

# OPERATING DATA REPORT

DOCKET NO. 50-317  
 DATE 7/15/81  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

## OPERATING STATUS

1. Unit Name: Calvert Cliffs No. 1
2. Reporting Period: June, 1981
3. Licensed Thermal Power (MWt): 2,700
4. Nameplate Rating (Gross MWe): 918
5. Design Electrical Rating (Net MWe): 845
6. Maximum Dependable Capacity (Gross MWe): 860
7. Maximum Dependable Capacity (Net MWe): 825
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

Notes

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

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	720.0	4,343.0	53,892.0
12. Number Of Hours Reactor Was Critical	657.8	3,855.6	42,792.3
13. Reactor Reserve Shutdown Hours	2.0	231.9	1,496.0
14. Hours Generator On-Line	649.5	3,777.3	41,830.0
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,783,301	9,888,438	100,455,230
17. Gross Electrical Energy Generated (MWH)	506,895	3,225,172	32,819,405
18. Net Electrical Energy Generated (MWH)	481,738	3,080,478	31,272,726
19. Unit Service Factor	90.2	87.0	77.6
20. Unit Availability Factor	90.2	87.0	77.6
21. Unit Capacity Factor (Using MDC Net)	81.1	87.0	71.9
22. Unit Capacity Factor (Using DER Net)	79.2	83.9	68.7
23. Unit Forced Outage Rate	8.9	8.5	8.4
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

25. If Shut Down At End Of Report Period, Estimated Date of Startup:
26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY  
 INITIAL ELECTRICITY  
 COMMERCIAL OPERATION

Forecast	Achieved
_____	_____
_____	_____
_____	_____

# OPERATING DATA REPORT

DOCKET NO. 50-318  
DATE 7/15/81  
COMPLETED BY Elaine Lotito  
TELEPHONE (301) 787-5363

## OPERATING STATUS

1. Unit Name: Calvert Cliffs No. 2
2. Reporting Period: June, 1981
3. Licensed Thermal Power (MWt): 2,700
4. Nameplate Rating (Gross MWe): 911
5. Design Electrical Rating (Net MWe): 845
6. Maximum Dependable Capacity (Gross MWe): 860
7. Maximum Dependable Capacity (Net MWe): 825
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

Notes

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

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	720.0	4,343.0	37,247.0
12. Number Of Hours Reactor Was Critical	720.0	2,889.3	31,309.1
13. Reactor Reserve Shutdown Hours	0.0	153.5	595.3
14. Hours Generator On-Line	720.0	2,834.1	30,871.2
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,577,314	6,532,381	75,284,012
17. Gross Electrical Energy Generated (MWH)	599,071	2,240,484	24,969,451
18. Net Electrical Energy Generated (MWH)	572,632	2,128,638	23,799,612
19. Unit Service Factor	100.0	65.3	82.9
20. Unit Availability Factor	100.0	65.3	82.9
21. Unit Capacity Factor (Using MDC Net)	96.4	59.4	78.3
22. Unit Capacity Factor (Using DER Net)	94.1	58.0	75.6
23. Unit Forced Outage Rate	0.0	6.2	5.4
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

25. If Shut Down At End Of Report Period, Estimated Date of Startup:
26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY  
INITIAL ELECTRICITY  
COMMERCIAL OPERATION

Forecast

Achieved

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-317

UNIT Calvert Cliffs No. 1

DATE 7/15/81

COMPLETED BY Elaine Lotito

TELEPHONE (301) 787-5363

MONTH June, 1981

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>172</u>
2	<u>826</u>
3	<u>851</u>
4	<u>851</u>
5	<u>852</u>
6	<u>821</u>
7	<u>856</u>
8	<u>857</u>
9	<u>854</u>
10	<u>852</u>
11	<u>845</u>
12	<u>846</u>
13	<u>729</u>
14	<u>-</u>
15	<u>-</u>
16	<u>527</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>820</u>
18	<u>778</u>
19	<u>655</u>
20	<u>674</u>
21	<u>815</u>
22	<u>629</u>
23	<u>633</u>
24	<u>625</u>
25	<u>276</u>
26	<u>658</u>
27	<u>733</u>
28	<u>798</u>
29	<u>777</u>
30	<u>494</u>
31	<u></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. 50-318  
 UNIT Calvert Cliffs No. 2  
 DATE 7/15/81  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

