for adequacy. NRC audit activities are ongoing in the areas of piping, civil/structural, allegations and the IRP, which further verifies design adequacy of Unit 2.

Following completion of the NRR review, completion of construction, and demonstration of operational readiness, Unit 2 will be ready for receipt of its operating license. The following schedule for Unit 2 major milestones has been established by the licensee:

Milestone	Scheduled Date
Hot Functional Testing	December 20, 1984
Security System Implementation	January 15, 1985
Plant Operator Licensing	January 21, 1985
Fuel Load	February 15, 1985
Initial Criticality	April 1985

Item 3

QUALITY ASSURANCE ORGANIZATION

On April 17, 1969, the proposed "Quality Assurance Criteria for Nuclear Power Plants" was published for comment in the Federal Register. These criteria were formally adopted and issued as Appendix B to 10 CFR 50, effective June 27, 1970, over 2 years after the CP for Diablo Canyon Unit 1 had been issued.

The PGandE quality program during the time period before Appendix B consisted of engineering and construction practices which included analyses, reviews, inspections, and tests common to the utility and construction industries. QA requirements for Diablo Canyon were first addressed in Appendix G to the Unit 2 Preliminary Safety Analysis Report (PSAR) which was submitted to the NRC in June 1968. PGandE revised the Unit 2 PSAR in July 1969, to include the 18 Criteria of Appendix B as part of the quality program.

In anticipation of the requirements of Appendix B, PGandE organized the Quality Engineering (QE) Section within the Engineering Department in November 1969, and assigned it responsibilities in connection with the construction of nuclear power plants. The Company issued a QA manual for Design and Construction (often called the "Red Book") in January 1970, utilizing the proposed 18 criteria of 10 CFR 50, Appendix B. By the time the manual was issued, the proposed Appendix B criteria had been issued unchanged as a regulation.

With the issuance of ANSI N45.2 in 1971, the concept of independence of the QA organization was further clarified. In response, PGandE management established a separate Quality Assurance Department, formerly the QE section. Instead of reporting to the Vice President of Engineering, the QA Department began reporting to the Senior Vice President (Engineering, Construction, Planning and Research) (see Attachment 1). In August 1972, the QA Program policy was revised to reflect the new independent reporting relationship. The new department was responsible for the development and issuance of corporate policies, procedures and revisions thereto, just as QE had been. The scope of the audit program for the QA Department was broadened over that of QE to provide a means for evaluating the quality program's effectiveness in all departments and for reporting findings to executive management.

PGandE submitted to the NRC on January 30, 1975, Amendment 25 to its OL Application which revised FSAR Chapter 17.2, "Quality Assurance Program For Plant Operation." Amendment 25 stated PGandE's commitment to follow the guidance contained in the "Rainbow Books" where appropriate.

On September 26, 1975, PGandE issued the "Quality Assurance Manual for Operating Nuclear Power Plants" (commonly referred to as the "White Book") which was issued in anticipation of fuel loading for Unit 1. The White Book described the quality program being implemented at the Humboldt Bay Power Plant

Unit 3, and the quality program which was to be implemented at Diablo Canyon Units 1 and 2 when the responsibility for the systems in place was transferred to the PGandE Operations Department. However, the "Red Book" remained in effect as the QA manual for design and construction activities.

Beginning in 1977, each department responsible for nuclear activities established a QC group to perform monitoring activities of the department's quality-related functions. QC groups were formed within the Engineering, Planning and Research, Materials, and Operations Departments. General Construction's QC group had been functioning onsite at Diablo Canyon since 1969. The quality program became a combined effort of the QA Department and the QC groups working collectively to monitor the implementation of the quality program. The QA Department was responsible for performing an overview function of the combined effort and for reporting to executive levels of management on program effectiveness. The QC groups were responsible for the day-to-day functioning of the quality program within their respective departments and the reporting on the status of the quality program to their management.

The QC groups issued procedures which described the requirements that each department had to comply with. These procedures were contained in the following manuals:

- Materials Department Manual, issued April 20, 1976
- Engineering Department Manual, issued May 5, 1977
- Operations Plant Manual, QC Procedures, issued June 10, 1977
- Planning and Research Manual, issued April 23, 1980
- General Construction Manual, issued May 8, 1980

The establishment of the QC groups and the issuance of QC procedures was followed by major revisions to the corporate QA manuals to describe the responsibilities of the QC groups and to delete procedures and/or requirements which had been superseded by QC procedures. The revisions to the corporate QA manuals encompassing these aspects of the program spanned the time period from March 1977 through September 1978.

In January 1976, senior management anticipated that with the nuclear units becoming part of the generating system, a concerted effort would be needed to identify and manage the large volume of nuclear records that were being developed and the retention of which is required by law. A records management (RM) section was established in 1977 in the QA Department because QA already had access to all of PGandE's NRC-required records and had established interfaces with all involved departments.

In April 1980, the QA Department began reporting to the Vice President of the newly established Nuclear Power Generation Department. This change in reporting occurred in anticipation of management's expectation that Unit 1 would begin operating.

On January 22, 1981, PGandE committed to several Reg. Guides and ANSI Standards. These Reg. Guides and Standards are in a table contained in the 1983 revision of Chapter 17 to the Diablo Canyon FSAR (See Attachment 2). The revision was submitted to NRC December 2, 1983, and was approved December 20, 1983.

On February 9, 1981, the Quality Assurance Manual for Nuclear Power Plants was issued, superseding both the "Red Book" and the "White Book".

In September 1983, the QA Department was reorganized into five basic sections (See Attachment 3). Due to the reorganization and the extent of the FSAR commitments, on June 30, 1984 there were 100 people working directly for the QA Department. (For the number of QA personnel in prior years, See Attachment 4.) The reorganization made it possible to give proper attention to the various tasks the department now had with more employees in supervisory positions. Prior to this reorganization, the QA department consisted of two basic sections, auditing and program development.

During the preparation of the December 1983 revision to FSAR Chapter 17, PGandE management decided to move the QA Department back to its independent position of reporting to an executive level of management. In December 1983, the QA Department began reporting to the Executive Vice President, Facilities and Electric Resources Development (See Attachment 5).

Another major development in the post-1981, time period was the retention of the Bechtel Power Corporation as the Project Completion Manager. The basic QA Program for this effort was accepted by PGandE based on the NRC's endorsement on June 12, 1981, of Bechtel's Topical Report BQ-TOP-1.

The formation of the integrated PGandE/Bechtel project team in April 1982, required modifications to the QA program to take into account the new project organization and differences in implementation of the work. It was the conclusion of both PGandE and Bechtel management that it would be best to adopt the previously approved Bechtel Topical QA program for future design work to be performed by the integrated Project Team. This conclusion was based on the following:

- The integrated Project Team was under the direction of a Project Completion Manager who was a Bechtel employee reporting to a PGandE Executive Vice President. The Project Team consisted of PGandE and Bechtel management employees interspersed throughout the integrated organization at various levels of supervision.

- The Bechtel Topical QA Program had been accepted generically by the NRC. The program was primarily designed for use in project team matrix organizations typical of other Bechtel projects and similar to that being developed for the integrated PGandE/Bechtel Project Team.

