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 FACIL: 50-275 Diablo Canyon Nuclear Power Plant, Unit 1, Pacific Ga 05000275
 50-323 Diablo Canyon Nuclear Power Plant, Unit 2, Pacific Ga 05000323
 AUTH. NAME AUTHOR AFFILIATION
 JOYCE, T.C. Pacific Gas & Electric Co.
 TOWNSEND, J.D. Pacific Gas & Electric Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: Monthly operating repts for Feb 1991 for Diablo Canyon Units
 1 & 2.W/910309 ltr.

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 TITLE: Monthly Operating Report (per Tech Specs)

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Pacific Gas and Electric Company

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424
805/541-7616

John D. Townsend
Vice President—Diablo Canyon
Operations and Plant Manager

March 9, 1991



U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Re: Docket No. 50-275 and 50-323
License No. DPR-80 and DPR-82
Monthly Operating Report for February 1991

Gentlemen:

Enclosed are the completed monthly operating report forms for Diablo Canyon Units 1 and 2 for February 1991. This report is submitted in accordance with Section 6.9.1.7 of the Units 1 and 2 Technical Specifications.

Sincerely,


JDT:ws

Enclosures

cc Mr. John B. Martin
Regional Administrator
Region V

9103180252 910228
PDR ADOCK 05000275
R PDR

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081-20

MONTHLY NARRATIVE REPORT
OF OPERATION
AND MAJOR MAINTENANCE EXPERIENCE

This report describes the operating and major maintenance experience for the month of February 1991. This narrative report was prepared by the Plant staff and is submitted in accordance with Section 6.9.1.7 of the Units 1 and 2 Technical Specifications (TS).

Narrative of Daily Significant Plant Events

- On February 1, 1991: Unit 1 started the month at 88% power continuing the End of Life (EOL) coast down for the fourth refueling outage (1R4) and Unit 2 started the month at 100% power.
A 4 hour non-emergency 10 CFR50.72(b)(2)(ii) report was made when Unit 1 tripped due to Steam Generator Low Level. The feedwater regulating valves to two Steam Generators failed closed when the instrument air was accidentally isolated during scaffolding erection.
Unit 1 entered Mode 3 (HOT STANDBY).
Unit 2 ramped down to 50% power to repair feedwater pump 2-1.
- On February 2, 1991: Unit 1 entered Mode 4 (HOT SHUTDOWN) and Mode 5 (COLD SHUTDOWN).
Unit 2 returned to 100% power.
- On February 4, 1991: Unit 2 ramped down to 47% power to repair Circulating Water Pump (CWP) 2-2.
- On February 5, 1991: Unit 1 entered mode 6 (REFUELING); fuel unloading commenced.
- On February 7, 1991: Unit 2 returned to 100% power.
- On February 10, 1991: Unit 1 fuel unloading complete.
- On February 28, 1991: Unit 1 ended the month at 0% power and Unit 2 at 100% power.

Summary of Plant Operating Characteristics, Power Reductions and Unit Shutdowns

Unit 1 operated this month with a unit availability factor of 1.4% and a unit capacity factor of 0.4%. Unit 1 reduced power once this month due to reactor trip.

Unit 2 operated this month with a unit availability factor of 100.0% and a unit capacity factor of 94.3%. Unit 2 reduced power twice this month for repairs of feedwater pump 2-1 and Circulating Water Pump (CWP) 2-2.



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Summary of Significant Safety Related Maintenance

- o The Unit 1 Steam Generators were cleaned of sludge and the tubes were eddy current tested. One tube on S/G 1-3 was plugged.
- o As part of the 10 year ISI program, hydrostatic testing of the accumulator tanks, containment fan coolers and spray additive tanks was conducted. The 10 year ISI program will continue thru 1R5 and 1R6.
- o Sixty eight out of seventy snubbers were tested so far in 1R4 with no failures.
- o Performed post maintenance work on Unit 1 RHR pump 1-2. A Design Change was implemented to add a spacer in the RHR suction to accommodate a flange misalignment.

Actuations of Steam Generator Safety Valves
or Pressurizer Power Operated Relief Valves

None.



