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 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 Dec 1990 for Diablo Canyon Units 1 & 2. W/910115 ltr.

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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



January 15, 1991

U.S. Nuclear Regulatory Commission
Attn: 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 December 1990

Gentlemen:

Enclosed are the completed monthly operating report forms for
Diablo Canyon Units 1 and 2 for December 1990. This report is
submitted in accordance with Section 6.9.1.7 of the Units 1 and 2
Technical Specifications.

Sincerely,

W. Mikles for J. Townsend

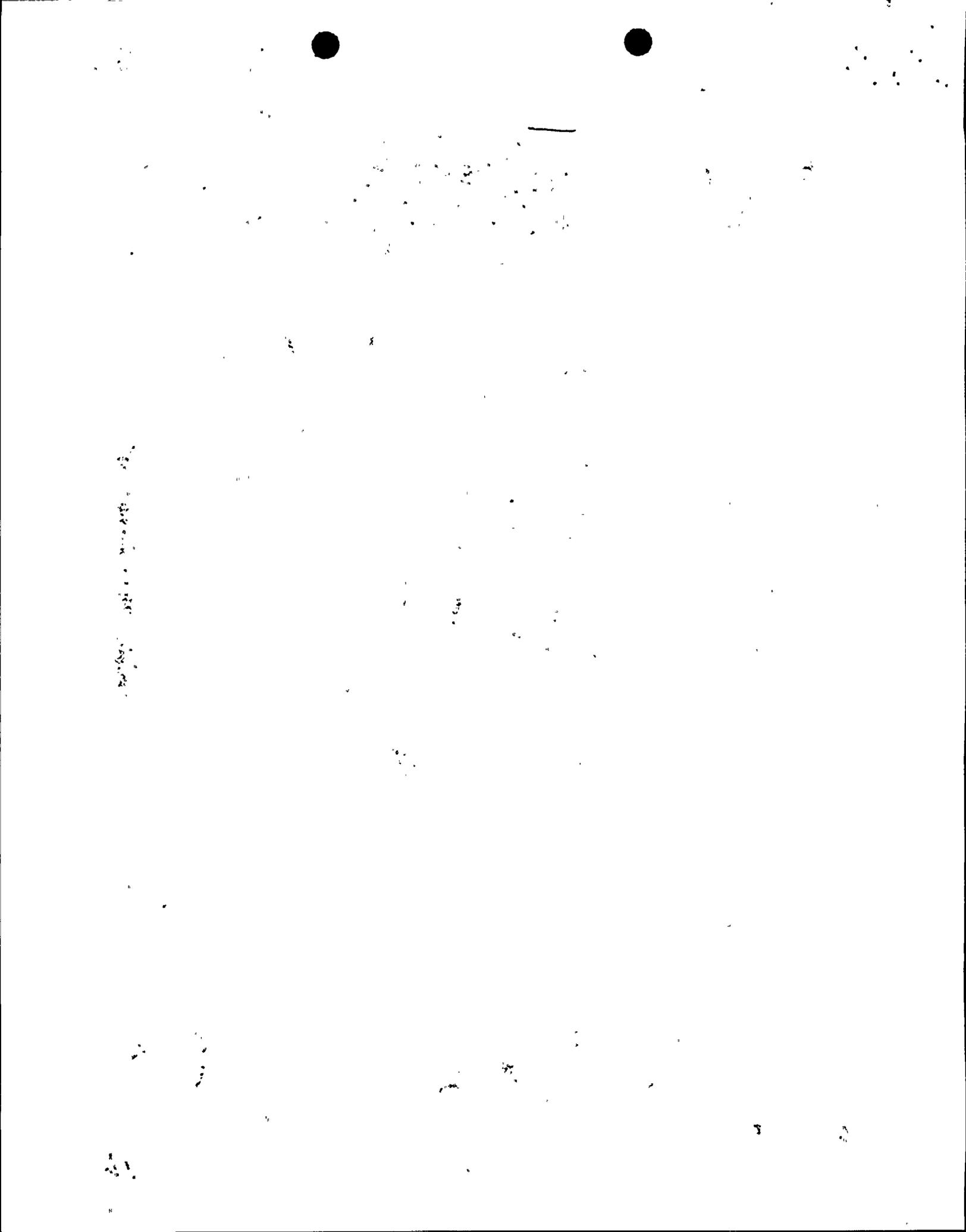
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Enclosures