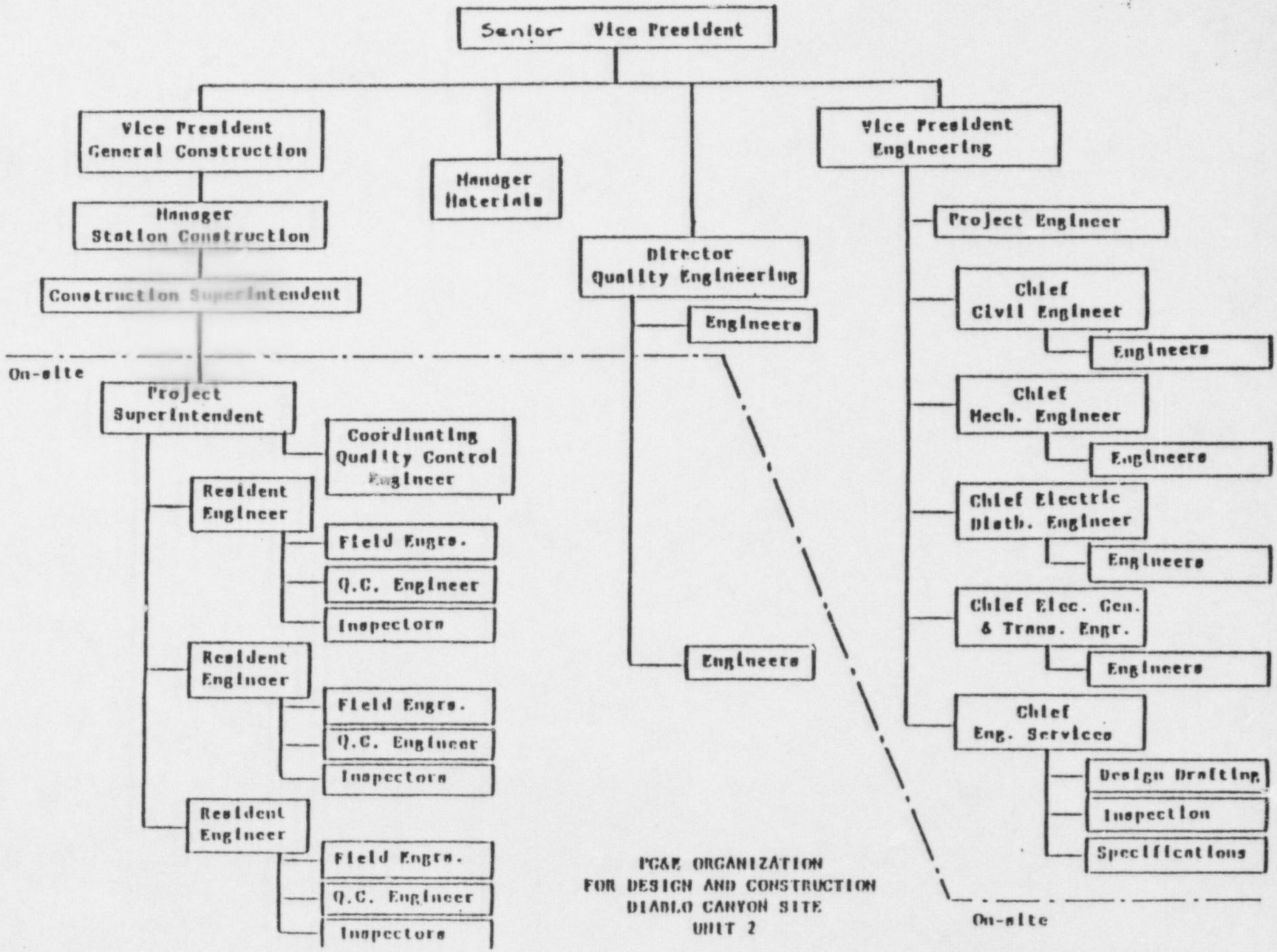
- Based on the circumstances under which the integrated Project was formed, it was believed the Bechtel program would be more readily accepted by the NRC, the IDVP, and all other parties involved. With past implementation of the PGandE QA program under question, it would provide additional credibility to use a different, more proven, program.

Throughout this decision making process, the in-place PGandE QA Program was adequate and remained in effect, governing procurement and construction activities as well as PGandE QA auditing and overview of the integrated project's design activities.

The process of conforming the PGandE Engineering Manual (EM) to the Bechtel QA Program and implementing the revised manual had a positive benefit in that certain additional features and controls of the Bechtel QA Program could be evaluated and, if appropriate, retained by PGandE for any future engineering evaluation or modification work on the plant during commercial operation.

PGandE's QA Department reviewed and approved the Bechtel QA Program including the revised EM. PGandE's QA Department has reviewed and audited the implementation of the project QA Program since its effective date on August 20, 1982. Attachment 6 shows the Diablo Canyon Project Unit 2 organization and the relationship of Quality Assurance.

ATTACHMENT 1
(1972)



PG&E ORGANIZATION
FOR DESIGN AND CONSTRUCTION
DIABLO CANYON SITE
UNIT 2

ATTACHMENT 2
(1983 FSAR Rev.)

TABLE 17.2

(Sheet 1 of 3)

CURRENT REGULATORY REQUIREMENTS AND PG&E COMMITMENTS PERTAINING TO THE QUALITY ASSURANCE PROGRAM

The Quality Assurance Program described in the Quality Assurance Manual for Nuclear Power Plants complies with the requirements set down in the Code of Federal Regulations. In addition, it complies with the regulatory documents and industry standards listed below. Changes to this list are not made without the review and concurrence of the Quality Assurance Manager.

Reg. Guide	Date	Standard No.	Rev.	Title/Subject	Comments/Reservations
(R.G.) 28	6/72	ANSI N45.2	1971	Quality Assurance Program Requirements for Nuclear Power Plants	
1.37	3/73	ANSI N45.2.1	1973	Quality Assurance Requirements for Cleaning Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants	
1.33	5/77	ANSI N45.2.2	1972	Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants	
1.39	9/77	ANSI N45.2.3	1973	Housekeeping Requirements for Water-Cooled Nuclear Power Plants	
1.30	8/72	ANSI N45.2.4	1972	Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment	
1.94	4/76	ANSI N45.2.5	1974	Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants	

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ATTACHMENT 2
(1983 FSAR Rev.)

TABLE 17.2

(Sheet 2 of 3)

CURRENT REGULATORY REQUIREMENTS AND PG&E COMMITMENTS
PERTAINING TO THE QUALITY ASSURANCE PROGRAM

Reg. Guide	Date	Standard No.	Rev.	Title/Subject	Comments/Reservations
1.29	9/78	--	--	Seismic Design Classification	
1.58	9/80	ANSI N45.2.6	1978	Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel	ANSI N45.2.6 applies to individuals conducting independent QC inspections, examinations, and tests. ANSI N18.1 applies to personnel conducting inspections and tests of items or activities for which they are responsible (e.g., plant surveillance test maintenance tests, etc).
1.116	5/77	ANSI N45.2.8	1975	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems	
1.88	10/76	ANSI N45.2.9	1974	Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records	Except we will comply with the two-hour rating of Section 5.6 of ANSI N45.2.9 issued July 15, 1979.
1.74	2/74	ANSI N45.2.10	1973	Quality Assurance Terms and Definitions	
1.64	6/76	ANSI N45.2.11	1974	Quality Assurance Requirements for the Design of Nuclear Power Plants	
1.144	1/79	ANSI N45.2.12	1977	Auditing of Quality Assurance Program for Nuclear Power Plants	

ATTACHMENT 2
(1983 FSAR Rev.)

TABLE 17.2

(Sheet 3 of 3)

CURRENT REGULATORY REQUIREMENTS AND PG&E COMMITMENTS
PERTAINING TO THE QUALITY ASSURANCE PROGRAM

Reg. Guide	Date	Standard No.	Rev.	Title/Subject	Comments/Reservations
1.123	7/77	ANSI N45.2.13	1976	Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants	
1.146	8/80	ANSI N45.2.23	1978	Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants	
1.33	2/78	ANSI N18.7	1976	Quality Assurance Program Requirements (Operation)	
1.8	9/75	ANSI N18.1	1971	Personnel Selection and Training	
	2/79	ANSI/ANS 3.1	1979	Personnel Selection and Training	Within three years of commercial operation
4.15	12/77	—	--	Quality Assurance for Radiological Monitoring Programs (Normal Operations) - Effluent Streams and the Environment	
BTP APCSB 9.5-1	5/76	—	--	Guidelines for Fire Protection for Nuclear Power Plants	
1.26	2/76	--	--	Quality Group Classifications and Standards for Water, Steam, and Radioactive Waste Containing Components of Nuclear Power Plants	Design and construction of Diablo Canyon Power Plant started in 1965 and most of the work cannot comply with the specific requirements of Regulatory Guide 1.26, February 1976. The intent of the Reg. Guide has been followed as shown by comparing the Reg. Guide with Tables 3.2-2 and 3.2-3 in the FSAR.

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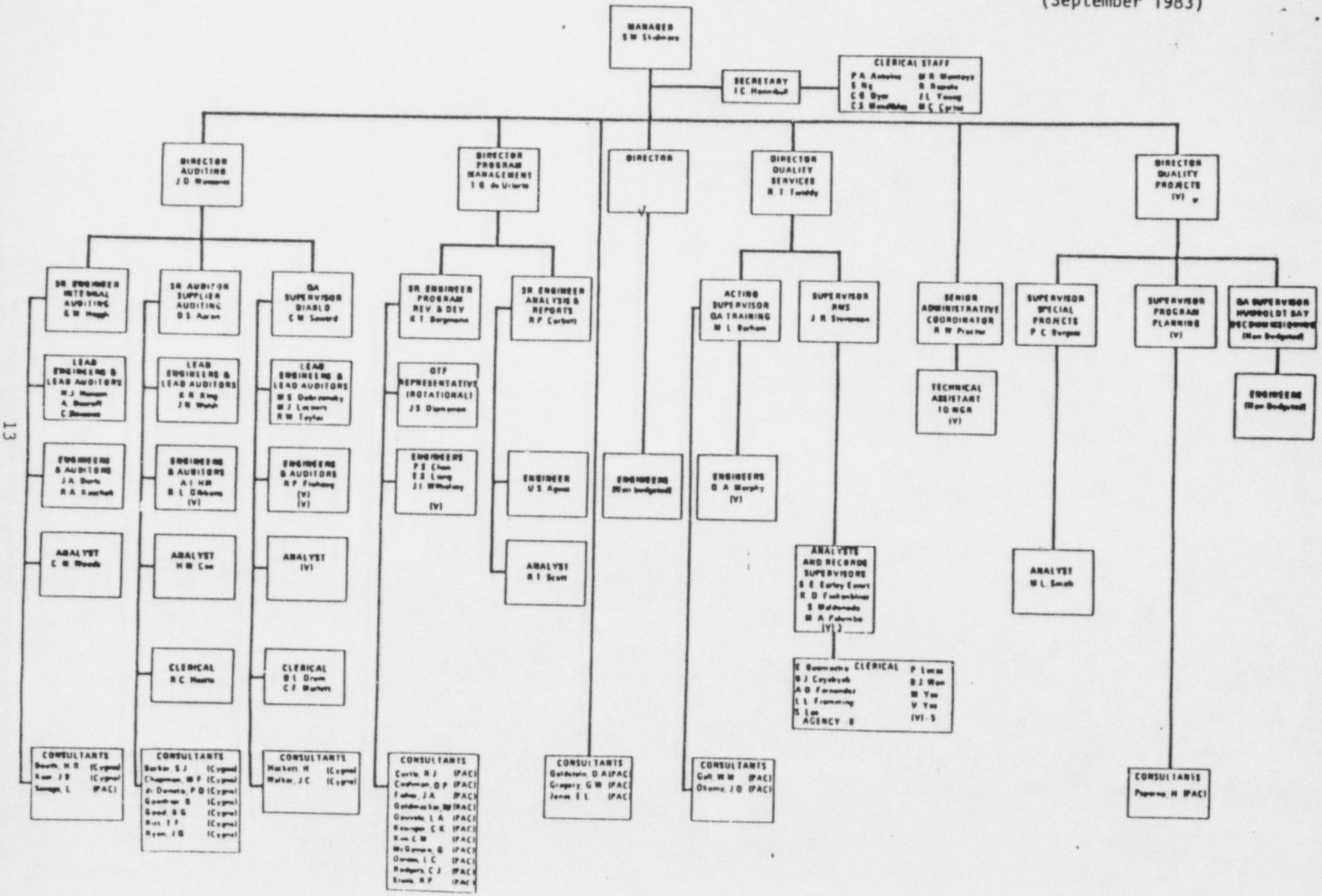
QUALITY ASSURANCE DEPARTMENT

