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 50-323 Diablo Canyon Nuclear Power Plant, Unit 2, Pacific Ga 05000323
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 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: Monthly operating rept for Mar 1994 for Diablo Canyon Units 1 & 2. W/940414 ltr.

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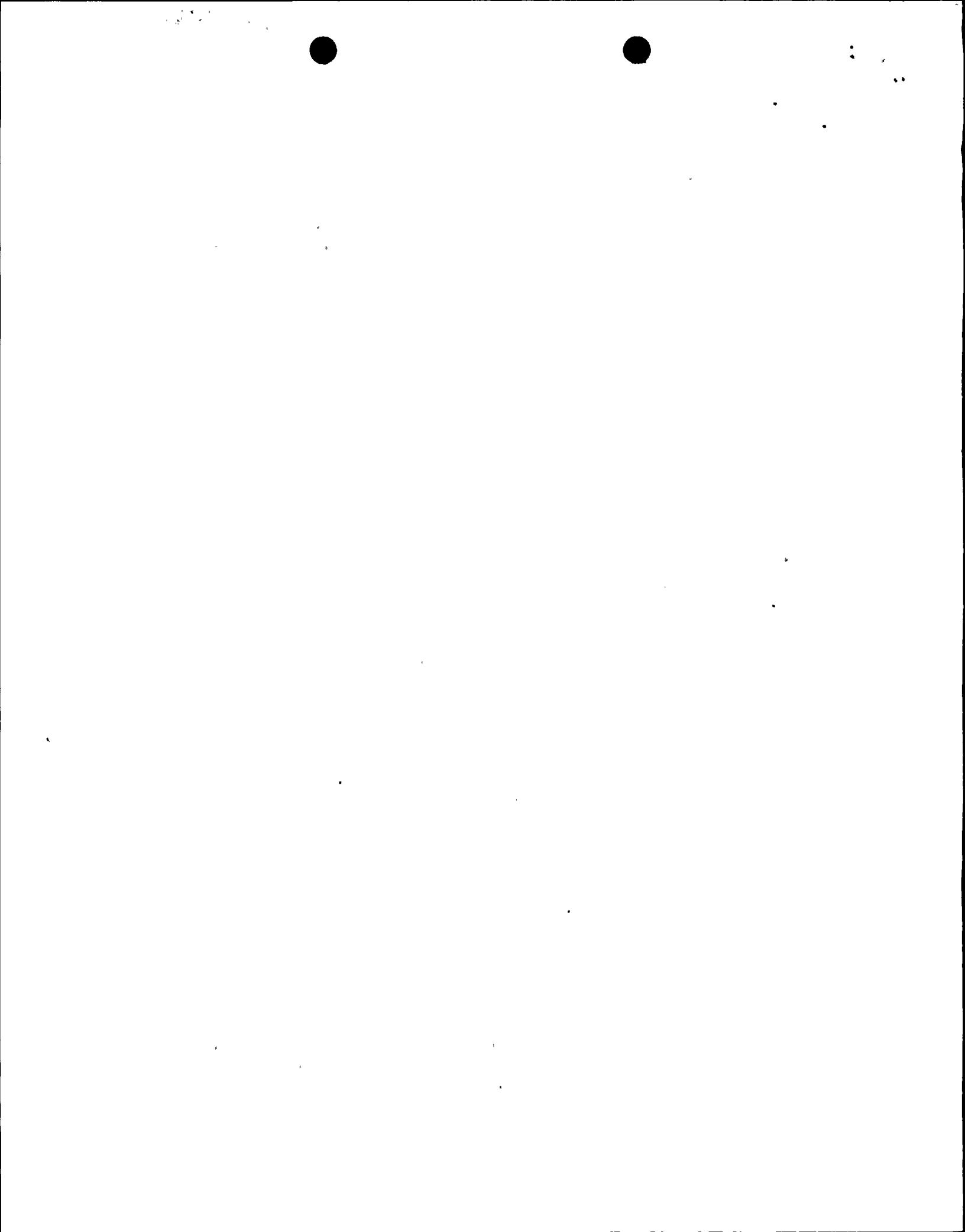
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Pacific Gas and Electric Company

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424
805/545-6000

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

April 14, 1994



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 March 1994

Gentlemen:

Enclosed is the monthly operating report for Diablo Canyon Units 1 and 2 for March 1994. This report is submitted in accordance with Section 6.9.1.7 of the Units 1 and 2 Technical Specifications.