MONTH June, 1981

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>843</u>
2	<u>847</u>
3	<u>850</u>
4	<u>848</u>
5	<u>847</u>
6	<u>848</u>
7	<u>848</u>
8	<u>851</u>
9	<u>847</u>
10	<u>845</u>
11	<u>838</u>
12	<u>841</u>
13	<u>751</u>
14	<u>836</u>
15	<u>840</u>
16	<u>832</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>789</u>
18	<u>802</u>
19	<u>812</u>
20	<u>703</u>
21	<u>706</u>
22	<u>771</u>
23	<u>835</u>
24	<u>730</u>
25	<u>697</u>
26	<u>656</u>
27	<u>738</u>
28	<u>797</u>
29	<u>726</u>
30	<u>686</u>
31	<u></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 AND POWER REDUCTIONS

DOCKET NO. 50-317  
 UNIT NAME Calvert Cliffs No. 1  
 DATE 7/15/81  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

REPORT MONTH June, 1981

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
81-05	810530	S	7.0	B	5		CB	PUMPXX	To repair oil leakage on No. 12B Reactor Coolant Pump Motor Oil Reservoir.
81-06	810601	F	6.5	B	5		CB	PUMPXX	Same as above.
81-07	810614	F	11.0	A	1				Reactor Coolant System Leakage
81-08	810614	F	40.6	A	9		CD	VALVEX	Reactor already shut down. No. 12 Main Steam Isolation Valve could not close within NRC time spec.
81-09	810622	F	16.5	A	4		XX	ZZZZZZ	Condenser Tube Leak
81-10	810625	F	42.3	A	4		XX	ZZZZZZ	Condenser Tube Leak
81-11	810630	F	5.4	A	3		XX	AIRDRY	Malfunction of Instrument air dryers.

<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-Load Reduction  
 5-Continuation  
 9-Other

<sup>4</sup>  
 Exhibit G - Instructions  
 for Preparation of Data  
 Entry Sheets for Licensee  
 Event Report (LER) File (NUREG-  
 0161)

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

(9/77)

# UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-318  
 UNIT NAME Calvert Cliffs No: 2  
 DATE 7/15/81  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

REPORT MONTH June, 1981

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
									No Outages or Reductions

<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-Other (Explain)

<sup>4</sup>  
 Exhibit G - Instructions  
 for Preparation of Data  
 Entry Sheets for Licensee  
 Event Report (LER) File (NUREG-  
 0161)

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

(9/77)

July 10, 1981

REFUELING INFORMATION REQUEST

1. Name of Facility: Calvert Cliffs Nuclear Power Plant, Unit No. 1
2. Scheduled date for next Refueling Shutdown: April 16, 1982
3. Scheduled date for restart following refueling: May 31, 1982
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

Resumption of operation after refueling will require changes to Technical Specifications. The changes will be such as to allow operation of the plant with a fresh reload batch and reshuffled core.

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

January 26, 1982

6. Important licensing considerations associated with the refueling.

Reload fuel will be similar to that reload fuel inserted into the previous cycle.

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

(a) 217

(b) 584

Spent Fuel Pools are common to Units 1 and 2

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.

1358 Licensed

1028 Currently Installed

472 Licensed Addition is Planned

9. The projected date of the last refueling that can be discharged to the Spent Fuel Pool assuming the present licensed capacity.

October, 1985

July 10, 1981

REFUELING INFORMATION REQUEST

1. Name of Facility: Calvert Cliffs Nuclear Power Plant, Unit No. 2.
2. Scheduled date for next refueling shutdown: October 15, 1982.
3. Scheduled date for restart following refueling: November 29, 1982
4. Will refueling or resumption of operation thereafter require a technical specification change or other licensed amendment?

Resumption of operation after refueling will require changes to Technical Specifications. The changes will be such as to allow operation of the plant with a fresh reload batch and reshuffled core.

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

August 21, 1982

6. Important licensing considerations associated with refueling.

Reload fuel will be similar to that reload fuel inserted in the previous cycle.

7. The number of fuel assemblies (a) in the core and (b) in the Spent Fuel Storage Pool.

(a) 217

(b) 584

Spent Fuel Pool is common to Units 1 & 2.

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

1358 Licensed

1028 Currently Installed

472 Licensed Addition is Planned

9. The projected date of the last refueling that can be discharged to the Spent Fuel Pool assuming the present licensed capacity.