ATTACHMENT 3
(September 1983)



JUNE 30 1984

PACIFIC GAS AND ELECTRIC COMPANY

ACTIVE EMPLOYEES 1973-1984(APRIL)

DIVISION:GENERAL OFFICE
DEPARTMENT:EXEC VP FACILITIES:QUALITY ASSURANCE

	1973 (DEC)	1974 (DEC)	1975 (DEC)	1976 (DEC)	1977 (DEC)	1978 (DEC)	1979 (DEC)	1980 (DEC)	1981 (DEC)	1982 (DEC)	1983 (DEC)	1984 (APR)
MGT./PROF. LEVELS 7 & UP	1	1	1	1	4	3	4	5	5	5	5	13
MGT./PROF. LEVELS 5 & 6	9	13	14	16	11	13	14	10	9	12	14	15
MGT./PROF. LEVELS 1-4					2	2	3	2	3	5	4	9
MGT./PROF. SUBTOTAL	10	14	15	17	17	18	21	17	17	22	23	37
ADV. CLERICAL	1	1	1	1	3	6	6	5	8	7	8	6
ENTRY CLERICAL	1	1	2	2	3	3	3	5	6	7	10	10
CLERICAL SUBTOTAL	2	2	3	3	6	9	9	10	14	14	18	16
TOTAL	12	16	18	20	23	27	30	27	31	36	41	53

AVERAGE ANNUAL CHANGE IN TOTAL EMPLOYEES 1973 TO 1983 IS: 13.07%

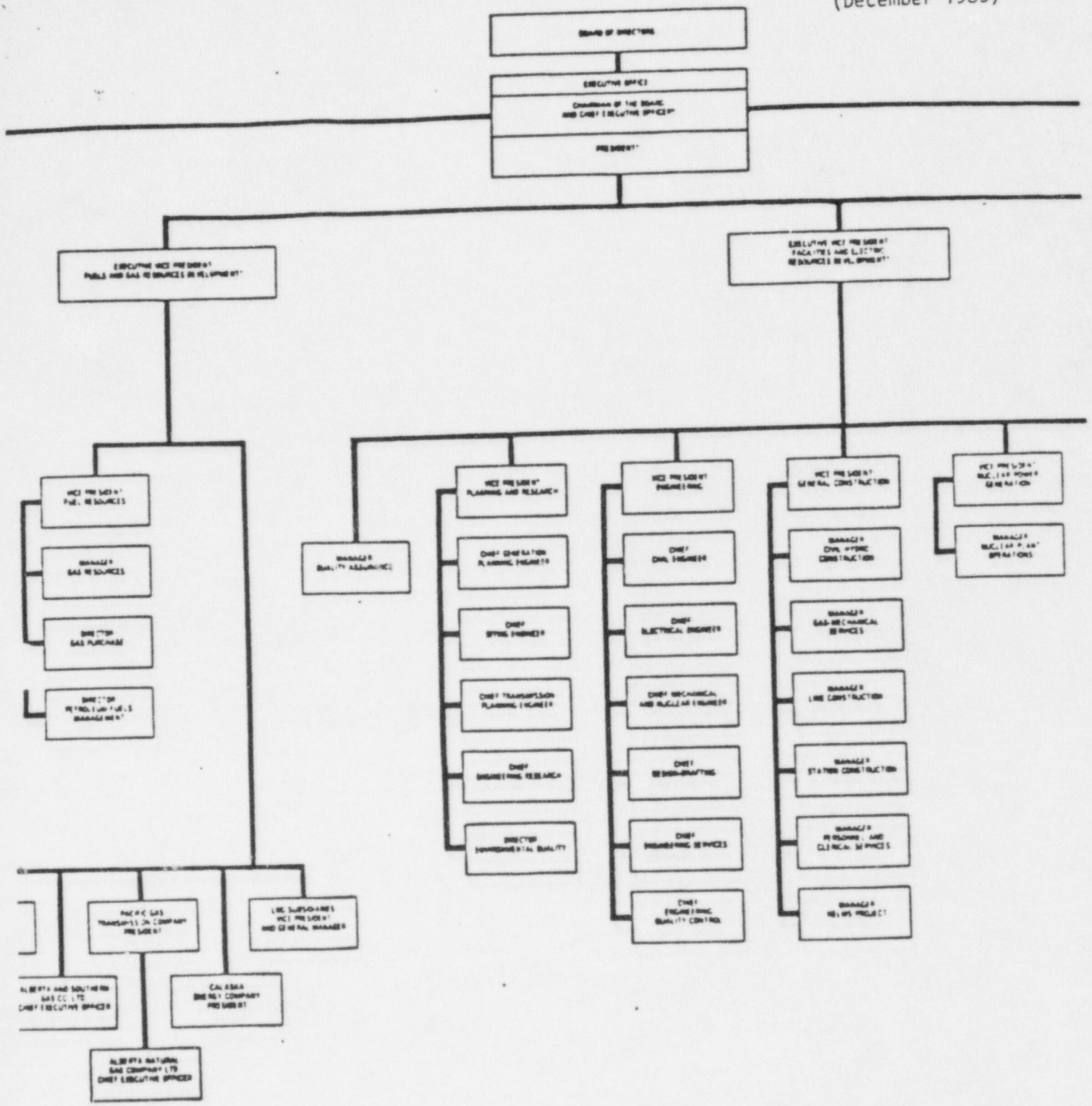
*700

NOTE: COUNTS FOR YEARS 1973 THROUGH 1983 HAVE BEEN ADJUSTED FOR CHANGES IN THE ORGANIZATION.
ALL COUNTS REPRESENT AS CLOSELY AS POSSIBLE THE ORGANIZATIONAL STRUCTURE AS OF APRIL 1984.

PERSONNEL INFORMATION AND TECHNICAL SERVICES
RMRAY(X4005)

* This chart only shows PGandE employees and does not include consultants working for the Department in 1983 and 1984.