Sincerely,

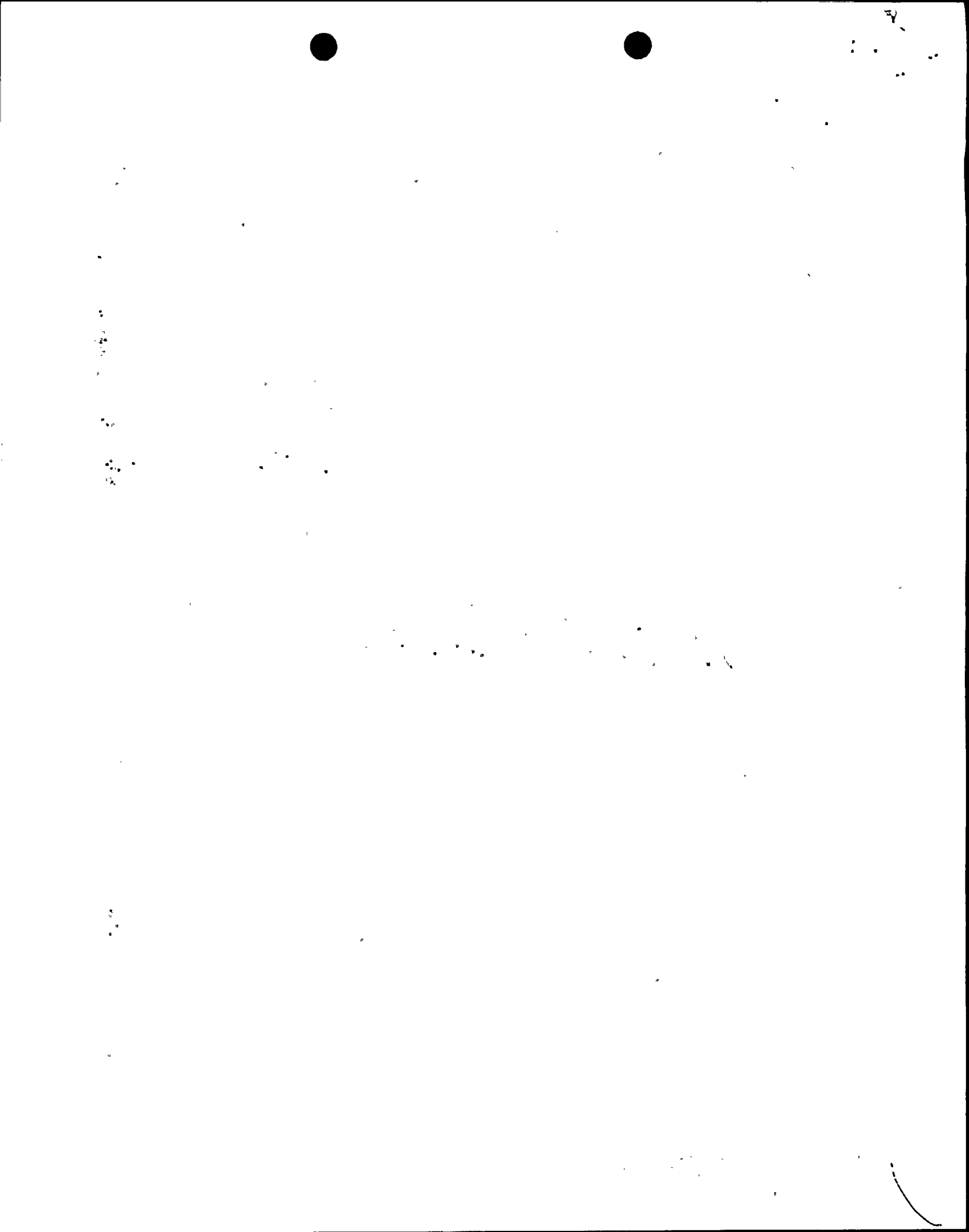
D. Mikulish for J.D. Townsend

JDT:pgd

Enclosures

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JE24



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U.S. Nuclear Regulatory Commission, Region IV
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9404190253 940331
PDR ADDEK 05000275
R PDR



MONTHLY NARRATIVE REPORT
OF OPERATION
AND MAJOR MAINTENANCE EXPERIENCE

This report describes the operating and major maintenance experience for the month of March 1994. 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.