October, 1985



SUMMARY OF UNIT 1 OPERATING EXPERIENCE - JUNE 1981

- 6/1 At the beginning of this reporting period Unit 1 was shutdown for repairs to the acoustic monitor and 12B RCP motor oil reservoir. The reactor was brought critical at 1055 and the unit paralleled at 1330. Load was increased to capacity (865 MWe) at 2359.
- 6/2 At 0800 load was reduced to 800 MWe to investigate saltwater leakage into the main condenser. Load was increased to 885 MWe at 1420 when indications of saltwater leakage disappeared.
- 6/6 At 0335 Control Element Assembly (CEA) 21 dropped into the core. Reactor power was immediately reduced to less than 70% in accordance with the Technical Specifications. CEA 21 was withdrawn back to its group at 0445. Full load operation (870 MWe) was resumed at 1000.
- 6/13 At 0250 load was decreased to 705 MWe to clean condenser water boxes. Resumed full load operation (875 MWe) at 1900. Commenced reducing load at 2200 due to excessive Reactor Coolant System (RCS) leakage. The unit was taken off the line at 0137. The reactor was shutdown at 0140.
- 6/14 At 1240 the Reactor Coolant System leakage was repaired, but No. 12 Main Steam Isolation Valve would not close within the NRC required time specification.
- 6/16 The reactor was brought critical at 0255 and the unit paralleled at 0514. Load was increased to capacity (860 MWe) at 1500.
- 6/18 At 0100 load was decreased to 690 MWe to clean condenser water boxes. Resumed full load operation (860 MWe) at 0800.
- 6/19 At 0040 load was reduced to 700 MWe to investigate saltwater leakage into the main condenser. Load was reduced to 600 MWe at 0505 due to increasing baywater temperature.
- 6/21 Load was increased to capacity (860 MWe) at 0100.

6/22 At 0500 load was reduced to 640 MWe to investigate saltwater leakage into the main condenser and for cleaning main condenser water boxes. Started increasing load and at 1900 load was limited to 670 MWe due to a plant computer failure.

6/24 The computer was returned to service at 1700, however load was still limited to 670 MWe due to a broken inlet valve for 12A waterbox and for investigating saltwater leakage into the main condenser.

6/25 Decreased load to 300 MWe at 0300 due to multiple condenser tube leaks.

6/26 After plugging 4 condenser tubes resumed full load operation (845 MWe) at 1930.

6/27 At 1000 load was decreased to 645 MWe to clean condenser water boxes. Load was increased to (850 MWe) at 2100.

6/28 At 2125 load was reduced to 710 MWe to investigate saltwater leakage into the main condenser.

6/29 Increased load to capacity (855 MWe) at 0900 after plugging 1 condenser tube.

6/30 At 0753 the reactor tripped on low Steam Generator level due to a malfunction of the instrument air dryers. The reactor was brought critical at 0953 and the unit paralleled at 1320. At 1900, load was limited to 735 MWe to investigate saltwater leakage into the main condenser. Started increasing load at 2300 when indications of saltwater leakage disappeared. At the end of this reporting period, Unit 1 was operating at 770 MWe with the reactor at 87% power, increasing to capacity.

## SUMMARY OF UNIT 2 OPERATING EXPERIENCE - JUNE 1981

- 6/1 At the beginning of this reporting period Unit 2 was operating at 880 MWe with the reactor at 100% power.
- 6/13 At 1030 load was reduced to 720 MWe to investigate saltwater leakage into the main condenser.
- 6/14 Load was increased to 885 MWe at 0500 when indications of saltwater leakage disappeared.
- 6/17 At 0205 load was decreased to 685 MWe to clean main condenser water boxes. Resumed full load operation (880 MWe) at 0800.
- 6/18 At 1930 load was reduced to 735 MWe to investigate saltwater leakage into the main condenser.
- 6/19 After plugging 1 condenser tube resumed full load operation (870 MWe) at 0530.
- 6/20 Decreased load to 720 MWe at 0700 for maintenance on the Amertap System.
- 6/21 Load was increased to capacity (880 MWe) at 2300.
- 6/22 At 0500 load was reduced to 745 MWe to investigate saltwater leakage into the main condenser. Increased load to capacity (870 MWe) at 1900 after plugging 1 condenser tube.
- 6/24 At 1000 load was reduced to 720 MWe to investigate saltwater leakage into the main condenser.
- 6/27 After plugging 3 condenser tubes resumed full load operation (865 MWe) at 1800.
- 6/28 At 0210 load was reduced to 740 MWe to investigate saltwater leakage into the main condenser. Load was increased to 860 MWe at 0900 when indications of saltwater leakage disappeared.