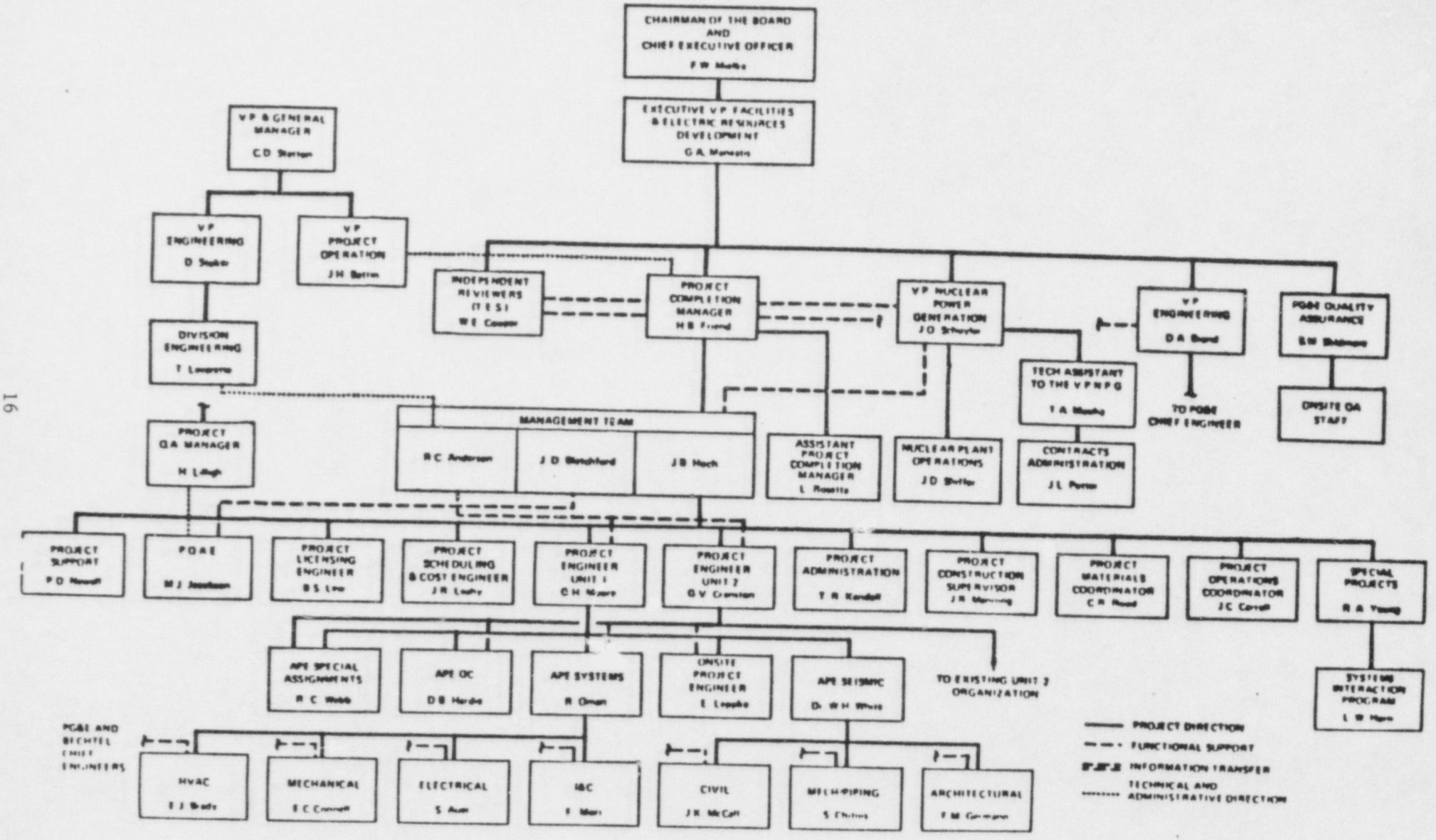
ATTACHMENT 5
(December 1983)



EXCERPTED FROM
FSAR, CHAPTER 17
SUBMITTAL APPROVED
BY NRC DECEMBER, 198

ATTACHMENT 6
(June 1984)

DIABLO CANYON PROJECT ORGANIZATION



6/84

Item 4

Nuclear Regulatory Commission Inspection Activities

(a) Construction Inspections (MC-2512)

Construction is essentially complete and the construction inspection program is complete with the exception of several modules (listed below) which were left open to allow examination of the Lawrence Livermore National Laboratory contractor inspections.

50090 Safety Related Pipe Support and Restraint Systems
51054 Electrical-Observation of Work
55063 Safety Related Structures - Observation of Work
55064 Safety Related Structures - Observation of Work

These inspections will continue at a decreasing pace through January 1985. Final contractor reports are expected in March 1985, although this might slip a month if the licensee still is completing substantial safety related work.

Construction items which currently require follow-up include; plant rupture restraints, structural and miscellaneous steel work in the containment, examination of PG&E report of cracking in PPP rupture restraints, examination of pipe hangers and vacuum breakers in Unit 2 ASW system, fire door upgrading, penetration seals and foaming, repair of polar crane main hoist gearing, installation of tube lane blocking devices in steam generators, and completion of the RVLIS. Closeout of these items will require about 2 manweeks of effort.

(b) Operations Inspections, Preoperational Testing (MC-2513)

The inspection program for preoperational testing has been completed with the exception of hot functional test (HFT) observations and results review which are currently being completed. Licensee personnel have scheduled completion of the HFT by December 1, 1984 although they are currently two to three weeks behind schedule. The modules remain open to evaluate the HFT and its results are listed below.

70312 Preoperational Test Witnessing
70314 Witness Hot Functional Tests
70320 Evaluation of Test Results
70322 Evaluation of ESF Test Results

The licensee's radiation protection program is identical for Unit 1 and 2 and therefore, should only require implementation in the Unit 2 areas of the plant coincident with establishing operability of hardware and procedure implementation to allow Unit 2 fuel load. At this time sixteen preoperational tests, NUREG 0737/TMI items, and calibration/acceptance of Twenty-two radiation monitors require completion. The following modules have been left open to allow tracking these items.

83320 Radiation Protection - Preoperational Inspection
84330 Radioactive Waste System - Preoperational Liquid and Solid Waste
84331 Radioactive Waste System - Preoperational Gas Waste System

The licensee's operations staff appear adequate to operate and manage Unit 2, however, approximately twenty operators must be qualified for a "hot" license for Unit 2 prior to fuel load. The Operator Licensing Branch has the lead for this effort and no modules remain open related to staffing of Unit 2.

Regarding TMI action plan item (NUREG 0737), There are twenty-four fuel load and twelve full power items requiring completion by the licensee and inspection by the staff. These items appear to be minor in nature (such as calibration, approval of procedures, etc.) and do not appear to be an impediment to licensing. Close out for fuel load items is scheduled for January 1985 and for full power items for April 1985.

The last security inspection of Unit 1 was completed June 29, 1984. The licensee intends to implement the security program for Unit 1 by December 22, 1984 to support a fuel loading date of January 28, 1985. The Region V office has scheduled a security inspection for Unit 2 during January 7-11, 1985.

Since emergency preparedness is done on a site wide basis, the emergency preparedness program for Unit 2 was addressed during the preoperational inspection for Unit 1. The routine inspections and observations of emergency preparedness exercises conducted since the Unit 1 operational license was issued have shown the program to be acceptable.

(c) Operations Inspections, Power Ascension Tests (MC 2514)

The programatic aspects of the power ascension test program for Unit 2 are essentially the same as those for Unit 1 and have been reviewed and approved by the staff. The modules remaining open involve the observations of tests, the review of results and evaluation by the staff.

(d) Allegations and Investigations

Allegations have been managed by the responsible Operations Branch and Section Chiefs which the Technical Support Branch doing most of the evaluation, investigation, and documentation. As of October 26, 1984 four hundred and seventy-eight allegations were open. Forty-six were assigned to Region V, one-hundred-thirty-nine to OI, one-hundred and forty-three to PG&E, and one hundred and fifty to to NRR. The allegations being handled by Region V are divided between the in-office staff and the Diablo Canyon Residents. Since these allegations were examined originally for applicability to Unit 1, a review to determine applicability to Unit 2 must be completed. It is anticipated that this review will be documented in an SSER prepared by NRC and Region V personnel.

OI currently has fifteen investigation cases in progress dealing with Diablo Canyon Unit 2. Most of these cases relate to employee discrimination or intimidation and therefore do not appear to relate to the readiness for operation of Unit 2. On the other hand four cases (5-84-022,027,028, and 029) relate to QA/QC of PG&E or its' contractors and might have some future impact. However, at this time there is no apparent impact on Unit 2 as a consequence of these allegations.

Item 5
Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
81-01	Qualification of inspection, examination, testing and audit personnel	07/14/81	Closed	Units 1 and 2. PGandE responded that compliance with Regulatory Guide 1.58, Rev. 1, and Regulatory Guide 1.146, with, noted exceptions will be fully implemented by the date that Unit 1 is issued a full power operating license. Compliance confirmed in Chapter 17 on the updated FSAR submitted September 21, 1984.
81-02	Analysis, conclusions, and recommendations concerning operator licensing	---	NA	Response is not required. NRC intends to develop additional criteria for the requirements for operator licensing, and is soliciting review and comments. Response to this request is voluntary.
81-04	Emergency procedures and training for station blackout events	03/09/82	Closed	Units 1 and 2. PGandE responded that Emergency Operating Procedures have been developed based on WOG guidelines. Required training has been incorporated into operator requalification program.
81-05	Information regarding the the program for environmental qualification (EQ) of safety-related electrical equipment	---	NA	Response is not required. this Generic Letter provides information in response to requests from licensees. It provides clarification of the EQ requirements of the electrical equipment specified.
81-06	Periodic updating of FSARs	---	NA	Response is not required until 2 years after issuance of Unit 2 operating license.
81-07	Control of heavy loads	---	NA	Response is not required. This Generic Letter corrects a text error in an earlier NRC transmittal and forwards 5 missing pages. The original request to provide information on heavy loads was in a letter from the NRC dated 12/22/80 (not a generic letter). Response for Unit 2 on the control of heavy loads was provided by PGandE submittal of 07/29/83, and supplemental response is scheduled to be submitted mid-November.
81-10	Post-TMI Requirements for the Emergency Operations Facility - NUREG-0737 III.A.1.2	04/08/81	Closed	Units 1 and 2. Information on EOF and staffing levels was contained in two PGandE letters both dated 1/13/81. PGandE is in compliance for Units 1 and 2 for required staffing levels. PGand E letter of 4/18/81 provides additional information.

