JUL 23 1981

Docket number: 50-275/323

MEMORANDUM FOR: J. H. Sniezek, Director, Division of Resident and Regional Reactor Inspection, IE

FROM: R. H. Engelken, Director, RV

IE FILE COPY

SUBJECT: PACIFIC GAS AND ELECTRIC COMPANY
DIABLO CANYON UNIT 1 (DOCKET NO. 50-275)

In accordance with Inspection Procedure No. 94300B, the attached enclosures list the remaining open items that require resolution before finding of readiness for operation may be endorsed by Region V. The format has been modified to identify items for each Branch, and to separate items required for: (1) fuel loading, (2) low power testing, and (3) full power operation.

Original signed by,
R. H. Engelken

R. H. Engelken
Director

Enclosures:
Appendix A - Construction Items
Appendix B - Operations Items
Appendix C - Radiation Protection Items
Appendix D - Safeguards Items

cc w/enclosures:
H. D. Thornburg, Director, Division of Safeguards and Radiological Safety Inspection, IE:HQ
B. K. Grimes, Director, Division of Emergency Preparedness, IE:HQ

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RV PDR
Resident Inspector
State of CA (Hahn/Johnson)

IE01
S1/1 APP

OFFICE	RV/dot	RV					
SURNAME	MORRILL	ENGELKEN	STERNBERG	CREWS	BROCKMAN	NORDERHAUG	
DATE	7/20/81	7/23/81	7/22/81	7/23/81	7/22/81	7/RV/81	

APPENDIX A

CONSTRUCTION

Outstanding Items - Action by applicant required before Inspection Procedures may be completed.	FL	LPT (5%)	FPO (100%)
Bulletins			
IEB-79-02: Pipe Support Baseplate Design Using Concrete Anchors (IE Insp. Rpt. 50-275/81-10 covers)			X
Followup Items			
none			
50.55(e) Items			
a. Deficiency in containment Spray Pump Starting Sequencer	X		
b. Potential deficiency related to low ultimate tensile values on 1" Hilti concrete anchors (see IEB 79-02)			X
c. 120 VAC Power Supply Panel-Neutral Block		X	

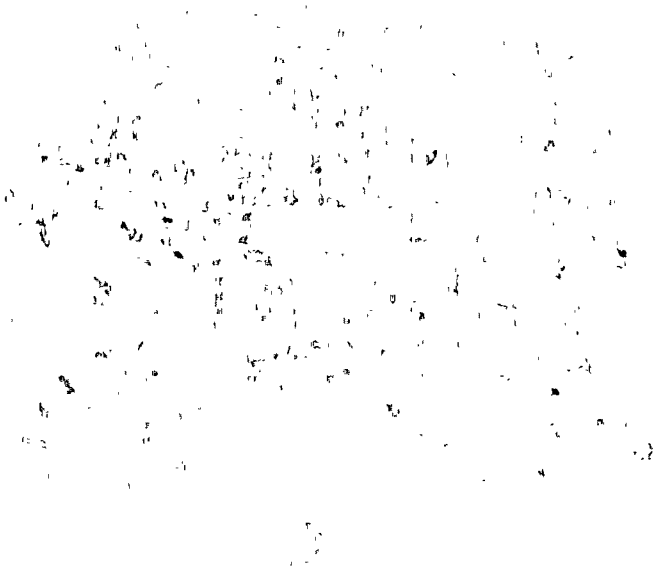
FPO here is interpreted to mean prior to operation at power levels in excess of those for Low Power Testing.