cc: Mr. John B. Martin, Regional Administrator
Region V - USNRC

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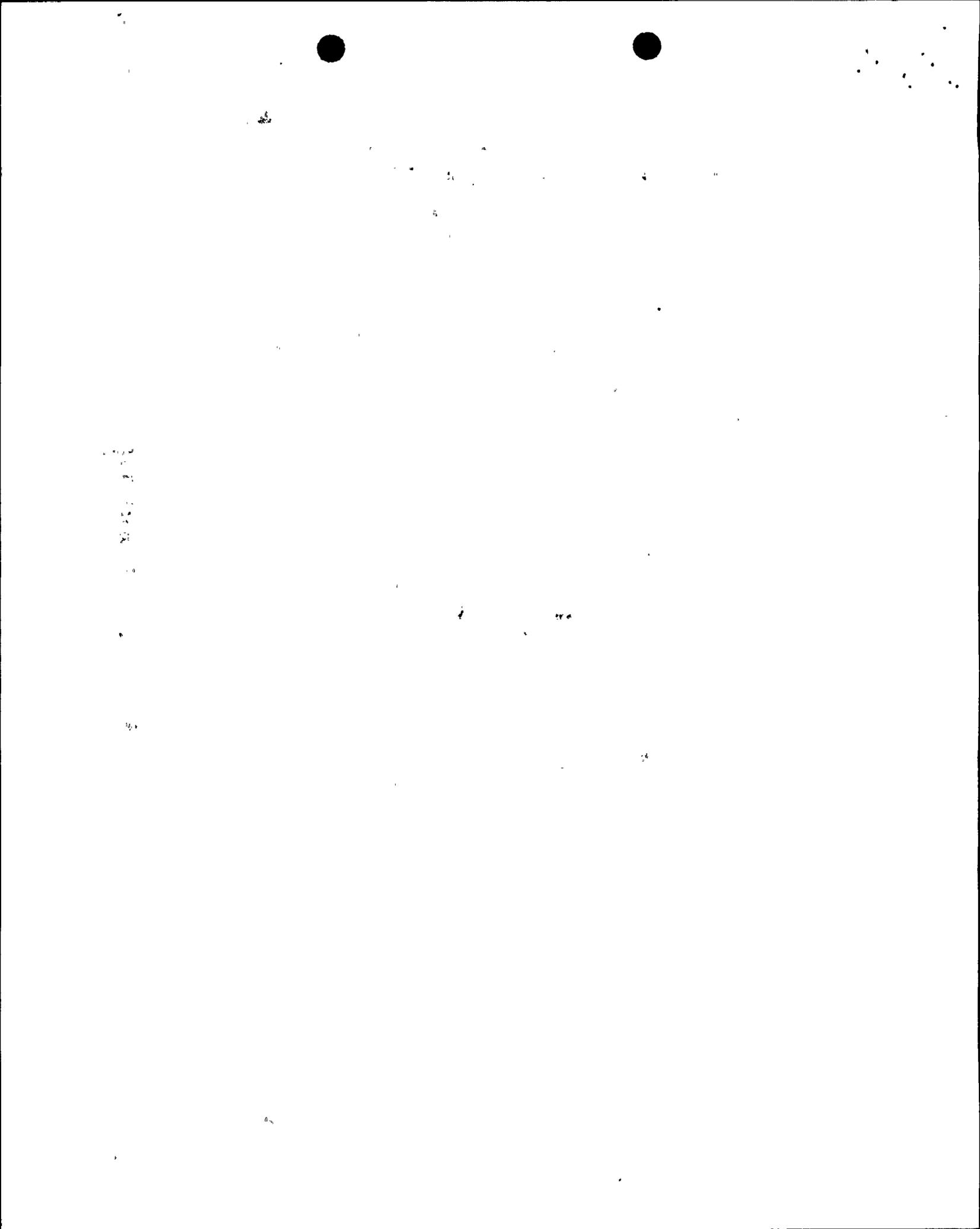