Item 5

Generic Correspondence

Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
81-11	Second letter on BWR feedwater nozzle and control rod drive return linenozzle cracking	---	NA	Response is not required. Provided to PWR licenees and applicants for information only.
81-15	Environmental qualification of Class IE electrical equipment clarification of staff's handling of proprietary information.	---	NA	Response is not required. NRC transmits Policy Statement in response to concerns from certain equipment vendors and clarifies NRC's position that summary type information alone is not adequate to establish qualification.
81-16	Steam generator overfill	---	NA	Response is not required. NRC transmit report and request that applicable information be factored into operator training and requalification programs. See generic letter 81-28.
81-17	Functional Criteria for ERF's (NUREG-0696)	---	NA	Response is not required. Transmittal letter for NUREG-0696.
81-21	Natural circulation cooldown - vessel voiding	12/07/81	Closed	Units 1 and 2. PGandE letter summarizes review and provides assurance to alleviate concerns of reactor vessel voiding, noting that Diablo Canyon operating procedures will be revised, tests performed, and training implemented as outlined. Complete; see PGandE letter August 2, 1983, and September 26, 1984 (DCL-84-314).
81-22	Engineering evaluation report of H. B. Robinson reactor coolant system leak, 1/29/84	---	NA	Response is not required. Transmittal for information and training purposes.
81-23	INPO plant-specific evaluation reports	---	NA	Response is not required. NRC requests that any such reports be submitted through normal docketing channels. Cancelled by Generic Letter 81-23A.
81-23A	INPO evaluation reports - NRC request in Generic Letter 81-23 is cancelled	---	NA	Response is not required. NRC cancels Generic Letter 81-23.

Item 5
Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
81-25	Change in implementing schedule for submission and evaluation of upgraded emergency plans	---	NA	Response is not required. NRC transmits schedule of NUREG-0737 changing the implementation schedule to require upgrade emergency plans from prior to "fuel load" to prior to "full power" authorization.
81-27	Private and proprietary material in emergency plans	06/11/81	Closed	Units 1 and 2. In accordance with NRC request, PGandE identified information that should be deleted by NRC from previously transmitted PGandE submits prior to distribution to various Public Document Rooms.
81-26	Steam generator overfill - additional criteria for operator training and qualification	---	NA	Response is not required. See 81-16 (same subject). IOM Kaefer to Shiffer reports that requested training was conducted for cold license candidates and was incorporated in Requalification Training Program, and states no formal written response to NRC is required.
81-29	Request for schedule for simulator examinations, 1981 and 1982	10/01/81	Closed	Units 1 and 2. PGandE provided schedule of simulator examinations through 1981 and all of 1982 for operator licensing.
81-36	Revised schedule for completion of TMI action plan Item II.D.1, relief and safety valve testing	---	NA	Response is not required. NRC transmits a revised schedule in response to a request for schedule relief for completing that portion of NUREG Item II.D.1 related to PWR (EPRI) testing program.
81-38	Storage of low level radioactive wastes at power reactor sites	---	NA	Response is not required. NRC guidance is provided on the variety of plans which are underway and how they should be reviewed and approved.
81-39	NRC volume reduction policy statement	---	NA	Response is not required. NRC forwards the Federal Register Notice for information and use.
81-40	Qualifications of reactor operators - license examinations	---	NA	Response is not required. NRC invites public comments on license examination criteria.
82-01	New facility applications survey	03/11/82	Closed	Units 1 and 2. PGandE responded that no new facilities or modifications to facilities are anticipated. Therefore, no applications or requests of the type described in 82-01 would be submitted by PGandE through 12/31/84.

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Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
82-02	Nuclear power plant staff working hours - factors causing fatigue	---	NA	Response is not required. NRC transmits the Policy Statement on factors causing fatigue of operating personnel at nuclear reactors. When R.G. 1.33 and NUREG-0737 are revised to reflect the policy, NRC will contact each licensee by separate letter.
82-04	Use of INPO SEE-IN program	---	NA	Response is not required. NRC describes the Significant Event Evaluation and Information Network (SEE-IN) program and encourages participation.
82-06	Transmittal of NUREG-0909 relative to Ginna Tube rupture	---	NA	Response is not required. NUREG-0909 will be made part of the plant training program under NUREG-0737, TMI TAP I.C.5.
82-09	NRC Staff positions concerning environmental qualification of safety-related equipment (Ref RG 1.89/NUREG-0588)	---	NA	Response is not required. Transmittal of NRC Staff positions which will be used in the review of licensing submittals.
82-11	Transmittal of NUREG-0916 restart of Ginna Nuclear Plant	---	NA	Response is not required. NRC transmits NUREG-0916 and notes that generic aspects are being developed as a result of lessons learned from the Ginna event.
82-12	Nuclear power plant staff working hours (ref: Generic	10/01/82	Closed	Units 1 and 2. PGandE administrative procedures address the revised working hours guidelines in Generic Letter 82-12.
82-13	Reactor operator and senior reactor operator exams	---	NA	Response is not required. NRC transmittal, for information, of the results of a meeting to discuss changes to examinations.
82-14	Submittal of documents to NRC	---	NA	Response is not required. NRC clarifies the number of document copies to be submitted to the NRC.
82-18	Reactor operator and senior reactor operator requalification	---	NA	Response is not required. Provides information and schedule for NRC-administered requalification examinations.

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Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
82-19	Submittal of copies of documents to NRC	---	NA	Response is not required. PGandE follows the procedures outlined in making submittals to the NRC.
82-20	Guidance for implementing standard review plan rule	---	NA	Response is not required. NRC transmittal of NUREG 0906 for public comment.
82-21	Technical specifications for fire protection audits	---	NA	Response is not required. NRC guidance is provided for information.
82-22	Congressional request for information concerning steam generator tube integrity	11/24/81	Closed	Units 1 and 2. PGandE responded to NRC questions, stating that PGandE has not accumulated any operating experience at Diablo Canyon Units 1 and 2 and, therefore cannot provide meaningful answers.
82-26	Inadequate core cooling instrumentation system	04/27/83 08/19/83	Open	Units 1 and 2. PGandE letters dated 4/27/83 and 8/19/83 provide all the information necessary for the NRC Staff to complete their review, and state that the systems final connections, testing, and calibration will be performed during low power testing, and environmental qualification of the systems will be completed by 3/31/85. PGandE letter of 6/25/84 provides evidence of EQ documentation.
82-30	Filings relating to 10 CFR 50 production and utilization	---	NA	Response is not required. NRC reminder to file subject documents with the Director of the NRC.
82-33	Requirements for emergency response capability - Supplement 1 to NUREG-0737	04/18/83 09/19/83 04/30/84	Open	Units 1 and 2. PGandE submittals provide schedule information for completion of the requirements in Supplement 1 to NUREG-0737. PGandE's submittal of 4/30/84 schedules Unit 2 SPDS, EOF, and TSC to be operable/ functional prior to Unit 2 criticality. In addition, the Control Room Design Review Summary Report is scheduled 12/31/84, and completion of training of operators on EOPs and SPDS, as well as implementation of the Emergency Operating Procedures, are scheduled 3/28/85.
82-36	Meeting to discuss recent developments for operating licensing examinations	---	NA	Response is not required. NRC meeting notice.

Item 5

Generic Correspondence

Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
82-39	Problems with the submittals of 10 CFR 73.21 safeguards information	---	NA	Response is not required. NRC provides procedures to be followed for all future transmittals to the NRC involving safeguards information.
83-01	Operator licensing examination site visit	02/28/83	Closed	Units 1 and 2. PGandE letter provides present estimate of anticipated requests for site visits.
83-04	Regional workshops - NUREG-0737, Supplement 1, requirements for emergency response capability	---	NA	Response is not required. NRC provides information on dates and locations of regional workshops.
83-06	Certificates and revised format for reactor operator and senior reactor operator licenses	---	NA	Response is not required. NRC states new format of Certificates will be suitable for framing.
83-07	Nuclear waste policy act of 1982	02/18/83 03/04/83	NA	PGandE responded in letters dated 02/18/83 and 03/04/83 that the Company is actively and in good faith negotiating with the DOE for required contract. A letter from DPHodel, the Secretary of Energy, dated 03/24/83 certified that PGandE is in good faith negotiating with DOE.
83-10c	Resolution of TMI Action Item II.K.3.5 - automatic trip of reactor coolant pumps	05/31/83 01/19/84	Open	Units 1 and 2. PGandE letters provide plans and schedules for resolution of TMI Action Item II.K.3.5. PGandE has reviewed the WOG report, "Justification of Manual RCP Trip for Small Break LOCA Events," and found the generic information presented justifies the manual RCP trip for Units 1 and 2 when RCP trip setpoints consistent with WOG "Emergency Response Guidelines," Rev. 1, are in use. PGandE's schedule for including the RCP setpoint trip in the Emergency Operating Procedures is March 28, 1985. (One year after receipt of WOG Guidelines - PGandE letter April 30, 1984.)
83-12	Issuance of NRC form 398 personal qualifications statement - licensee	---	NA	Response is not required. NRC letter provides the form to be submitted by all applicants for operator and senior operator and senior operator licenses under 10 CFR 55.
83-13	Clarification of surveillance requirements for HEPA filters and charcoal absorber units in standard technical specifications	---	NA	Response is not required. NRC transmits revised testing requirements to be used in proposed Technical Specifications when they are submitted. These changes will be incorporated in the next revision of the STS.