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OPERATING DATA REPORT

DOCKET NO. 50-275
 DATE 03/01/91
 COMPLETED BY T. C. Joyce
 TELEPHONE (805) 545-4139

OPERATING STATUS

1. Unit Name: Diablo Canyon Unit 1
2. Reporting Period: February 1991
3. Licensed Thermal Power (MWt): 3338
4. Nameplate Rating (Gross MWe): 1137
5. Design Electrical Rating (Net MWe): 1086
6. Maximum Dependable Capacity (Gross MWe): 1124
7. Maximum Dependable Capacity (Net MWe): 1073
8. If changes occur in capacity ratings (Items Number 3 through 7) since last report, give reasons:

N/A

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

	This Month	Year to Date	Cumulative
11. Hours in Reporting Period	<u>672.0</u>	<u>1416.0</u>	<u>50974.3</u>
12. Number Of Hours Reactor Was Critical	<u>9.1</u>	<u>753.6</u>	<u>41870.3</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>9.1</u>	<u>753.1</u>	<u>41112.7</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
16. Gross Thermal Energy Generated (MWH)	<u>26381</u>	<u>2416883</u>	<u>127711355</u>
17. Gross Electrical Energy Generated	<u>9200</u>	<u>813400</u>	<u>43003732</u>
18. Net Electrical Energy Generated	<u>2965</u>	<u>767993</u>	<u>40748075</u>
19. Unit Service Factor	<u>1.4</u>	<u>53.2</u>	<u>80.7</u>
20. Unit Availability Factor	<u>1.4</u>	<u>53.2</u>	<u>80.7</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0.4</u>	<u>50.5</u>	<u>74.5</u>
22. Unit Capacity Factor (Using DER Net)	<u>0.4</u>	<u>49.9</u>	<u>73.6</u>
23. Unit Forced Outage Rate	<u>80.9</u>	<u>4.9</u>	<u>4.0</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Refueling, February 1991, 60 days

25. If Shut Down At End Of Report Period, Estimated Date of Startup: 04/02/91



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OPERATING DATA REPORT

DOCKET NO. 50-323
 DATE 03/01/90
 COMPLETED BY T. C. Joyce
 TELEPHONE (805) 545-4139

OPERATING STATUS

1. Unit Name: Diablo Canyon Unit 2
2. Reporting Period: February 1991
3. Licensed Thermal Power (Mwt): 3411
4. Nameplate Rating (Gross MWe): 1164
5. Design Electrical Rating (Net MWe): 1119
6. Maximum Dependable Capacity (Gross MWe): 1137
7. Maximum Dependable Capacity (Net MWe): 1087
8. If changes occur in capacity ratings (Items Number 3 through 7) since last report, give reasons:

N/A

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

	This Month	Year to Date	Cumulative
11. Hours in Reporting Period	<u>672.0</u>	<u>1416.0</u>	<u>43533.0</u>
12. Number Of Hours Reactor Was Critical	<u>672.0</u>	<u>1416.0</u>	<u>36092.0</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>672.0</u>	<u>1416.0</u>	<u>35349.0</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
16. Gross Thermal Energy Generated	<u>2190222</u>	<u>4544222</u>	<u>114322276</u>
17. Gross Electrical Energy Generated	<u>721600</u>	<u>1496900</u>	<u>38060099</u>
18. Net Electrical Energy Generated	<u>688947</u>	<u>1427952</u>	<u>36099024</u>
19. Unit Service Factor	<u>100.0</u>	<u>100.0</u>	<u>81.2</u>
20. Unit Availability Factor	<u>100.0</u>	<u>100.0</u>	<u>81.2</u>
21. Unit Capacity Factor (Using MDC Net)	<u>94.3</u>	<u>92.8</u>	<u>76.5</u>
22. Unit Capacity Factor (Using DER Net)	<u>91.6</u>	<u>90.1</u>	<u>74.1</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.0</u>	<u>5.7</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each)			

None.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: N/A



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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-275
 UNIT 1
 DATE 3/01/91
 COMPLETED BY T. C. JOYCE
 TELEPHONE (805) 545-4139

MONTH: FEBRUARY 1991

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	337	15	-6
2	-38	16	-6
3	-16	17	-5
4	-9	18	-6
5	-8	19	-6
6	-8	20	-6
7	-8	21	-6
8	-8	22	-6
9	-7	23	-3
10	-7	24	-5
11	-7	25	-6
12	-7	26	-7
13	-6	27	-6
14	-7	28	-4

INSTRUCTIONS:

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

The average monthly electrical power level for FEB 1991 = 4.4 MWe-Net



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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-323
 UNIT 2
 DATE 03/01/91
 COMPLETED BY T. C. JOYCE
 TELEPHONE (805) 545-4139