MONTHLY NARRATIVE REPORT
OF OPERATION
AND MAJOR MAINTENANCE EXPERIENCE

This report describes the operating and major maintenance experience for the month of December 1990. 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 December 1, 1990: Unit 1 and Unit 2 started the month at 100% power.
- On December 5, 1990: A 10CFR 50.72(b)(2)(ii) Non-Emergency 1 hour report was made regarding a Unit 1 reactor trip from turbine trip due to a main generator stator coil cooling water low flow unit runback initiation. For more information see LER 1-90-014.
- On December 8, 1990: A 10CFR 50.72(b)(2)(ii) Non-Emergency 4 hour report was made regarding a Unit 1 feedwater isolation actuation while transitioning from auxiliary feedwater to main feedwater due to steam generator 1-3 overfill and resultant swell above the high water level. For more information see LER 1-90-015.
- On December 8, 1990: Unit 1 returned to power operation and began ramping to 100% power.
- On December 9, 1990: Unit 1 returned to 100% power.
- On December 22, 1990: Unit 1 ramped down to 50% power for condenser conduit cleaning.
- On December 24, 1990: A 10 CFR 50.72(b)(1)(i)(A) Non-Emergency 1 hour report was made regarding a Unit 1 reactor trip and safety injection due to low pressurizer pressure caused by the failure of a pressurizer spray valve. For more information see LER 1-90-017.
- A 10 CFR 50.72(b)(1)(i)(A) Non-Emergency 1 hour report was made regarding initiation of TS 3.4.9.1 Mode 3 to Mode 5 shutdown due to exceeding the maximum cooldown rate of 100 degrees F in a 1 hour period following the reactor trip. For more information see LER 1-90-017.
- On December 27, 1990: A 10 CFR 50.72(b)(2)(ii) Non-Emergency 4 hour report was made regarding a Unit 1 unplanned Containment Ventilation Isolation (CVI) due to an instrumentation electrical power voltage transient caused by a tool accidentally shorting a terminal in the containment monitoring cabinet. For more information see LER 1-90-019.



On December 28, 1990: Unit 1 returned to power operation and began ramping to 100% power.

On December 29, 1990: Unit 1 returned to 100% power.

On December 31, 1990: Unit 1 and Unit 2 ended the month at 100% power.

Summary of Plant Operating Characteristics, Power Reductions and Unit Shutdowns

Unit 1 operated this month with a unit availability factor of 78.8% and a unit capacity factor of 70.9%. Unit 1 reduced power three times this month, twice for reactor trips and once for condenser cleaning.

Unit 2 operated this month with a unit availability factor of 100.0% and a unit capacity factor of 99.1%. Unit 2 did not reduce power this month.

Summary of Significant Safety Related Maintenance

- o Instrumentation and Controls technicians performed troubleshooting and repair of the main generator stator cooling water low flow input into the reactor runback circuit that initiated the December 5, 1990, reactor trip.
- o Mechanical Maintenance and Instrumentation and Controls technicians performed troubleshooting and repair of the feedwater flow regulating bypass control valve and feedwater line check valve for steam generator 1-3 associated with the December 8, 1990, ESF actuation.
- o Mechanical Maintenance and Instrumentation and Controls technicians performed troubleshooting and repair of the pressurizer spray valve responsible for the December 24, 1990, reactor trip.

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

There were no challenges to the pressurizer or steam generator PORVs during December, 1990.