Item 5
Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
83-14	Definition of "key maintenance personnel" (Clarification of Generic Letter 82-12)	---	NA	Response is not required. NRc provides clarification of the term "key personnel" as used in the NUREG 0737 revision transmitted with Generic Letter 82-12. PGandE procedures are in agreement with this definition. (See also Generic Letter 82-12).
83-15	Implementation of Regulatory Guide 1.150	---	NA	Response is not required. NRC recommends that all licensees modify their technical specifications, if appropriate. PGandE IOM, dated 8/18/83, from NPO to Licensing, states that no modifications are required.
83-16	Transmittal of NUREG-0977 relative to ATWS events at Salen 1 (includes 83-16A)	---	NA	Response is not required. PGandE Procedure NPAR C-14, Supplement 1, "Dissemination of Operating Experience," has been accepted as satisfying TMI Item I.C.5 in IE-IR 50-323, 81-10.
83-17	Requalification exams for renewal of reactor operator and senior reactor operator	---	NA	Response is not required. NRC highlights the need for ensuring that the validity of 10 CFR Part 55 certifications, and integrity and honesty of the requalification program, are adequately addressed in facility procedures. NRC will review these procedures as a part of their audits of the licensed reactor operator and senior reactor operator requalification programs.
83-20	Integrated scheduling for Implementation of plant modifications	---	NA	Response is not required. Amendment No. 91 to Duane Arnold Energy Center operating license is provided to licensees' for information and possible use.
83-21	Clarification of access control procedures for law enforcement visits	---	NA	Response is not required. NRC letter provides clarification of procedures.
83-22	Safety evaluation of "Emergency Response Guidelines"	---	NA	Response is not required. Transmittal of NRC's safety evaluation of WOG "Emergency Response Guidelines," and guidance for implementation.
83-23	Safety evaluation of "Emergency Procedure Guidelines"	---	NA	Response is not required. Transmittal of NRC's safety evaluation of Combustion Engineering "Emergency Procedure Guidelines," and guidelines for implementation.

Item 5

Generic Correspondence

Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
83-26	Clarification of surveillance requirements for diesel fuel impurity level tests	---	NA	Response is not required. NRC transmits the revised Surveillance Requirements that are to be used when proposed Technical specifications are submitted.
83-27	Clarification of surveillance intervals in standard technical	---	NA	Response is not required. NRC provides clarification of surveillance intervals.
83-28	Required actions based on generic implications of Salem ATWS events	11/07/83	Open	Units 1 and 2. PGandE letter provides the current status and the schedules for completion of Generic Letter 83-28 action items for Units 1 and 2. Submittals are scheduled into 1986.
83-30	Deletion of Standard Technical Technical Specification Surveillance Requirement 4.b.1.1.2.d.6 for Diesel Generator Testing	---	NA	Response is not required. PGandE issued DCL-84-127, dated 3/30/84, to submit LAR 84-07 requesting deletion of the surveillance requirement as required by Generic Letter 83-30. Unit 2 proposed Technical Specification submitted in PGandE letter DCL-84-309, dated 9/21/84, does not include the diesel generator surveillance requirement.
83-33	NRC positions on certain requirements of 10 CFR 50, Appendix R	---	NA	Response is not required. NRC positions are transmitted for information and use as appropriate. No written response is required.
83-35	Clarification of TMI action plan item II.K.3.31	---	NA	Response is not required. NRC provides clarification of analyses which can satisfy the requirements of NUREG-0737, Item II.K.3.31.
83-38	NUREG-0965 - NRC Inventory of Dams	---	NA	Response is not required. Transmittal of NRC Dam Safety Program for information.
83-43	Reporting requirements of 10 CFR 50, Sec. 50.72 and 50.73, and Standard Technical Specifications	---	NA	Response is not required. Draft Technical Specifications for Unit 2 already contain the requested change. (New LER Rule).
83-44	Availability of NUREG-1021, "Operator Licensing Examiner Standards"	---	NA	Response is not required. NRC announcement of publication of the subject standards.

Item 5
Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	STATUS	DESCRIPTION OF ACTIONS
84-01	NRC use of the terms "important to safety" and "safety related"	02/03/84	Closed	Units 1 and 2. PGandE confirmed their intention to participate through a Steering Committee which will represent PGandE on this subject.
83-02	Notice of meeting regarding	---	NA	Response is not required. NRC meeting notice.
84-03	Availability of NUREG-0933, "A prioritization of Generic Safety Issues".	---	NA	Response is not required. NRC announcement of publication of NUREG-0933.
84-04	Safety evaluation of topical reports dealing with elimination of postulated pipe breaks in PWR primary main loops	---	NA	Response is not required. Response would be only required if PGandE wished to take exemptions on asymmetric blowdown loads. Since PGandE's analyses have been accepted in SSER 7 and 8 there is not reason to request these exemptions.
84-05	Change to NUREG-1021, "Operator Licensing Examiner Standards"	---	NA	Response is not required. NRC transmits a copy of a change to NUREG-1021 for information and use in keeping copies of NUREG-1021 current.
84-08	Interim procedures for NRC management of plant-specific backfitting	---	NA	Response is not required. NRC transmits interim procedures for information.
84-10	Administration of operating tests prior to initial criticality (10 CFR 55.25)	---	NA	Response is not required. NRC provides instruction for obtaining an exemption to 10 CFR 55.25(b), and clarifies when an request is needed. No action is required for Diablo Canyon Unit 2.
84-12	Compliance with 10 CFR, Part 61, and implementation of the radiological effluent technical specifications (RETS) and attendant process control program (PCP)	8/29/84	Closed	Units 1 and 2. PGandE's PCP update was submitted in the semiannual report (DCL-84-296, dated 8/29/84) to insure compliance with 10 CFR 61. The PCP applies to both Units 1 and 2. PGandE's Unit 1 full power Technical Specifications include the RETS, which satisfies the latest 10 CFR 61, and the Unit 2 proposed Technical Specifications includes the same RETS.
84-13	Technical specification for snubbers	---	NA	Response is not required. NRC transmits a revision to the model specification, Rev. 1 of Surveillance Requirements for Snubbers.

Item 5

Generic Correspondence

Applicable to Diablo Canyon Unit 2 Since 1981

GENERIC LETTER	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	DESCRIPTION OF ACTIONS
84-15	Propose staff actions to improve and maintain diesel generator reliability	---	NA	Response is not required for Unit 2. PGandE letter DCL-84-318, dated 10/02/84 submitted the information requested in 84-15 for Unit 1 to the NRC. Generic Letter 84-15 states applicants for operating licenses and holders of construction permits are not required to respond.
84-16	Adequacy of on-shift operating experience for near term operating license applicants	---	NA	Response is not required. This NRC transmittal contains no reporting requirement and is for information only.
84-17	Annual meeting to discuss recent developments regarding operator training, qualifications, and examinations	---	NA	Response is not required. NRC meeting notice.
84-29	Availability of Supplement 1 to NUREG-0933, "A Prioritization of Generic Safaty Issues"	---	NA	Response is not required. NRC announcement of publication of Supplement 1 to NUREG-0933. No reply is required.
-	FEMA Interim Findings on State of California Nuclear Power Plant Emergency Response Plan (NRC letter dated August 16, 1984)	---	NA	Response is not required. NRC transmits the interim finding report for review, and recommends continued coordination with offsite governmental authorities to effect the improvements identified by FEMA.
84-20	Scheduling guidance for licensee submittals of reloads that involve unreviewed safety questions	---	NA	Response is not required at this time. PGandE is not planning to submit reload analyses for at least two years, and a PGandE Licensing task is identified and will be tracked to re-review Generic Letter 84-20 in January 1937.

Item 5
Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981 or Still Open

IE BULLETIN	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	STATUS	DESCRIPTION OF ACTIONS
79-13	Feedwater nozzle pipe welds inspection	---	Jan. 1985	Open	Program of inspection and testing for Unit 2 will be completed 30 days after hot functional, but prior to Unit 2 fuel loading.
79-14	Unit 2 safety-related piping	---	Dec. 1984	Open	The piping and pipe support review reports will include the information required by this Bulletin This information will be provided in the Piping and Pipe Support Review Program Final Report.
80-11	Masonary Walls	09/26/84	---	Closed	NRC reviewing as to acceptability of energy balance method of evaluation. Fixes to be completed prior to full power operation.
81-01	Schedule for surveillance of mechanical snubbers	---	Dec. 1983	Open	Final report required 30 days after surveillance. Surveillance is required to be completed after hot functional testing but prior to fuel load. Inspection Report 323/84-14 retains this item open for Unit 2.
82-02	Failure of gate type valves to completely close against pressure, Supplement 1	05/15/81	---	Closed	PGandE letter indicates that containment isolation valves on the lines connecting to the hydrogen recombiners would only open in a post loss-of-coolant accident case. Pressure is acceptably low so closure can be assured. No other action necessary.
81-03	Cooling water flow block due to mollusk infestation	07/21/81	---	Closed	PGandE has monthly demusseling programs which after inspection of the Unit 1 heat exchangers, proved effective. Unit 2 was not inspected since it is subject to the same program and it was not in service at the time.
82-01	Alteration of radiographs of welds in piping subassemblies Revision 1, Supplement 1.	---	---	Closed	Provided to Diablo Canyon for information only. No response required.