Narrative of Daily Significant Plant Events

- On March 1, 1994: Unit 1 and Unit 2 started the month in Mode 1 (Power Operation) at 100% power.
- On March 6, 1994: Unit 2 reduced power to 50% for condenser cleaning.
- On March 7, 1994: Unit 2 returned to 100% power.
- On March 8, 1994: A four-hour non-emergency report was made in accordance with 10 CFR 72(b)(2)(vi) concerning a hazardous material release consisting of approximately 1 gallon of hydrazine. This release was contained on an outside paved surface and subsequently cleaned up.
- On March 11, 1994: Unit 1 commenced ramping down in preparation for the sixth refueling outage (1R6). Unit 1 ramped down to 0% power, was disconnected from the PG&E power grid and then entered Mode 2 (Startup).
- On March 12, 1994: Unit 1 entered Mode 3 (Hot Standby), Mode 4 (Hot Shutdown) and Mode 5 (Cold Shutdown).
- A one-hour non-emergency report was made in accordance with 10 CFR 50.72 (b)(1)(ii)(B) concerning the Unit 2 Auxiliary Feedwater (AFW) and the Main Steam Safety Valves (MSSVs) being in a condition outside the design basis of the plant. An enforcement discretion was received from the NRC for Unit 2 Main Steam Generator Safety valves being as much as 3% outside their nominal setpoint. For more information see LER 1-94-004.
- On March 15, 1994: Unit 1 entered Mode 6.
- On March 25, 1994: Unit 1 reactor defueled.
- On March 26, 1994: Unit 2 reduced power to 50% for 2-1 tunnel cleaning.



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- On March 28, 1994: Unit 2 manually shut down to investigate a reactor coolant leak which was later determined to be from a non-isolable cracked socket weld in a 3/4" vent line. Unit 2 entered Mode 3 and Mode 4. An emergency (Unusual Event) report was made in accordance with 10CFR50.72(a)(1)(i) concerning this event. The Unusual Event was terminated after the unit entered Mode 5. For more information see LER 2-94-001.
- On March 29, 1994: A 10 CFR 50.72(b)(2)(ii) four-hour non-emergency report was made regarding an automatic actuation of Diesel Generator (DG) 1-1 when, during maintenance activities an inadvertent ground was initiated in a 4kV bus potential transformer circuit. For more information see LER 1-94-007.
- On March 31, 1994 Unit 1 ended the month with the reactor defueled and Unit 2 ended the month in Mode 5 (Cold Shutdown).

Summary of Plant Operating Characteristics, Power Reductions and Unit Shutdowns

Unit 1 operated this month with a unit availability factor of 35.53% and a unit capacity factor (using MDC Net) of 35.02%. Unit 1 reduced power once this month to start the sixth refueling outage.

Unit 2 operated this month with a unit availability factor of 87.36% and a unit capacity factor (using MDC Net) of 82.58%. Unit 2 reduced power by more than 20% for more than four hours three times this month. Once for condenser cleaning, once for tunnel cleaning and once to investigate a reactor coolant leak.