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OPERATING DATA REPORT

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

OPERATING STATUS

1. Unit Name: Diablo Canyon Unit 1
2. Reporting Period: December 1990
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 Number 3 through 7) since last report, give reasons:

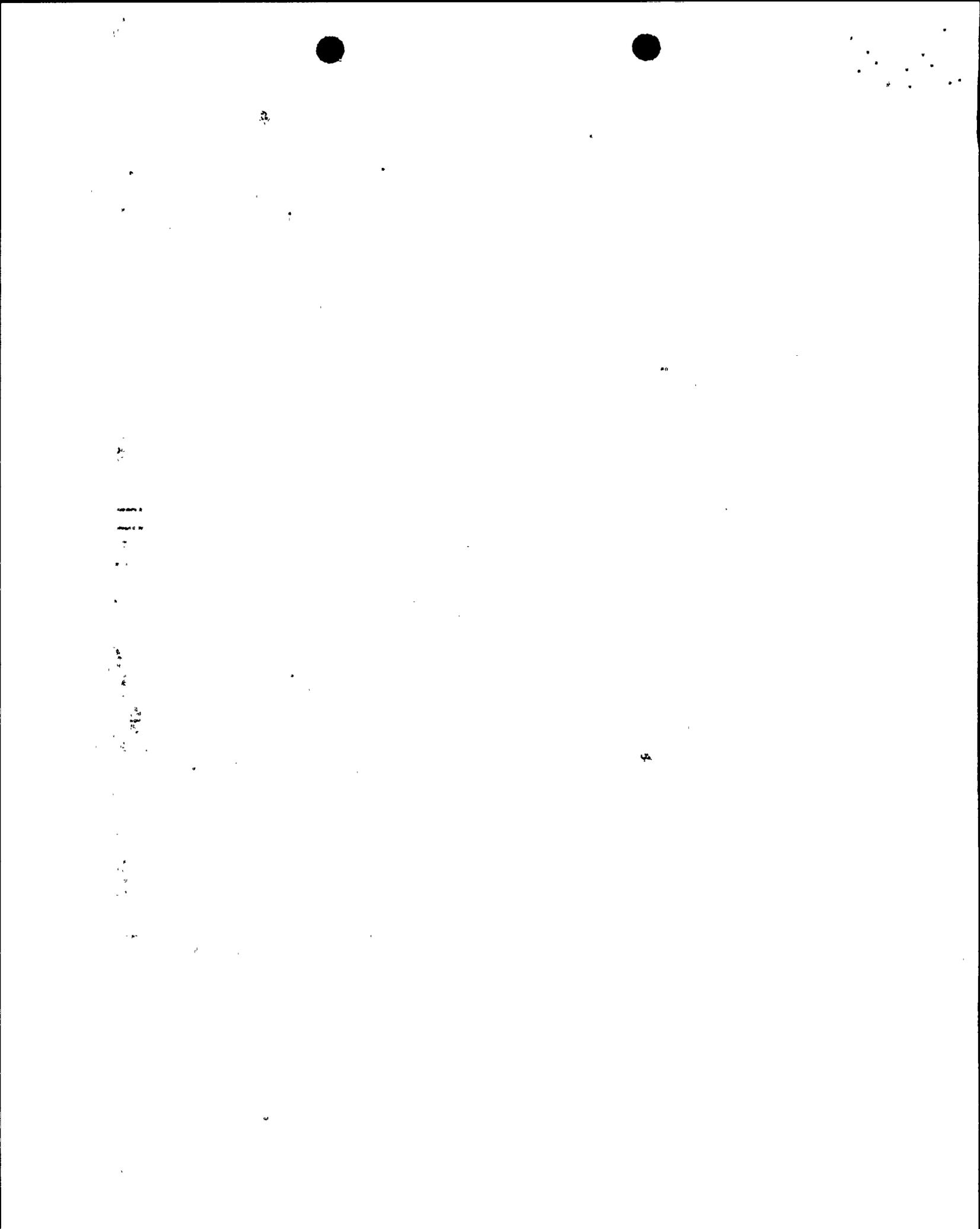
N/A

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>744.0</u>	<u>8760.0</u>	<u>49558.3</u>
12. Number Of Hours Reactor Was Critical	<u>600.3</u>	<u>8504.3</u>	<u>41117.2</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>586.2</u>	<u>8426.9</u>	<u>40359.5</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>1824511</u>	<u>27221145</u>	<u>125294472</u>
17. Gross Electrical Energy Generated	<u>603000</u>	<u>9166900</u>	<u>42190332</u>
18. Net Electrical Energy Generated	<u>566123</u>	<u>8713519</u>	<u>39980082</u>
19. Unit Service Factor	<u>78.8</u>	<u>96.2</u>	<u>81.4</u>
20. Unit Availability Factor	<u>78.8</u>	<u>96.2</u>	<u>81.4</u>
21. Unit Capacity Factor (Using MDC Net)	<u>70.9</u>	<u>92.7</u>	<u>75.2</u>
22. Unit Capacity Factor (Using DER Net)	<u>70.1</u>	<u>91.6</u>	<u>74.3</u>
23. Unit Forced Outage Rate	<u>21.2</u>	<u>3.8</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: N/A