Item 5
Generic Correspondence
Applicable to Diablo Canyon Unit 2 Since 1981

IE BULLETIN	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	STATUS	DESCRIPTION OF ACTIONS
82-02	Degradation of threaded fasteners in the reactor coolant pressure boundary of pressurized water reactor plants	08/02/82 04/06/83	---	Closed	PGandE letters provided response to Items 1 and 3. Stated that response to Item 2 will be provided 60 days after completion of first refueling outage. Inspection Report 323/84-14 closes this Bulletin for Items 1 and 3.
82-04	Deficiencies in containment electrical penetration	02/02/83	---	Closed	PGandE letter dated February 2, 1983 indicates that hard epoxy electrical penetration assemblies manufactured by the Bunker Ramo Co. have not been installed in the containment at Diablo Canyon Units 1 and 2. Inspection Report 323/84-14 closed this Bulletin.
83-01	Failure of reactor trip breakers to open on automatic trip signals	03/09/83	---	Closed	Response provided for Unit 1. Information only, no response required for plants with construction permits. See also GL 83-28. Inspection Report 323/84-14 closed this Bulletin.
83-03	Check valve failures/raw water cooling system diesel generator	06/06/83	---	Closed	PGandE letter indicates that there are no check valves in this closed system; therefore, this bulletin does not apply to Diablo Canyon. See Inspection Report 323/84-14 closed this Bulletin.
83-04	Failure undervoltage function/ reactor trip breakers (GE AK-2)	---	---	Closed	Information only. No response required because Diablo Canyon utilizes W DB type breakers. Inspection Report 323/84-14 closes this Bulletin.
83-05	ASME nuclear code pumps and spare part/Hayward Tyler Company, 10 CFR 2.790.	---	---	Closed	PGandE has determined that there are no Hayward Tyler pumps or spare parts at DCPP. No response is required. Inspection Report 323/84-14 closes this Bulletin.
83-06	Nonconforming materials supplied by Tube-Time Corporation facilities	11/16/83	---	Closed	PGandE letter dated November 16, 1983 indicates that PGandE has reviewed the list of purchasing and receiving companies and has concluded that none of these materials have been incorporated in the Diablo Canyon Plant. Inspection Report 323/84-14 closes this Bulletin.

Item 5

Generic Correspondence

Applicable to Diablo Canyon Unit 2 Since 1981

IE BULLETIN	SUBJECT	RESPONSE PROVIDED	RESPONSE STATUS	STATUS	DESCRIPTION OF ACTIONS
83-07	Apparently fraudulent products sold by Ray Miller, Inc.	03/22/84	---	Closed	PGandE letter dated March 22, 1984 indicates that none of the apparently fraudulent material has been incorporated in any safety-related items in DCPP. No further action required. Inspection Report 323/84-14 closes this Bulletin.
83-08	Electrical circuit breakers with an undervoltage trip feature	04/04/84	---	Closed	PGandE letter dated April 4, 1984 indicates that Unit 1 and 2 do not use any subject circuit breakers for safety-related applications. Determined that there are not similar applications using the undervoltage trip feature.
84-02	Failure of GE type HFA relays in use in Class IE safety system	05/08/84	---	Closed	PGandE letter dated May 8, 1984 indicates that DCPP Units 1 and 2 do not use and do not contemplate use of such relays.
84-03	Refueling cavity water seal	---	Dec. 1984	Open	Reply being prepared by licensee.

Item 6

Enforcement History

During construction and design of the Diablo Canyon Plant Unit 2 the number of minor items of noncompliance and/or violations have been fewer than other similar facilities. This is due to Unit 1 being the lead unit which allowed the licensee to correct identified deficiencies in Unit 2 after they were identified by the staff in Unit 1. During the last two years more items of noncompliance have been identified during the Unit 2 construction. This is largely due to supplemental inspection effort from allegation follow-up, and the use of contract inspection personnel from Lawrence Livermore National Laboratory.

No enforcement conferences, confirmatory action letters, civil penalties or orders have been issued from Unit 2 of Diablo Canyon. It must be realized, however, that the staff and licensee have always concurred (in meetings and correspondence) that information or problems discovered in Unit 1 would be applied to Unit 2.

At this time there are no uncorrected items of non-compliance or significant open items.

Item 7

UNIT 2 DIABLO CANYON PROJECT QUALITY ASSURANCE AUDIT STATISTICS

(a) PGandE and DCP Audits

	Audits[1]	Findings	Observations[2]	Stop Work Orders[3]
PGandE				
1971	22	55	0	0
1972	43	124	24	0
1973	28	77	10	0
1974	27	88	9	0
1975	89	114	2	0
1976	32	5	0	0
1977	49	44	0	0
1978	134	179	0	0
1979	96	88	0	0
1980	81	48	0	0
1981	83	68	0	0
1982	68	110	0	2
1983[4]	204	184	0	0
DCP				
1982	3	0	1	0
1983	20	23	14	0
1984[5]	19	15	8	2

Notes:

(1) Includes audits which were both Unit 1 and Unit 2.

(2) The customary practice of PGandE was to write findings, not observations, in order to assure that mandatory corrective action took place.

(3) The formal Stop Work Order mechanism was sometimes not necessary since mutual agreement on issues were reached and work was stopped voluntarily.

(4) January 1, 1984 to September 30, 1984.

(5) January 1, 1984 to October 26, 1984.

Item 7 (continued)

(b) PGandE and DCP AUDITS

STOP WORK ORDERS

Date Issued	Reason	Date Work Allowed to Resume
PGandE AUDITS		
June 15, 1982	Energy, Inc. QA Program for furnishing Incore Thermocouple Computer Class IE Isolation System was found to be seriously deficient during an audit.	Partial - 6/21/82 Partial - 6/28/82 Complete - 8/16/82
September 29, 1982	Installation of Class IE Cable stopped at DCPP due to serious deficiencies identified in the manufacturer's QA Program during an audit.	Approximately 12/8/82 Based on qualification testing.
January 9, 1984	All work stopped due to serious deficiencies identified during an audit.	Work resumed 1-19-84. 1-9-84 to 1-19-84 work continued under the auspices of a PGandE inspector and inspection plan.
June 14, 1984	PI-42 issued May 29, 1984, was used in the field prior to incorporating QA comments on PI-42.	June 14, 1984. Work allowed to proceed once PI-42, Revision 2, was issued.
DCP AUDITS		
February 14, 1984	A number of individuals not received Engineering Manual Training.	February 17, 1984. All personnel were trained. Work trained. Work allowed to proceed.
August 20, 1984	Hold points bypassed, calibrated equipment, welder qualification, uncontrolled drawings, at Hatch, Inc. in El Paso, Texas.	Stop work still in effect, PGandE preparing a letter to close out findings. Stop work expected to be lifted by October 31, 1984.

Item 7 (continued)

DIABLO CANYON PROJECT UNIT 2 QUALITY ASSURANCE AUDIT STATISTICS

(c) Outside Agency Audits

Audit Type	Year	Audits Performed[1]	Number of Findings	Number of Observations	Stop Work Orders[2]
H. P. Foley QA Audits					
	1974	25	64	0	0
	1975	24	48	0	0
	1976	29	49	5	0
	1977	15	19	3	0
	1978	14	27	0	0
	1979	16	54	0	0
	1980	6	31	0	0
	1-1-81 to 8-81				

Notes:

(1) Audits were both Unit 1 and Unit 2.

(2) The formal Stop Work Order mechanism has not been necessary since mutual agreement on issues were reached and work was stopped voluntarily.