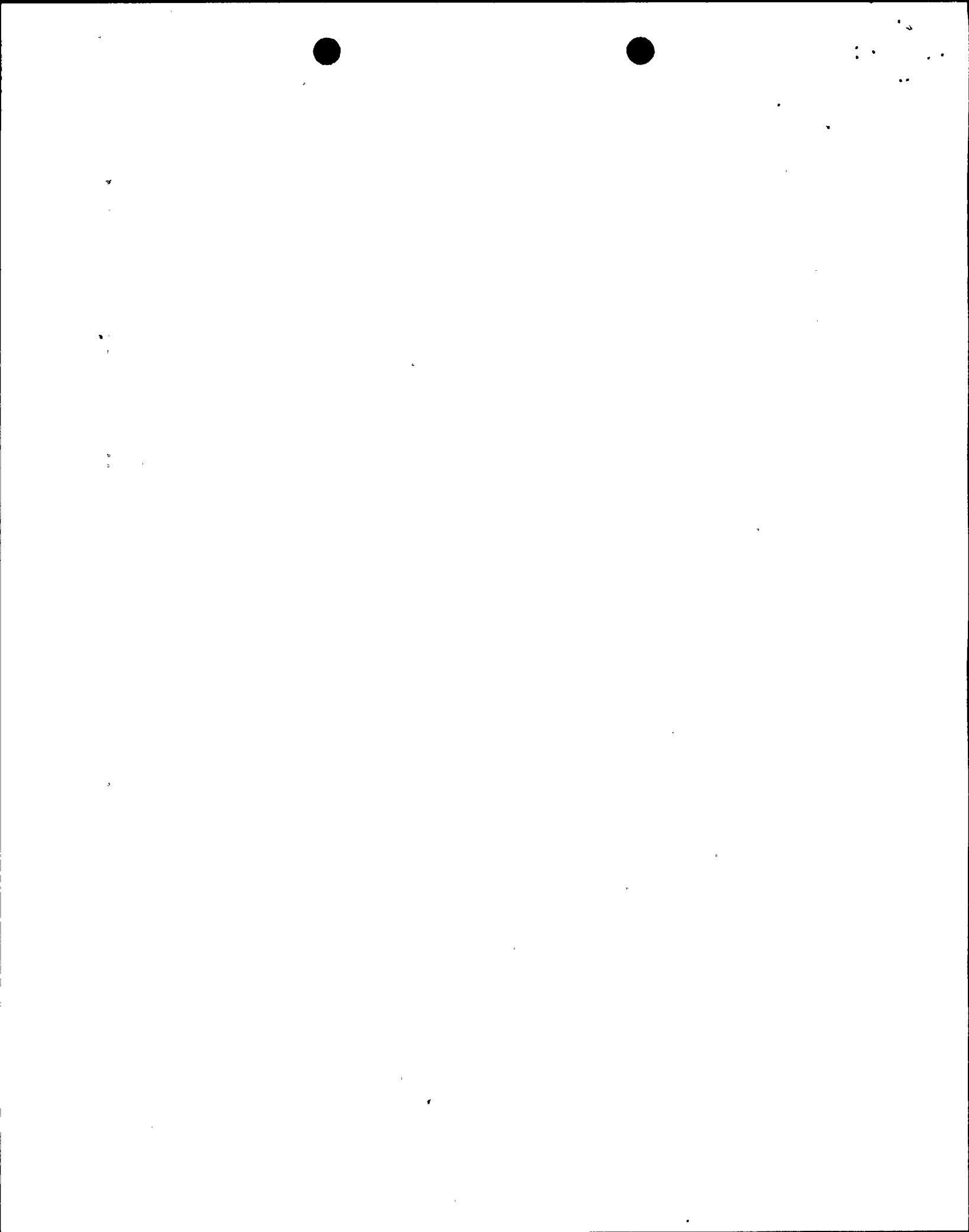
Summary of Significant Safety Related Maintenance

Significant safety related maintenance for Unit 1 consisted of the following:

- . Overhaul and maintenance was performed on various safety related motor operated valves, breakers and motors.
- . The main annunciator system was replaced with an upgraded system.
- . The analog (Hagan) reactor protection and process equipment was replaced with a digital (Eagle 21) instrumentation.
- . Several modifications to the solid state protection system were implemented including the new steam line break protection.

Significant safety related maintenance for Unit 2 consisted of the following:

Repair of a cracked socket weld in a 3/4" vent line.



Actuations of Steam Generator Safety or Pressurizer Power Operated Relief Valves

There were no challenges to the steam generator safety valves or the pressurizer power operated relief valves.



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OPERATING DATA REPORT

DOCKET NO.	50-275
UNIT	1
DATE	04/01/94
COMPLETED BY	T. Eubank J. Stipicevich
TELEPHONE	(805) 545-4867/4877

OPERATING STATUS

- | | |
|--|----------------------|
| 1. Unit Name: | Diablo Canyon Unit 1 |
| 2. Reporting Period: | March 1994 |
| 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): | 1073.4 |
| 8. If changes occur in capacity ratings (items 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 |

	<u>This Month</u>	<u>YTD</u>	<u>Cumulative</u>
11. Hours In Reporting Period	744.0	2160.0	78022.3
12. Number Of Hours Reactor Was Critical	265.2	1681.2	65924.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	264.4	1675.1	65018.1
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	872868	5553436	205388841
17. Gross Electrical Energy Generated (MWH)	297700	1889000	69157532
18. Net Electrical Energy Generated (MWH)	279705	1797459	65614012
19. Unit Service Factor	35.53	77.55	83.33
20. Unit Availability Factor	35.53	77.55	83.33
21. Unit Capacity Factor (Using MDC Net)	35.02	77.53	78.35
22. Unit Capacity Factor (Using DER Net)	34.62	76.63	77.44
23. Unit Forced Outage Rate	0.00	0.37	3.13
24. Shutdowns Scheduled Over Next 6 Months			

(Type, Date, and Duration of Each): Sixth refueling outage (1R6) started on March 12, 1994, for a duration of 52 days.