APPENDIX B

OPERATIONS

	Outstanding Items - Action by applicant required before Inspection Procedures may be completed.	FL	LPT	FP
Preoperation Tests (incomplete or not accepted by licensee)				
3.7	Turbine Driven Aux FWP Initial Start and Perform. Demonstration	X		
8.4.1	Letdown, Charging, Seal Water	X		
16.2	Makeup Water System Flushing	X		
19.4	Spent Fuel Transfer System	X		
39.1	Containment Isolation Valves Leak Test Preop. Test	X		
39.3	Misc. Containment Leak Rate Test	X		
Fuel Loading and Power Ascension Testing (completion and/or acceptance by licensee required)				
4.1	Calib. of Stm & FW Flow Instrument at Power			(1)
4.6	Steam Generator Moisture Carryover Measurement			(1)
7.3	Resistance Temperature Detector Bypass Loop Flow Measurement		X	
7.5	Reactor Coolant System Flow Measurement		X	
7.6	Reactor Coolant System Flow Coastdown		X	
7.10	Pressurizer Spray & Heater Capability & Continuous Flow Setting		X	
22.8	Main Turbine Generator Initial Synch & Loading Procedure			(1)
22.9	Turbine Overspeed Test			(1)
36.1	Rod Drive Mechanism Timing		X	
36.3	Rod Drop Time Measurement		X	
36.5	Rod Position Indication System		X	
36.6	Rod Control System Operational Test		X	
38.1	Automatic Reactor Control Operational Test			(1)

		FL	LPT	FP
38.2	Automatic Stm. Gen. Level Control Operational Test			(1)
38.5	Incore Moveable Detectors			X
B-8D	Initial Core Loading (Procedure Review & Approval)	X		
41.1	Maintain Hot Shutdown From Outside Control Room			(1)
41.2	Initial Criticality		X	
41.3	Nuclear Design Checks		X	
41.4	Rod & Boron Worth Measurement During Boron Dilution		X	
41.5	Rod & Boron Worth Measurement During Boron Addition		X	
41.6	Rod Control Cluster Assembly (RCCA) Pseudo Ejection at Zero Pwr		X	
41.7	Minimum Shutdown Verification & Stuck Rod Worth Measurement		X	
41.8	Dynamic Automatic Stm. Dump Control			(1)
42.1	Pwr Coeff & Integral Pwr Defect Meas. During Pwr. Level Increase			(1)
42.2	RCCA Pseudo Ejection & RCCA Above Bank Position Measurements			(1)
42.3	Static RCCA Drop & RCCA Below Bank Position Measurements			(1)
42.4	Incore-Excore Detector Calibration			(1)
42.5	Thermal Pwr Measurement & State Point Data Collection			(1)
42.8	Operational Alignment of RCS Temperature Instruments			(1)
42.9	Operational Alignment of Nuclear Instrumentation			(1)



		FL	LPT	FP
43.1	Load Swing Tests			(1)
43.2	Net Load Trip Test			(2)
43.3	Large Load Reduction Tests			(1)
43.4	Plant Trip from 100% Power			(2)
43.5	Rod Group Drop & Plant Trip			(1)
43.6	NSSS Acceptance Test			(2)
43.7	Net Load Trip Test from 50% Power			(1)
Bulletins and Circulars				
IEB 79-04	Incorrect weights for Swing Check Valves Manufactured by Velan Engineering Corporation			X
IEB 80-18	Maintenance of Adequate Minimum Flow thru Centrifugal Charging Pumps Following Secondary Side High Energy Line Rupture	X		
IEB 81-01	Surveillance of Mechanical Snubbers	X		
IEC 80-09	Problems with Plant Internal Communications Systems		X	
IEC 80-16	Operational Deficiencies in Rosemount Model 510DU Trip Units & Model 1152 Pressure Transmitters	X		
Follow-up Items				
801501	Surveillance Set Point for Lo-Lo SG LVL. Trip Diff. from SER Supplement 9		X	
801701	Incorporate Procedures to Maintain Envr. Quals. of Safe. Rel. XMTRS in Surv. Test Proc.			X
801702	Oper. Proc. appear to conflict w/Proposed Tech. Specs.	X		