Item 7 (continued)

DIABLO CANYON PROJECT UNIT 2 QUALITY ASSURANCE AUDIT STATISTICS

(c) Outside Agency Audits

Audit Type	Year	Audits Performed (1)	Number of Findings	Number of Observations	Stop Work Orders (2)
Pullman Internal Audits					
Scheduled	1971	1	3	0	0
	1972	3	14	0	0
	1973	14	62	0	0
	1974	44	63	1	0
	1975	30	28	1	0
	1976	26	14	5	0
	1977	11	7	2	0
	1978	33	92	21	0
	1979	31	79	13	0
	1980	17	44	12	0
	1981	13	31	1	0
Unscheduled	1978	5	70	0	0
	1979	6	10	0	0
	1980	9	11	4	0
	1981	1	2	0	0
Pullman Corporate Audit					
	1972	1	4	0	0
	1973	1	2	0	0
	1974	1	0	0	0
	1975	1	0	1	0
	1976	1	6	5	0
	1977	1	3	0	0
	1978	3	52	0	0
	1979	1	5	0	0
	1980	1	8	0	0
	1981	1	8	0	0

Item 7 (continued)

DIABLO CANYON PROJECT UNIT 2 QUALITY ASSURANCE AUDIT STATISTICS

(c) Outside Agency Audits

Audit Type	Year	Audits Performed(1)	Number of Findings	Number of Observations	Stop Work Orders(2)
Third Party Inspection Agency Audits (Hartford)					
	1976	1	10	0	0
	1977	1	2	0	0
	1978	0	0	0	0
	1979	0	0	0	0
	1980	0	0	0	0
	1981	1	0	0	0
GE Audit	1976	1	15	9	0
NCS Audit	1977	1	79	0	0
ASME Surveys	1980	1	0	0	0
	1977	1	0	0	0
	1972	1	0	0	0

Item 8

PGandE Construction Deficiency (50.55(e)) and Part 21 Reports

APPLICABLE TO UNIT 2

Report Date	Unit Number	Subject	Status	Comments
		50.55e Reports		
10/19/72 1* 11/20/72 W*	Unit 1 & 2	Possible Inadequate Hydrostatic Head Design of concrete housing for auxiliary saltwater pumps in intake structure.	Closed	
03/29/74 1 04/24/74 W 07/09/74 W 08/28/74 W 01/15/75 W	Unit 1 & 2	Cracks in Unit 1 steam generator nozzle.	Closed	Investigation found no cracks on Unit 2.
06/17/74 T 07/10/74 W 03/26/75 W	Unit 2	Integrity of Thermoplastic Insulation in Switchgear Buses.	Closed	
03/18/77 T 04/18/77 W 05/12/77 W 06/03/77 W 07/19/77 W 08/15/77 W 09/01/77 W 03/22/78 W 04/17/78 W	Unit 1	Leak in weld of FW nozzle to pipe.	Closed	Report made for Unit 1. Region V letter July 19, 1977 requested report contain data sufficient for both Units 1 and 2 by NRR. Report sent on September 1, 1977. NRC IE Report July 11, 1977 also referenes this item.

*LEGEND
T Telephone notification
W PG&E written response
N NRC letter

Report Date	Unit Number	Subject	Status	Comments
		50.55(e) Reports (cont'd)		
None T 06/03/77 W 07/13/77 W 08/04/77 W 10/26/77 W	Unit 1 & 2	Radiographs of field welds were not recorded as required on Unit I field weld 197.	Closed	Report initiated as result of a May 6, 1977 Notice of Violation.
02/16/76 1 03/07/78 W 05/12/81 W	Unit 1 & 2	Improperly welded pipe hanger assemblies	Closed	
02/23/78 T 03/23/78 W 10/24/78 W	Unit 1 & 2	Rated horsepower for auxiliary feedwater pump motors inadequate to meet FSAR requirements	Closed	
None T 11/02/78 W 01/18/79 W 02/05/79 W	Unit 1 & 2	Mutually redundant Class I circuits in control room.	Closed	Reported as a result of notice of violation dated October 6, 1978. PGandE letter dated February 5, 1979 closes 55(e) report. Work is to be completed following hot functional testing.
11/13/78 T 12/22/78 W	Unit 1 & 2	Columns on approved for construction drawings on the turbine building exceeded allowables.	Closed	
11/14/78 T 12/13/78 W 01/31/79 W	Unit 1 & 2	Supplier provided materials with improper documentation.	Closed	

Report Date	Unit Number	Subject	Status	Comments
		50.55(e) Reports (cont'd)		
04/04/79 1 05/03/79 W 12/09/80 W	Unit 1 & 2	Cracking on pipe rupture restraints made by Pullman.	Open	Final report for Unit 2 scheduled November 1984.
NONE T 05/22/79 W	Unit 1 & 2	No specific bolt mounting requirements on drawings.	Closed	Reported as a result of notice of violation May 2, 1979.
06/08/79 1 08/26/79 W	Unit 1 & 2	Deficiency in manufacturing procedure used to check performance of Barton Lot 1 transmitters.	Closed	
06/25/79 T 07/26/79 W 03/13/80 W	Unit 1 & 2	System generator water level measurement system.	Closed	NRR to investigate, rather than than Region V PGandE letter of March 13, 1980 closes 50.55(e). SSER 9, Section 7.8, Item d, closes issue.
06/25/79 T 07/23/79 W	Unit 1 & 2	Design of lateral seismic bracing supporting electrical conduits and raceways.	Closed	Deficient supports have been modified to comply with design requirements.
02/29/80 T 03/21/80 W 12/12/80 W	Unit 1 & 2	Insulation failure on electrical conductors	Closed	Unit 2 conduits have been realigned and embedded in concrete.

Report Date	Unit Number	Subject	Status	Comments
		50.55(e) Reports (cont'd)		
09/29/80 T 10/27/80 W	Unit 1 & 2	Control and inventory of aluminum.	Closed	
12/04/80 T 01/19/81 W 07/31/81 W	Unit 1 & 2	Containment spray pump start timing. (diesel)	Closed	
01/29/81 1 03/12/81 W 05/05/81 W 07/21/81 W	Unit 1 & 2	Deficient 1-inch expansion anchors manufactured by HILTI.	Closed	
02/06/81 T 03/09/81 W	Unit 1 & 2	Hagan Model 118 (output 60% of full scale when input was open circuited).	Closed	Transistors in all Class IA installations have been replaced.
05/14/81 T 06/12/81 W 06/17/81 W	Unit 1 & 2	Design deficiency in 120 VAC vital instrument power supply panel.	Closed	
07/28/81 T 08/27/81	Unit 1 & 2	Modification on doors to Hagan racks.	Closed	
09/15/81 T 10/15/81 W 01/09/84 W	Unit 1 & 2	Containment spray pump start timing (Containment Pressure)	Closed	

Report Date	Unit Number	Subject	Status	Comments
		50.55(e) Reports (cont'd)		
09/28/81 T 11/05/81 W 03/16/82 W	Unit 2	Deficiencies in design of systems contained within the annulus area of the containment building.	Closed	Closed since NRR is following deficiency. Other deficiencies that arose during verification program were identified in the verification program semi-monthly reports.
10/08/82 T 11/08/82 W	Unit 2	Water hammer phenomenon in ASW system.	Closed	Vacuum breaker and piping modifications complete. One hanger remains to be installed.
05/26/83 T 06/27/83 W 03/01/84 W	Unit 2	Malfunction of Limitorque Valve Operator	Open	Screws will be replaced prior to fuel load. (DC2-EJ-12615)
		Part 21 Reports		
03/31/78 1 04/03/78 W 08/17/78 W 12/07/78 W	Unit 1 & 2	Springs in NEMA motor controllers do not meet specifications.	Closed	Kick-out springs have been replaced.

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DIABLO CANYON PROJECT
UNIT 2

CONSTRUCTION STATUS

Construction is essentially complete; however, minor modifications remain. Hot functional testing will be completed by the end of November; and December 1 through 21, construction will be completed for the majority of the remaining items. Approximately 4,500 personnel associated with the project team or construction are working at the site. The remaining construction activities and scheduled completion dates are listed below.

Rupture Restraints	
All modifications inside and outside containment	12/21/84
Civil/Structural/Architectural	
Minor structural steel mods: stiffener, plates, gussets, etc. (now 98% complete)	12/21/84
Misc. Steel: platforms, grating, handrails: removed or modified to facilitate other installation (now 85% complete)	12/21/84
Door installation/modifications (now 95% complete)	12/21/84
Painting required for fuel load	01/28/85
Penetration seals	12/21/84
Mechanical Equipment	
Polar crane main hoist gear repair/replacement	12/14/84
Replace media filter tank	11/26/84
Install tube lane blocking devices	01/11/85
Miscellaneous equipment repair	12/21/84
Pipe Supports (Approximately 500 left)	01/13/85
HVAC	
Duct supports (Approximately 30 left)	11/16/84
HVAC for box and drum compactor areas	11/24/84
HVAC for penetration area	12/28/84
Electrical	
Penetration foaming	12/21/84
Rad monitor installation (RE-58 and 59)	12/28/84
Flux monitoring system	12/21/84
PA system (power block)	01/11/85
PA system (intake and yard)	03/22/85
Miscellaneous electrical and startup support	01/28/85

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(Continued)

DIABLO CANYON PROJECT
UNIT 2

CONSTRUCTION STATUS

Instrumentation

Transmitter changeouts (Rosemont)	01/28/85
RVLIS	12/21/84
Miscellaneous instrumentation/startup/NPO support	01/28/85

Item 10

DIABLO CANYON UNIT 2 PREOPERATIONAL TESTING

The licensee's preoperational testing program was 82.1% complete as of November 27, 1984. The Hot Functional Test is currently in progress with completion scheduled for December 20, 1984. Following Hot Functional Testing, only the following seven properational tests remain, of which all but the Condensate Booster Pump Initial Start and Condensate System Preoperational tests will be completed prior to fuel load. These two tests will be subsequently completed prior to reactor coolant system heatup.

Fuel Handling Procedures (System 34),
Secondary Plant Chemical Cleaning,
Condensate Booster Pump Initial Start,
Condensate System Preop,
Pipe Break Isolation Test,
Backup Instrument Air Performance Demonstration, and
Miscellaneous Addenda for non-safety related systems.