

MONTHLY NARRATIVE REPORT  
OF OPERATION  
AND MAJOR MAINTENANCE EXPERIENCE

This report describes the operating and major maintenance experience for the month of February, 1986. 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.

On February 1, 1986	Unit 1 reduced power to 44% due to kelp fouling of the intake traveling screens.
On February 2, 1986	Unit 1 returned to 98% power.
On February 6, 1986	A significant event notification was made due to the inadvertent automatic actuation of an Engineered Safety Features System (Unit 2 Fuel Handling Building Ventilation System).
On February 15, 1986	Unit 1 reduced power to 45% to backflush the main condenser and inspect for leakage.
On February 16, 1986	Unit 1 returned to 100% power.
On February 19, 1986	Unit 2 was paralleled to the grid at 2335 PST thereby ending the strainer removal outage. Nine minutes later Unit 2 was separated from the grid to investigate a cracking sound coming from the potential transformer cabinets. The noise was apparently caused by arcing in a fuse drawer due to the drawer being only partially latched.
On February 19, 1986	An Unusual Event was declared on Unit 1 due to an error in the determination of RWST boron concentration. Unit 1 power was reduced to 65% to comply with a Technical Specification Limiting Condition for Operation on boron concentration before the error was discovered.
On February 20, 1986	Unit 2 was paralleled to the grid.
On February 20, 1986	Unit 1 returned to 100% power.
On February 21/22, 1986	Unit 1 reduced power to 45% to plug leaking tubes in the main condenser.
On February 22, 1986	Unit 1 returned to 100% power.
On February 22, 1986	Unit 2 experienced a turbine trip and subsequent reactor trip.
On February 25, 1986	Unit 2 paralleled to the grid.
On February 28, 1986	Unit 2 was removed from the grid to correct a turbine digital control system problem, then returned to the grid.

Unit 1 operated this month with a unit availability factor of 100% and a unit capacity factor of 91.7%.

During the month of February, Unit 1 had to reduce power four times: due to kelp blocking the intake traveling screens; to backflush and inspect main condenser tubes; to plug leaking main condenser tubes; and in response to a Technical Specification Action statement entered due to a chemistry error in the analysis of a RWST sample.

The Unit 2 strainer removal outage ended February 19, 1986 at 2335 PST when the Unit was paralleled to the grid. Unit 2 separated from the grid three times after ending the strainer outage: to investigate and correct a noise heard in the metering potential transformer cabinets; as the result of a turbine trip; and to switch to a different electro-hydraulic control mode for the main turbine.

No challenges to the steam generator safety valves or pressurizer power operated relief valves have been made. No major safety-related maintenance was performed on Unit 1, or Unit 2 during the month of February, 1986.

# OPERATING DATA REPORT

DOCKET NO. 50-275  
 DATE 03/03/86  
 COMPLETED BY Bob Kanick  
 TELEPHONE (805) 595-7351

## OPERATING STATUS

1. Unit Name: Diablo Canyon Unit 1
2. Reporting Period: February 1986
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): 1125
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: None

	This Month	Yr-to-Date	Cumulative*
11. Hours In Reporting Period	672.0	1416.0	7150.3
12. Number Of Hours Reactor Was Critical	672.0	1416.0	6714.3
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	672.0	1416.0	6623.3
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	2102251	4526520	21091970
17. Gross Electrical Energy Generated (MWH)	695000	1494300	7008632
18. Net Electrical Energy Generated (MWH)	661125	1421314	6655548
19. Unit Service Factor	100.0	100.0	92.6
20. Unit Availability Factor	100.0	100.0	92.6
21. Unit Capacity Factor (Using MDC Net)	91.7	93.5	86.7
22. Unit Capacity Factor (Using DER Net)	90.6	92.4	85.7
23. Unit Forced Outage Rate	0.0	0.0	7.4
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Refueling Outage, August 30, 1986, 68 days

25. If Shut Down At End Of Report Period, Est. Date of Start-up: N/A
26. Units In Test Status (Prior to Commercial Operation): N/A

\* As of commercial operation on 5-7-85 at 0243.

# OPERATING DATA REPORT

DOCKET NO. 50-323  
 DATE 03/03/86  
 COMPLETED BY Bob Kanick  
 TELEPHONE (805)595-7351

## OPERATING STATUS

1. Unit Name: Diablo Canyon Unit 2
2. Reporting Period: February 1986
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): 1145\*\*\*
7. Maximum Dependable Capacity (Net MWe): 1093\*\*\*
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: None

	This Month	Yr-to-Date	Cumulative*
11. Hours In Reporting Period	672.0	1416.0	7297.0
12. Number Of Hours Reactor Was Critical	194.5	439.3	2313.3
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	134.3	349.3	1563.3
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	229168	786924	2908115
17. Gross Electrical Energy Generated (MWH)	66200	242800	875600
18. Net Electrical Energy Generated (MWH)	48034	209537	695725
19. Unit Service Factor	N/A**		
20. Unit Availability Factor	N/A**		
21. Unit Capacity Factor (Using MDC Net)	N/A**		
22. Unit Capacity Factor (Using DER Net)	N/A**		
23. Unit Forced Outage Rate	N/A**		
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

N/A

25. If Shut Down At End Of Report Period, Est. Date of Start-up: N/A
26. Units In Test Status (Prior to Commercial Operation):
 

	Forecast	Achieved
INITIAL CRITICALITY	July 1985	August 1985
INITIAL ELECTRICITY	October 1985	October 1985
COMMERCIAL OPERATION	March 1986	

\* Cumulative totals started on the April 26, 1985 (Date of effectiveness of Low Power License).