OPERATING DATA REPORT

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

OPERATING STATUS

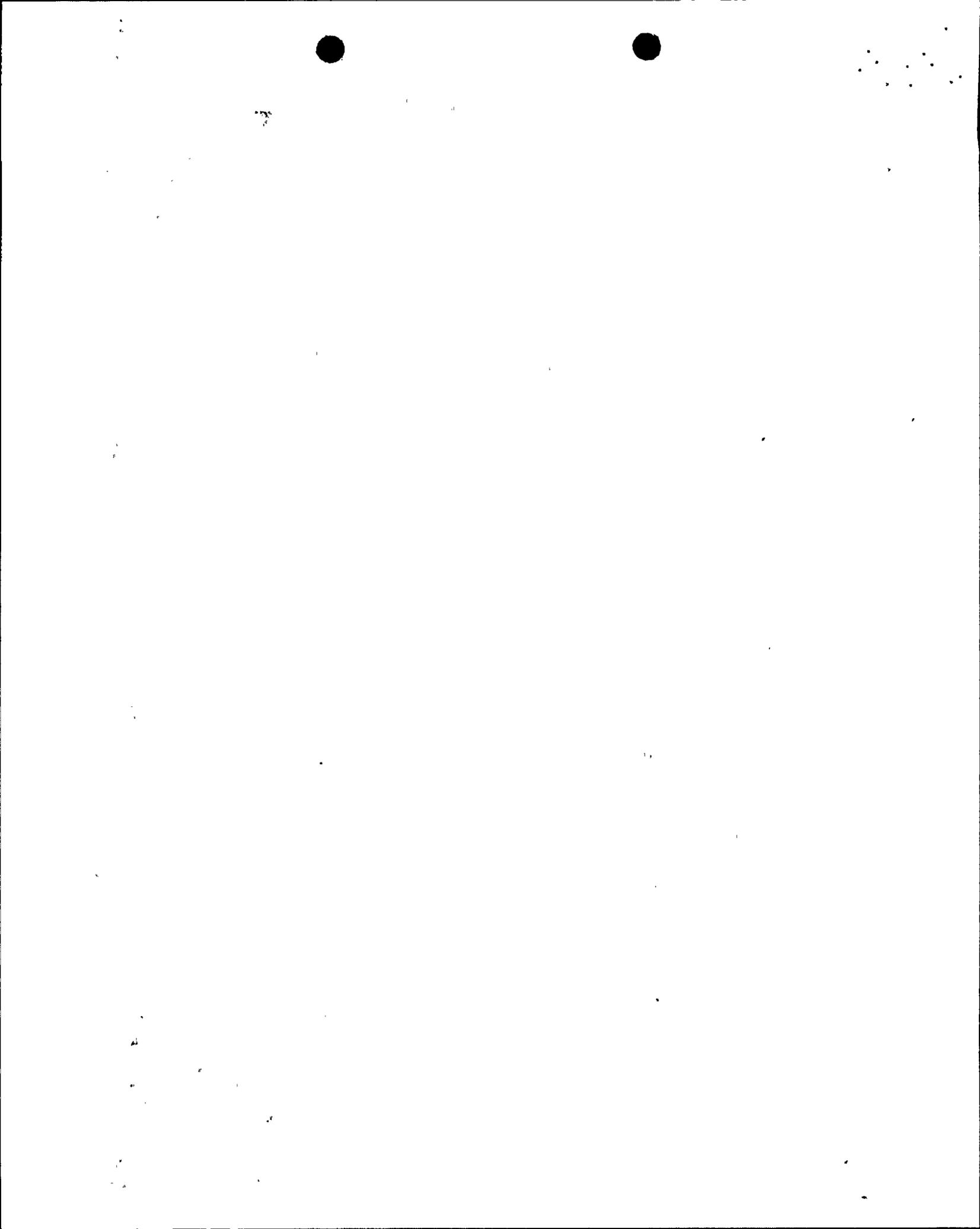
1. Unit Name: Diablo Canyon Unit 2
2. Reporting Period: December 1990
3. Licensed Thermal Power (Mwt): 3411
4. Nameplate Rating (Gross MWe): 1164
5. Design Electrical Rating (Net MWe): 1119
6. Maximum Dependable Capacity (Gross MWe): 1137
7. Maximum Dependable Capacity (Net MWe): 1087
8. If changes occur 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>744.0</u>	<u>8760.0</u>	<u>42117.0</u>
12. Number Of Hours Reactor Was Critical	<u>744.0</u>	<u>7432.9</u>	<u>34676.0</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>744.0</u>	<u>7285.1</u>	<u>33933.0</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
16. Gross Thermal Energy Generated	<u>2535655</u>	<u>23858101</u>	<u>109778055</u>
17. Gross Electrical Energy Generated	<u>838800</u>	<u>7938100</u>	<u>36563199</u>
18. Net Electrical Energy Generated	<u>801763</u>	<u>7560444</u>	<u>34671072</u>
19. Unit Service Factor	<u>100.0</u>	<u>83.2</u>	<u>80.6</u>
20. Unit Availability Factor	<u>100.0</u>	<u>83.2</u>	<u>80.6</u>
21. Unit Capacity Factor (Using MDC Net)	<u>99.1</u>	<u>79.4</u>	<u>75.9</u>
22. Unit Capacity Factor (Using DER Net)	<u>96.3</u>	<u>77.1</u>	<u>73.6</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.3</u>	<u>5.9</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