25. If Shut Down At End Of Report Period, Estimate Date of Startup: May 7, 1994.



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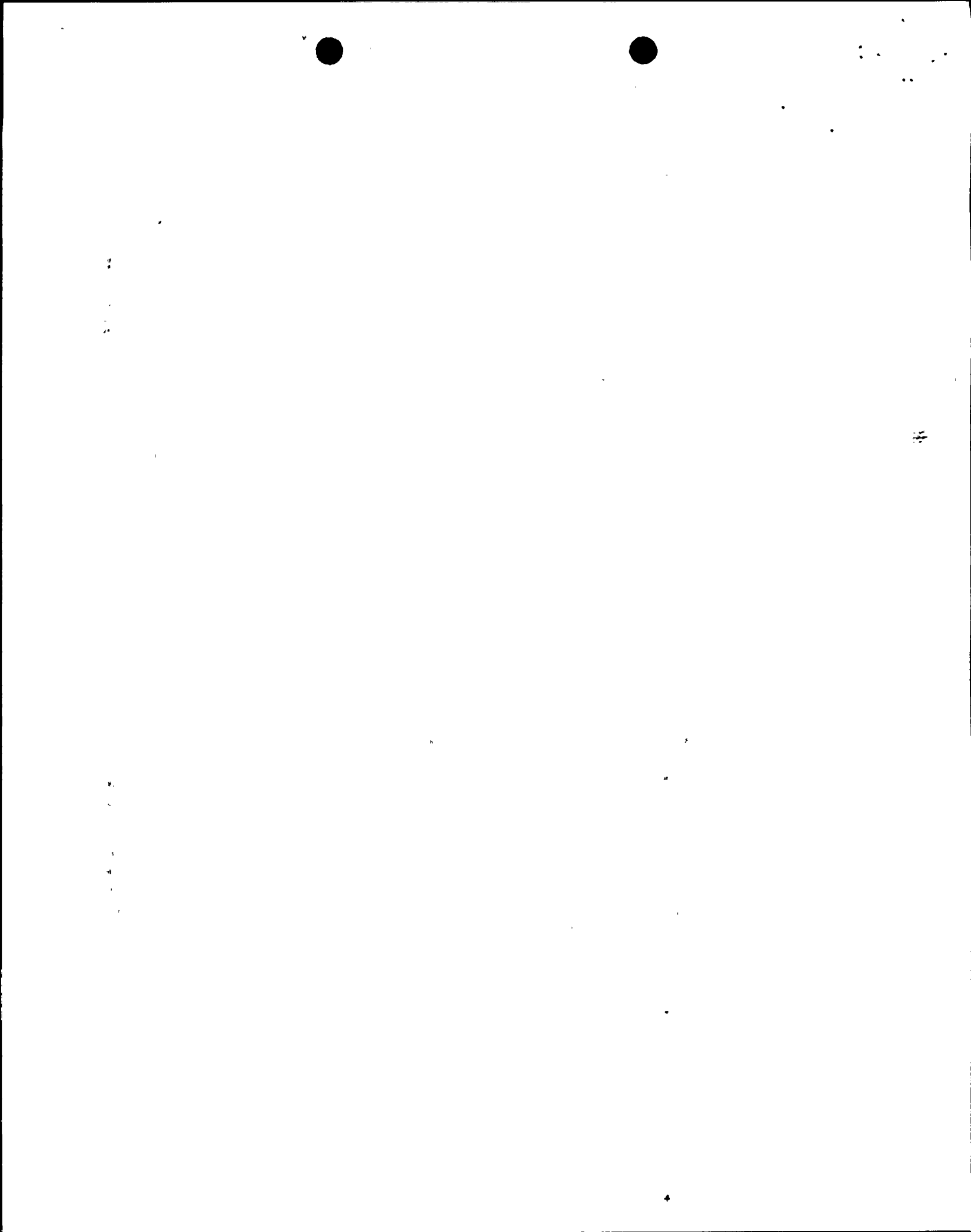
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-275
 UNIT 1
 DATE 04/01/94
 COMPLETED BY T. Eubank
 J. Stipicevich
 TELEPHONE (805) 545-4867/4877

MONTH: March 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1081	17	-7
2	1086	18	-7
3	1085	19	-6
4	1085	20	-6
5	1085	21	-7
6	1081	22	-8
7	1085	23	-7
8	1081	24	-7
9	1085	25	-8
10	1082	26	-7
11	989	27	-6
12	-45	28	-4
13	-19	29	-2
14	-7	30	-2
15	-7	31	-3
16	-7		