\*\* These sections not applicable until commencement of commercial operation.

\*\*\* These values are predictions - actual values are to be determined by operating experience during the first year of commercial operation.

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-275  
UNIT Diablo Canyon Unit 1  
DATE 03/03/86  
COMPLETED BY Bob Kanick  
TELEPHONE (805)595-7351

MONTH February 1986

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	<u>489</u>
2	<u>817</u>
3	<u>1036</u>
4	<u>1049</u>
5	<u>1061</u>
6	<u>1061</u>
7	<u>1066</u>
8	<u>1061</u>
9	<u>1053</u>
10	<u>1062</u>
11	<u>1070</u>
12	<u>1062</u>
13	<u>1062</u>
14	<u>1058</u>
15	<u>856</u>
16	<u>421</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	<u>1053</u>
18	<u>1053</u>
19	<u>1043</u>
20	<u>1000</u>
21	<u>798</u>
22	<u>874</u>
23	<u>1078</u>
24	<u>1057</u>
25	<u>1067</u>
26	<u>1083</u>
27	<u>1083</u>
28	<u>1076</u>

## 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.

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-323  
UNIT Diablo Canyon Unit 2  
DATE 03/03/86  
COMPLETED BY Bob Kanick  
TELEPHONE (805)595-7351

MONTH February 1986

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	<u>-6</u>
2	<u>-5</u>
3	<u>-6</u>
4	<u>-6</u>
5	<u>-6</u>
6	<u>-7</u>
7	<u>-7</u>
8	<u>-15</u>
9	<u>-15</u>
10	<u>-15</u>
11	<u>-16</u>
12	<u>-16</u>
13	<u>-20</u>
14	<u>-27</u>
15	<u>-42</u>
16	<u>-36</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	<u>-39</u>
18	<u>-38</u>
19	<u>-38</u>
20	<u>180</u>
21	<u>405</u>
22	<u>572</u>
23	<u>-38</u>
24	<u>-39</u>
25	<u>-39</u>
26	<u>319</u>
27	<u>554</u>
28	<u>446</u>

## 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.

UNIT SHUTDOWNS  
PAGE 1 OF 1

DOCKET NO. 50-275  
UNIT NAME Diablo Canyon Unit 1  
DATE 03/04/86  
COMPLETED BY D.P. SISK  
TELEPHONE (805)595-7351

REPORT MONTH FEBRUARY 1986

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutdown <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
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None

<sup>1</sup>  
F: Forced  
S: Scheduled

<sup>2</sup>  
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)

<sup>3</sup>  
Method:  
1-Manual  
2-Manual Scram  
3-Automatic Scram  
4-Continuation from  
previous month  
5-Power reduction  
6,7,8-N/A  
9-Other

<sup>4</sup>  
Exhibit G - Instructions  
for Preparation of Data  
Entry Sheets for Licensee  
Event Report (LER) File  
(NUREG-1022)

<sup>5</sup>  
Exhibit I - Same Source

UNIT SHUTDOWNS  
PAGE 1 OF 1

DOCKET NO. 50-323  
UNIT NAME Diablo Canyon Unit 2  
DATE 03/04/86  
COMPLETED BY D.P. SISK  
TELEPHONE (805) 595-7351

REPORT MONTH FEBRUARY 1986

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutdown <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
1	02/01/86	S	479.6	B	4	NA	NA	NA	Strainer Removal Outage
2	02/19/86	F	1.8	H	1	NA	NA	NA	Nine minutes after paralleling to the grid, the generator was separated from the system when a cracking sound was heard in the metering potential transformer cabinets. A fuse drawer was found to be not fully latched. The drawer was latched and the unit was paralleled to the grid with no further problems.
3	02/22/86	F	53.8	A	3	2-86-005	TL	RG	A voltage transient on the main generator voltage regulator resulted in a turbine trip and subsequent reactor trip. The cause of the voltage transient is being investigated.
4	02/28/86	F	2.5	A	1	NA	JJ	NA	Unit 2 was removed from the grid to correct a turbine digital control problem. The unit was switched to a different electro-hydraulic control mode and returned to the grid.

1  
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



# PACIFIC GAS AND ELECTRIC COMPANY



DIABLO CANYON POWER PLANT  
P.O. Box 56 • Avila Beach, California 93424 • (805) 595-7351

R.C. THORNBERRY  
PLANT MANAGER

March 10, 1986

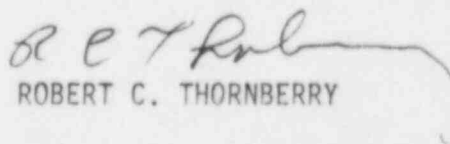
Director, Office of Resource Management  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

RE: Docket No. 50-275 and 50-323  
License No. DPR-80 and DPR-82  
Monthly Operating Report for February, 1986

Gentlemen:

Enclosed are the completed monthly operating report forms for Diablo Canyon Units 1 and 2 for February, 1986. This report is submitted in accordance with Section 6.9.1.7 of the Units 1 and 2 Technical Specifications.

Sincerely,

  
ROBERT C. THORNBERRY

RCT:lah

Enclosures

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

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