AVERAGE DAILY UNIT POWER LEVEL

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

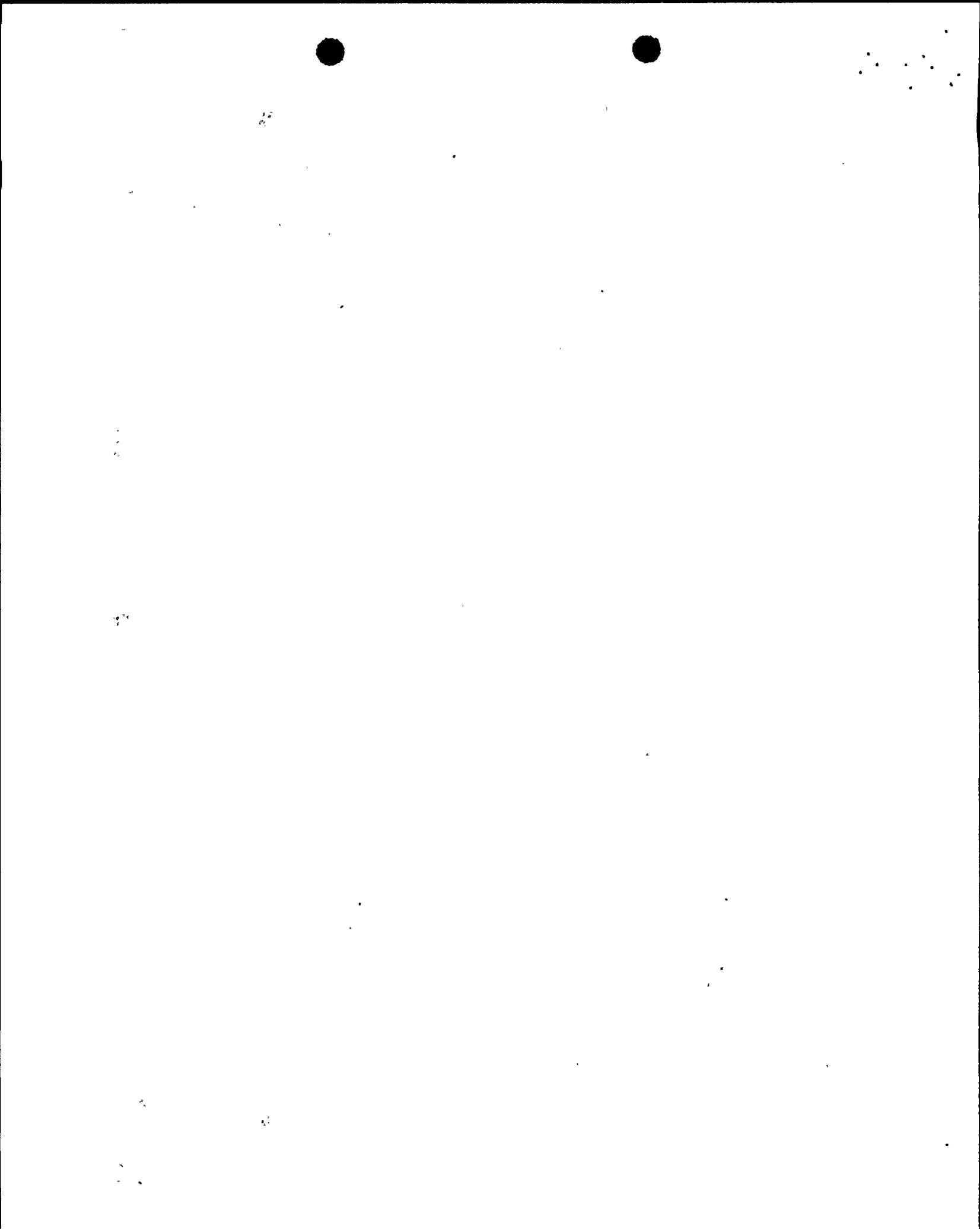
MONTH: DECEMBER 1990

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	1060	16	1056
2	1065	17	1064
3	1060	18	1060
4	1060	19	1056
5	969	20	1064
6	-39	21	1039
7	-40	22	471
8	451	23	474
9	972	24	56
10	1055	25	-36
11	1060	26	-48
12	1060	27	-49
13	1068	28	246
14	1060	29	1067
15	1064	30	1072
		31	1073