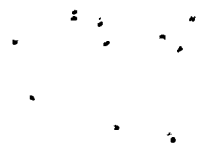
MONTH: February 1991

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	1076	15	1080
2	931	16	1079
3	1077	17	1080
4	888	18	1084
5	437	19	1080
6	571	20	1075
7	1076	21	1075
8	1080	22	1079
9	1082	23	1080
10	1076	24	1075
11	1088	25	1079
12	1084	26	1076
13	1079	27	1071
14	1079	28	1071

INSTRUCTIONS:

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

The average monthly electrical power level for FEB 1991 = 1025 MWe-Net



UNIT SHUTDOWNS AND POWER REDUCTIONS
Page 1 of 1

DOCKET NO. 50-275
 UNIT NAME Diablo Canyon Unit 1
 DATE 03/01/91
 COMPLETED BY P.G. DAHAN
 TELEPHONE (805) 545-4054

REPORT MONTH FEBRUARY 1991

No.	Date	1 Type	Duration (Hours)	2 Reason	3 Method of Shutdown	Licensee Event Report #	System 4 Code	Component 5 Code	Cause & Corrective Action to Prevent Recurrence
1.	910201	F	0	A	3	1-91-002	LD	ISV	Unit 1 experienced a Reactor trip due to a Steam Generator Low Level. The feed-water regulating valves to two Steam Generators failed closed when the instrument air was accidentally isolated during scaffolding erection. Procedures and plant policy are being revised to effectively control pre-outage maintenances.
2.	910205	S	671.0	C	1	N/A	AB	RCT	Unit 1 was remained shut down for the fourth refueling outage (1R4).

1 Type: F-Forced S-Scheduled	2 Reason: A-Equipment Failure (Explain) B-Maintenance or Test C-Refueling D-Regulatory Restriction E-Operator Training & License Examination F-Administrative G-Operational Error (Explain) H-Other (Explain)	3 Method: 1-Manual 2-Manual Scram 3-Automatic Scram 4-Continuation from previous month 5-Power reduction 6,7,8-N/A 9-Other	4 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-1022)	5 Exhibit I - Same Source
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UNIT SHUTDOWNS AND POWER REDUCTIONS
Page 1 of 1

DOCKET NO. 50-323
 UNIT NAME Diablo Canyon Unit 2
 DATE 03/01/91
 COMPLETED BY P.G. DAHAN
 TELEPHONE (805) 545-4054

REPORT MONTH FEBRUARY 1991

No.	Date	1 Type	Duration (Hours)	2 Reason	3 Method of Shutdown	Licensee Event Report #	System 4 Code	Component 5 Code	Cause & Corrective Action to Prevent Recurrence
1	910201	S	0	B	5	N/A	SJ	P	Unit 2 ramped down to 50% power to repair feedwater pump 2-1.
2	910204	S	0	B	5	N/A	NN	P	Unit 2 ramped down to 47% power to repair Circulating Water Pump (CWP) 2-2.

<p>1 Type: F-Forced S-Scheduled</p>	<p>2 Reason: A-Equipment Failure (Explain) B-Maintenance or Test C-Refueling D-Regulatory Restriction E-Operator Training & License Examination F-Administrative G-Operational Error (Explain) H-Other (Explain)</p>	<p>3 Method: 1-Manual 2-Manual Scram 3-Automatic Scram 4-Continuation from previous month 5-Power reduction 6,7,8-N/A 9-Other</p>	<p>4 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-1022)</p> <p>5 Exhibit I - Same Source</p>
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DATE: March 1, 91

REFUELING INFORMATION REQUEST

1. Name of facility: Diablo Canyon Unit 1
2. Scheduled date for next refueling shutdown: February 3 1991
3. Scheduled date for restart following refueling: April 2, 1991
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? If answer is yes, what, in general, will there be? If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload (Ref. 10 CFR Section 50.59)? If no such review has taken place, when is it scheduled?

On January 9, 1991, the PSRC reviewed the reload fuel design and core configuration and found no unreviewed safety question associated with the core reload (Ref. 10CFR Section 50.59).