The average monthly Electrical Power Level for March 1994 = 375.95 MWe-Net



UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-275
 UNIT 1
 DATE 04/01/94
 COMPLETED BY P. G. Dahan
 TELEPHONE (805) 545-4054

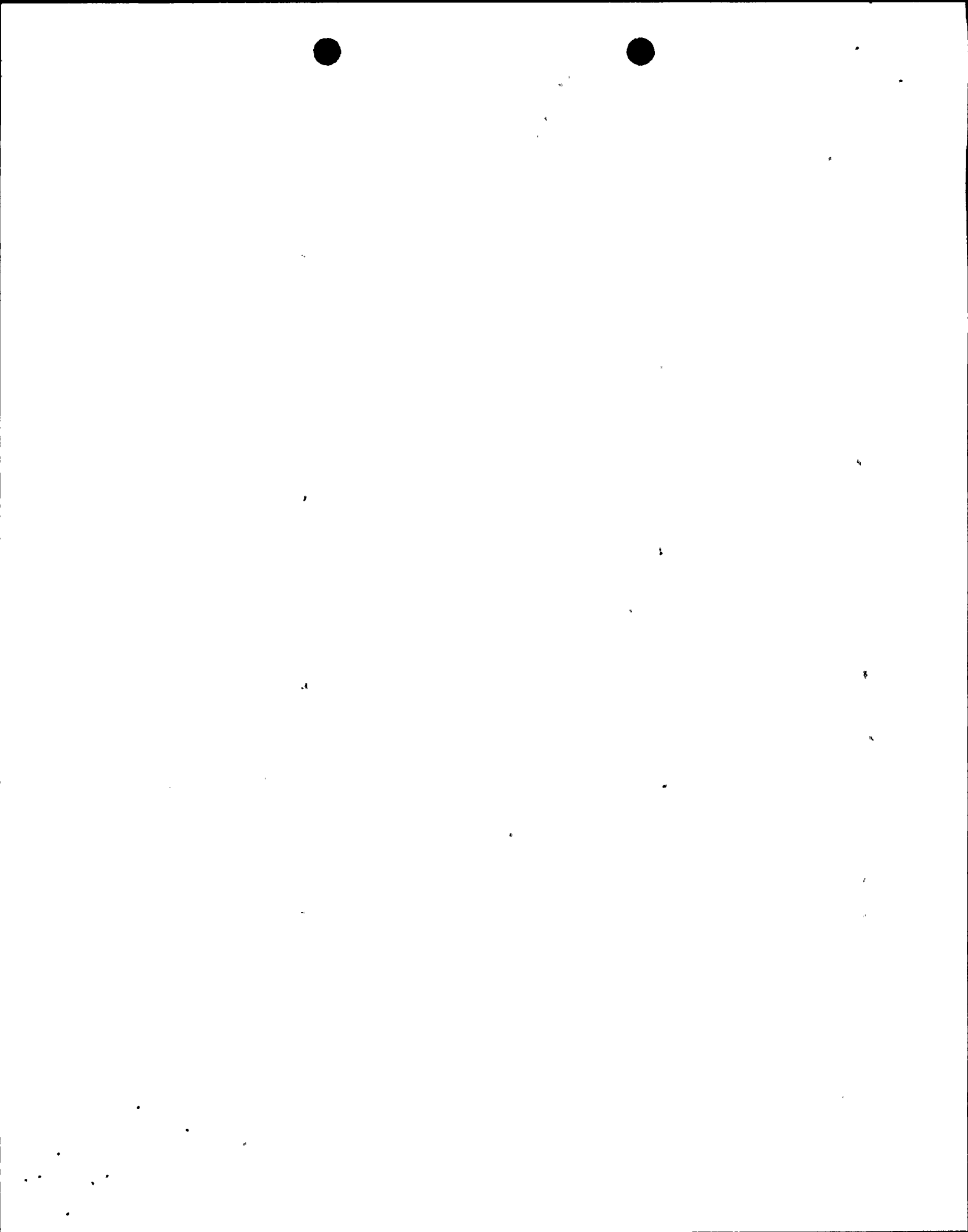
REPORT MONTH: March 1994

NO.	DATE	TYPE ¹	DURATION (HOURS)	REASON ²	METHOD OF SHUTDOWN ³	LICENSEE EVENT REPORT	SYSTEM CODE ⁴	COMPONENT CODE ⁵	CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE
1	940311	S	479	C	1	None.	AB	RCT	Unit 1 was manually shutdown from 100% power to 0% power for its sixth refueling outage (1R6)