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 DEC. 1990 = 761 MWe-Net



AVERAGE DAILY UNIT POWER LEVEL

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

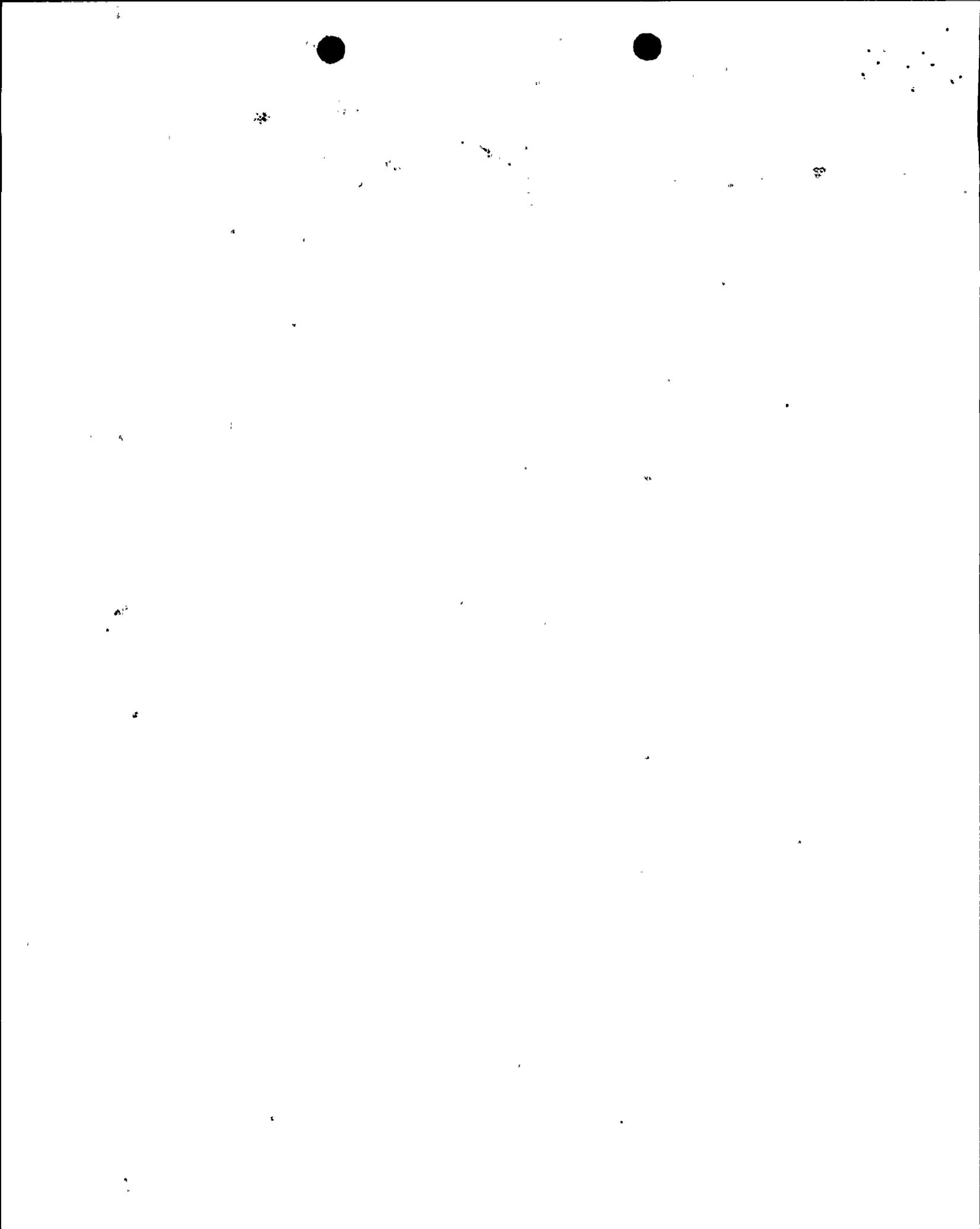
MONTH: DECEMBER 1990

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	1084	16	1075
2	1084	17	1079
3	1084	18	1075
4	1084	19	1079
5	1079	20	1079
6	1071	21	1083
7	1075	22	1080
8	1075	23	1079
9	1079	24	1079
10	1076	25	1083
11	1075	26	1075
12	1080	27	1079
13	1075	28	1067
14	1079	29	1071
15	1075	30	1072
		31	1075

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 DEC. 1990 = 1078 MWe-Net



UNIT SHUTDOWNS AND POWER REDUCTIONS
Page 1 of 1

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

REPORT MONTH DECEMBER 1990

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.	901205	F	52.6	A	5	1-90-014	AB	MO	Unit 1 reactor tripped due to a main generator stator coil cooling water flow unit trip signal.
2.	901208	F	0	A	5	1-90-015	SB	SJ	ESF actuation while transitioning from auxiliary feedwater to main feedwater due to SG 1-3 overflow and resultant swell above the high level setpoint.
3.	901222	S	0	B	1	N/A	SD	COND	Unit 1 ramped down to 50% for condenser cleaning.
4.	901224	F	105.2	A	1	1-90-017	AB	PCV	Unit 1 reactor tripped due to a pressurizer spray valve failure resulting in a low pressurizer pressure reactor trip and safety injection.
5.	901224	F	0	A	1	1-90-017	AB	PCV	Unit 1 initiated a Mode 3 to Mode 5 shutdown due to exceeding a TS 3.4.9.1 maximum cooldown rate of 100 degree F in a 1 hour period following a reactor trip.

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 01/01/91
 COMPLETED BY P.G. DAHAN
 TELEPHONE (805) 545-4054

REPORT MONTH DECEMBER 1990

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
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NONE

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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Vertical text or markings on the left side of the page, possibly bleed-through from the reverse side.

DATE: 01/01/91

REFUELING INFORMATION REQUEST

1. Name of facility: Diablo Canyon Unit 1
2. Scheduled date for next refueling shutdown: February 1991 (estimated)
3. Scheduled date for restart following refueling: May 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 February 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) 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: 01/01/91

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)