6/29 At 0715 load was reduced to 750 MWe to investigate saltwater leakage into the main condenser.

6/30 At the end of this reporting period, Unit 2 was operating at 695 MWe with the reactor at 88% power while investigating saltwater leakage into the main condenser.

## SAFETY-RELATED MAINTENANCE

UNIT OneGROUP Instrument MaintenanceMONTH July YEAR 81

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Reactor Protection/ Cold Leg Temperature Detector 1-TE-122 CB	0-81-911 3/5/81	Temperature detector defective	Erratic readings	Replaced temperature detector
Salt water Cooling Emergency Overboard Discharge Valve 1-CV-5149	0-80-4991 12/2/80	Loose position indica- tion actuation arm	valve not indicating full shut	Repaired actuation arm
Reactor Protection/ Channel "D" #12 Steam Generator Pressure Signal Isolator 1-PY-1023D	IC-81-29 4/6/81	Faulty Signal Isolator	Channel "D" Pressure Signal for #12 Steam Generator spiked.	Replaced 1-PY-1023D

## SAFETY-RELATED MAINTENANCE

UNIT One

GROUP Instrument Maintenance

MONTH July YEAR 81

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Reactor Protection/ Channel "C" Axial Power Drawer	0-81-1191 3/16/81	Channel "C" Ex-core Axial shape index calculator out of toler- ance.	Above normal deviation between Ex-core and In-core Axial shape index calculations.	Re-calibrated Channel "C" Index calculator
Engineered Safety Features/High Containment Pressure Bistable Channel ZG CIS	0-81-1302 3/21/81	Defective Containment Isolation Signal (CIS) Bistable Meter	Above normal voltage indication	Replaced CIS Bistable module
Engineered Safety Features/Containment Spray Actuation Channel "ZG" Bistable	0-81-1429 3/30/81	Defective Bistable Module	Above normal voltage deviation from other channels	Replaced Bistable module

## SAFETY-RELATED MAINTENANCE

UNIT 2

GROUP Instrument Maintenance

MONTH July YEAR 81

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Chemical and Volume Control System/ Isolation Control Solenoid Valve 2-SV-515	0-81-868 3-2-81	Solenoid valve plunger sticking	Pneumatic Control Valve would not open	Re-built solenoid valve with kit
Primary Containment Sump Level Switch 2-LS-5463	0-81-707 2-22-81	Dirty and sticking level switch	Highlevel alarm with sump empty	Cleaned sump & level switch
Primary Containment Cooler #21 Emergency Outlet Valve 2-CV-1582	0-81-388 1-23-81	Defective position switch	No open indication on panel in control room	Replaced position switch

## SAFETY-RELATED MAINTENANCE

UNIT 2GROUP Instrument MaintenanceMONTH July YEAR 81

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
21 B Safety Injection Tank Level Transmitter 2-LT-311	0-80-668 2/28/80	Level Transmitter Zero adjustment link disengaged	Level oscillates continuously	Removed transmitter mechanically and electrically cali- brated and re-installed.
Engineered Safety Features Actuation System/Letdown Line Rupture Sensor Pressure Transmitter 2-PT-5316B	IC-81-2015 1/29/81	Pressure transmitter out of tolerance	Pressure indication high	Re-calibrated pressure trans- mitter.
Engineered Safety Fea- tures Actuation System/ Containment Pressure Transmitter 2-PT-5313B	0-81-197 1/14/81	Pressure Transmitter out of tolerance	Pressure indication high	Re-calibrated pressure trans- mitter.
Steam Generator Surface Blowdown Control Valve 2-CV-4010	0-81-721 2/25/81	Broken open limit switch	No "Open" indication at control panel	Replaced open limit switch



## SAFETY-RELATED MAINTENANCE

UNIT 2

GROUP Electrical Maintenance

MONTH July YEAR 81

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Vital Instrumentation AC Electrical Power/ #21 Inverter	E-81-37 2-1-81	Overheated, cracked resistor	None - Found during Preventive Maintenance	Replaced Broken Logic Resistor
Primary Containment Sump Drain Valve 2-MOV-5462	0-81-394 1-23-81	Overheated motor windings due to close limit switch out of adjustment.	Breaker for MOV trips on overcurrent	Replaced motor Reset limit switch
125 Volt DC Electrical Power #21 DC Bus	0-81-265 1-17-81	Light Socket on #12 Battery Charger breaker shorted	Negative Ground on #21 DC Bus	Repaired short on Light Socket.