TI 2514/01 Task Action Plan Items		FL	LPT	FP
I.A.2.1	Immediate Upgrading of RO & SRO Training & Qualification (Items 1, 2, 3, 4 & 5, 0737)	X		
I.A.2.3	Admin. of Training Programs for Licensed Operators (0737)	X		
1.C.1	Short Term Accident Analysis & Procedure Revision (Items 2b & 3b, 0737) to be completed by first refueling after 1/1/82 if license issued before 1/1/82.		(3)	
I.C.8	Pilot Monitoring of Selected Emergency Procedures for OL Applicants (0737)			X
I.G.1	Training During Low Power Testing (Item 3, 0737) (Licensee Tests 44.1, 44.2, 44.3)			X
II.B.1	Reactor Coolant System Vents Procedures in Place by 1/1/82, Installation Complete by 7/1/82 (Items 2 & 3, 0737)			(3)
II.B.2	Plant Shielding (Item 3, 0737) Modifications Complete by 1/1/82			(3)
II.B.4	Training for Mitigating Core Damage (See NUREG 0737 for explanation)	X		X
II.D.3	Relief & Safety Valve Indication (0737)	X		
II.E.1.2	Auxiliary Feedwater Initiation & Indication (Items 1a, 1b, 2a & 2b 0737)	X		
II.E.3.1	Emergency Power for Pressurizer Heaters (0737)			X
II.E.4.1	Containment Dedicated Penetrations - Hydrogen Control (Items 2 & 3, 0737)	X		
II.E.4.2	Containment Isolation Dependability (Items 1 through 7, 0737)		X	

TI 2514/0I Task Action Plan Items		FL	LPT	FP
II.F.2	Inadequate Core Cooling Instruments (Saturation Meter) Items 1 & 2, 0737) (Item 4 completed by 1/1/82)	X		
II.G.1	Power Supplies from Emergency Buses (0737)		X	
III.D.1.1	Primary Coolant Sources Outside Containment (0737)			X
50.55(e) Item				
	Adjust steam generator low-low water level trip set point per PGE letter dated 7/26/79.			X

Notes:

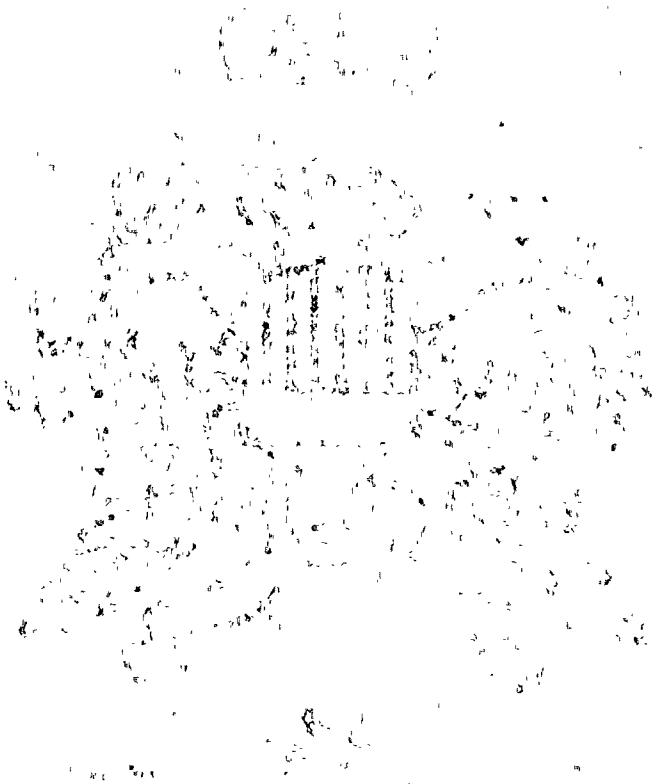
LPT here is interpreted to mean prior to initial criticality.

FPO here is interpreted to mean prior to operation at power levels in excess of those for Low Power Testing.

(1) Tests conducted above 5% power but prior to reaching 100% power.

(2) Tests to be conducted at or from 100% power.