5. Scheduled date(s) for submitting proposed licensing action and supporting information:

N/A

6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:

N/A

7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool:

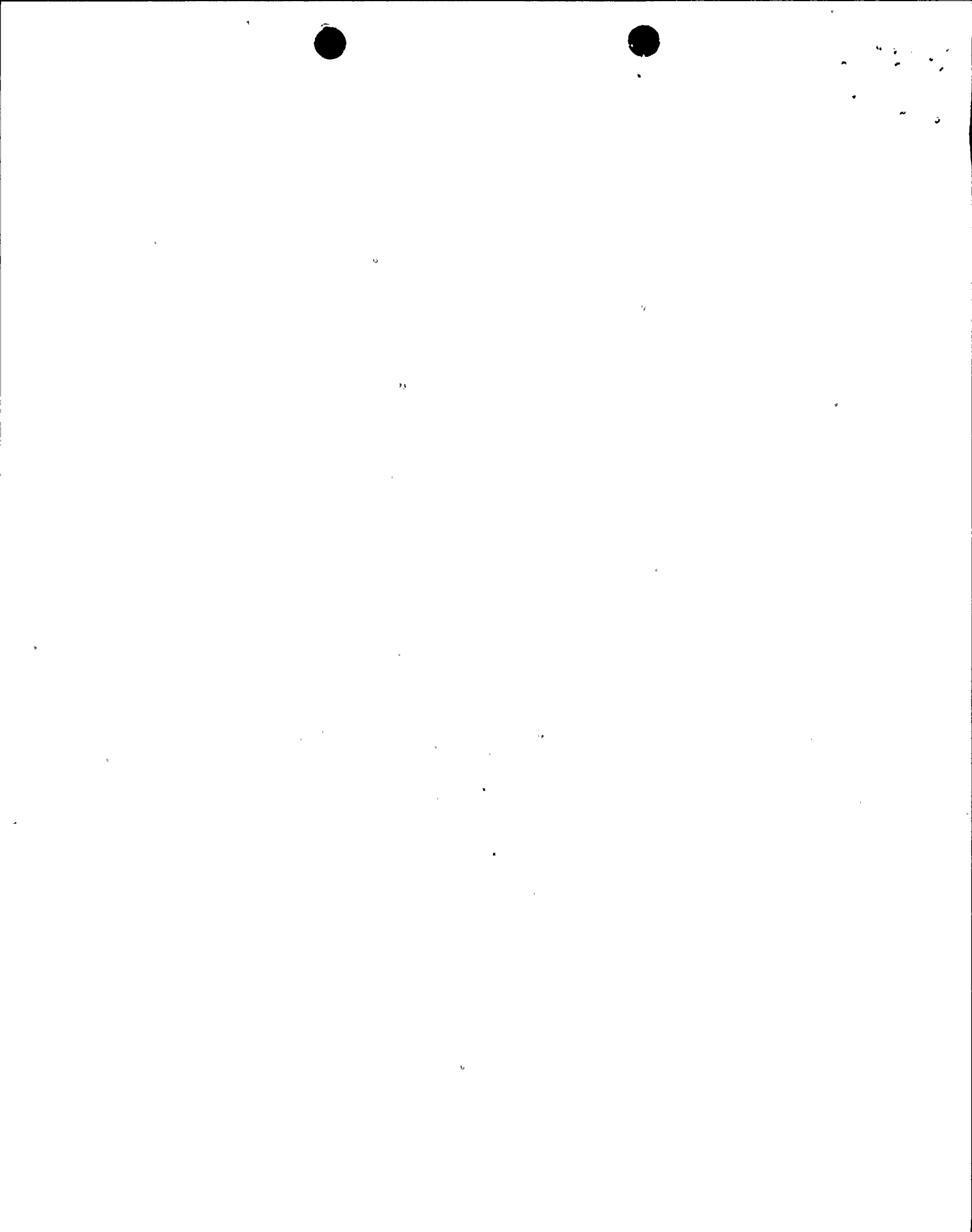
(a) 193 (b) 200

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:

Present 1324 Increase size by 0

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity:

Date: 2012 (Loss of full core off-load capability)



DATE: March 1, 1991

REFUELING INFORMATION REQUEST

1. Name of facility: Diablo Canyon Unit 2
2. Scheduled date for next refueling shutdown: September 1991 (estimated)
3. Scheduled date for restart following refueling: December 1991 (estimated)
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? If answer is yes, what, in general, will there be? If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload (Ref. 10 CFR Section 50.59)? If no such review has taken place, when is it scheduled?
No. The PSRC is scheduled to review the cycle 5 core reload in September 1991 (estimated).
5. Scheduled date(s) for submitting proposed licensing action and supporting information:
N/A
6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:
N/A
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool:
(a) 193 (b) 224
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:
Present 1324 Increase size by 0
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity:
Date: 2012 (Loss of full core off-load capability)



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