- 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-Other

- 4
EHS Systems List, Table 1
- 5
IEEE Std. 803A-1983, "IEEE Recommended Practice for Unique Identification in Power Plants and Related Facilities - Table 2"



OPERATING DATA REPORT

DOCKET NO.	50-323
UNIT	2
DATE	04/01/94
COMPLETED BY	T. Eubank J. Stipicevich
TELEPHONE	(805) 545-4867

OPERATING STATUS

- | | | |
|-----|---|----------------------|
| 1. | Unit Name: | Diablo Canyon Unit 2 |
| 2. | Reporting Period: | March 1994 |
| 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 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 |

		<u>This Month</u>	<u>YTD</u>	<u>Cumulative</u>
11.	Hours In Reporting Period	744.0	2160.0	70581.0
12.	Number Of Hours Reactor Was Critical	650.0	2066.0	60285.7
13.	Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14.	Hours Generator On-Line	650.0	2066.0	59397.4
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	2107924	6898720	194615441
17.	Gross Electrical Energy Generated (MWH)	702500	2305700	64817199
18.	Net Electrical Energy Generated (MWH)	667825	2201081	61622845
19.	Unit Service Factor	87.36	95.65	84.16
20.	Unit Availability Factor	87.36	95.65	84.16
21.	Unit Capacity Factor (Using MDC Net)	82.58	93.75	80.44
.	Unit Capacity Factor (Using DER Net)	80.22	91.07	78.03
23.	Unit Forced Outage Rate	12.64	4.35	3.92
24.	Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):	Refueling Outage; September 15, 1994; 52 days.		
25.	If Shut Down At End Of Report Period, Estimate Date of Startup:	April 9, 1994.		



AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-323
 UNIT 2
 DATE 04/01/94
 COMPLETED BY T. Eubank
 J. Stipicevich
 TELEPHONE (805) 545-4867/4877

MONTH: March 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1092	17	1088
2	1092	18	1092
3	1087	19	1092
4	1088	20	1092
5	1092	21	1088
6	588	22	1097
7	1054	23	1097
8	1092	24	1093
9	1096	25	1097
10	1087	26	695
11	1092	27	495
12	1092	28	-17
13	1088	29	-34
14	1088	30	-30
15	1092	31	-29
16	1088		

The average monthly Electrical Power Level for March 1994 = 897.61 MWe-Net



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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-323
 UNIT 2
 DATE 04/01/94
 COMPLETED BY P. G. Dahan
 TELEPHONE (805) 545-4054

REPORT MONTH: March 1994

NO.	DATE	TYPE ¹	DURATION (HOURS)	REASON ²	METHOD OF SHUTDOWN ³	LICENSEE EVENT REPORT	SYSTEM CODE ⁴	COMPONENT CODE ⁵	CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE
1	940306	S	N/A	B	5	NONE	SD	COND	Unit 2 reduced power to 50% for condenser cleaning.
2	940326	S	N/A	B	5	NONE	SD	CND	Unit 2 reduced power to 50% for tunnel cleaning.
3	940328	F	94	A	1	2-94-001	BQ	PSP	Unit 2 manually shut down for a leak from a craked socked weld in a 3/4" vent line weld. See LER 2-94-001.