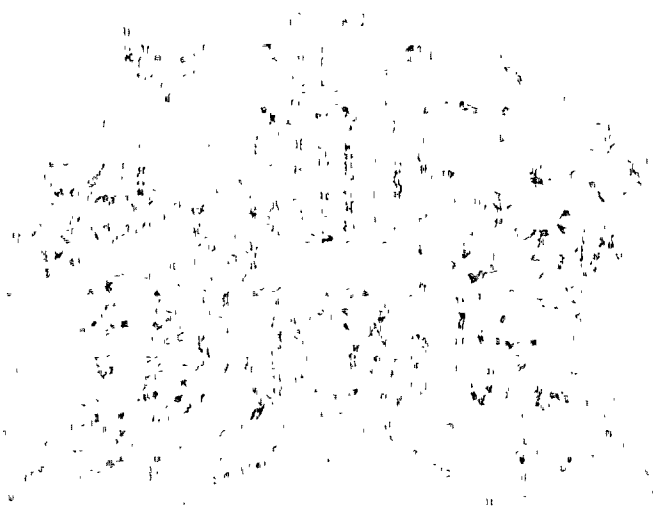
(3) Other criteria as stated.



APPENDIX C

RADIATION PROTECTION

Outstanding Items - Action by Applicant Required before Inspection Procedures May Be Completed:	Required for FL	LPT	FPO
General			
General employee training and retraining	X		
Area radiation monitors, calibration	X		
Radioactive Waste Systems			
Liquid and Solid			
Process and effluent monitor calibration (see IE Inspection Report 50-275/81-09 and 81-05)		X	
Incomplete Procedures			
A-5 Liquid radwaste discharge management		X	
E-4 Outfall sampling		X	
G-11 Packaging, storage and inventory of solid radioactive waste			X
Preop Tests - Incomplete or Not Accepted			
19.2.12 Flush and preop spent resin system		X	
19.4 Spent filter transfer systems		X	
38.4 Radiation monitoring system	X		
Gaseous			
Process and effluent monitor calibration	X		
Incomplete Procedures			
A-6 Gaseous radwaste discharge management		X	
Preop Tests - Incomplete or Not Accepted			
23.1 Main control room heating, ventilating and air conditioning system (complete)			
Addendum 2 - Control room pressurization system		X	



RADIATION PROTECTION	FL	LPT	FPO
Addendum 3 - Diesel exhaust effect on control room pressurization system		X	
23.3 Preop test of logic controls for auxiliary and fuel handling building ventilation system		X	
38.4 Radiation Monitoring System	X		
Outstanding Items - Inspection procedure complete			
Reinspection required			
Radioactive Waste System QC and Capability			
Licensee has significantly modified laboratory instruments used in the initial inspection: Re-evaluation of QC and Capability - advisable		X	
Outstanding Items - Not Previously Inspected			
Upgraded Emergency Planning and Exercise			X
NUREG-0737 items required by T12514/01, Rev. 2 & TI2515/44, Rev. 2			
II.F.1 Additional Accident Monitoring Instrumentation	X		
III.A.1.1 Emergency Preparedness Short Term	X		
III.A.1.2 Upgrade Emergency Support Facilities	X		
III.D.3.3 Inplant Radiation Monitoring	X		
II.B.3 Post Accident Sampling			X
III.A.2 Emergency Preparedness			X

APPENDIX D

SAFEGUARDS:

Required 30 days prior to fuel loading

IE Bulletin 79-16: Based on a review of the licensee's reply actions appear to be adequate - however this item remains open until actual implementation of the security program.

Follow-up Item: Based on the preoperation inspection conducted 3/28/79 - 4/6/79 the physical security program as implemented at that time was found to be inadequate in most inspection areas. (Inspection Report 50-275/79-09 (IE-U-298)). Determination of adequacy of the physical protection program will remain open until fully implemented by the licensee and subjected to full NRC preoperational inspection.

Follow-up Item: Manual Chapter 2513 requires that a preoperational inspection for material control and accounting be started no earlier than 3 months prior to, or completed no later than within 30 days prior to, the issuance of an operating license. Based on earlier expectations for issuance of the Diablo-I operating license, material accountability inspections were conducted in February 1976 (Report Number 7601) and March 1979 (Report Number 7901). In each instance, material accountability provisions were found to be adequate. A future inspection as necessary to meet Chapter 2513 guidelines will require about 16 man-hours of inspection effort.