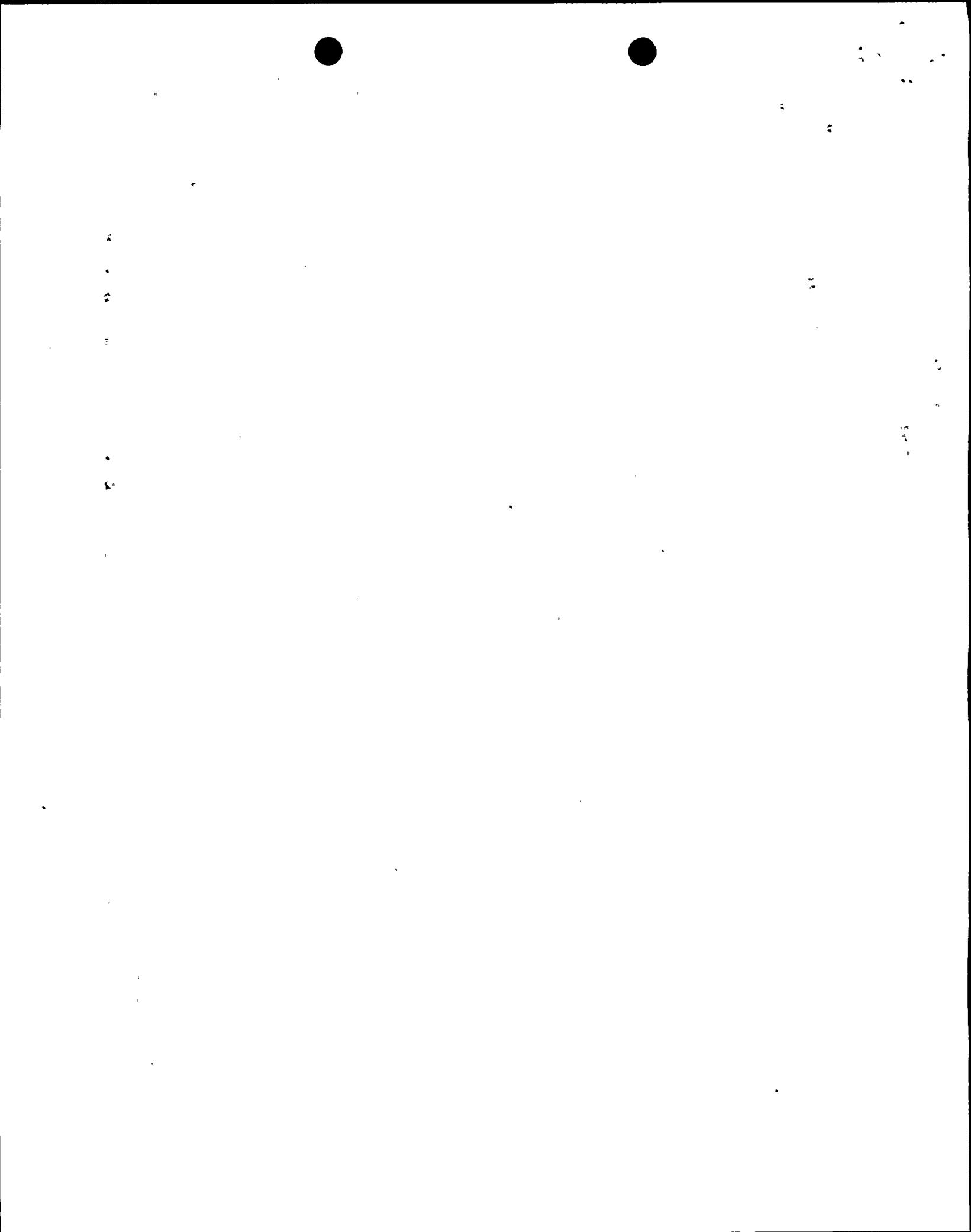
1
Type:
F-Forced
S-Scheduled

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-Other

4
EIS Systems List, Table 1

5
IEEE Std. 803A-1983, "IEEE Recommended Practice for Unique Identification in Power Plants and Related Facilities - Table 2"



REFUELING INFORMATION REQUEST

DOCKET NO. 50-275
UNIT 1
DATE 04/01/94
COMPLETED BY S. G. Chesnut
P. G. Dahan
TELEPHONE (805) 545-4143/4054

1. Name of facility: Diablo Canyon Unit 1
2. Scheduled date for next refueling shutdown: March 12, 1994.
3. Scheduled date for restart following refueling: May 7, 1994.
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 reviewed the cycle 7 core reload on March 28, 1994.
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. As of March 31, 1994, the number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool were:

(a) 0 (b) 657
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: 2006 (Loss of full core offload capability).



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REFUELING INFORMATION REQUEST

DOCKET NO. 50-323
UNIT 2
DATE 04/01/94
COMPLETED BY S. G. Chesnut
P. G. Dahan
TELEPHONE (805) 545-4143/4054

1. Name of facility: Diablo Canyon Unit 2
2. Scheduled date for next refueling shutdown: September 15, 1994 (estimated).
3. Scheduled date for restart following refueling: November 6, 1994 (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 reviewed and approved the cycle 6 core reload on March 10, 1993.

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: NA
7. As of March 31, 1994, the number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool were:

(a)	193	(b)	396
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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
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9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: 2006 (Loss of full core offload capability).

