

# OPERATING DATA REPORT

DOCKET NO. 50-317  
 DATE 10-14-81  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

## OPERATING STATUS

1. Unit Name: CALVERT CLIFFS NO. 1
2. Reporting Period: September, 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	6,551	56,100
12. Number Of Hours Reactor Was Critical	716.5	5,693.7	44,630.4
13. Reactor Reserve Shutdown Hours	2.3	402.9	1,667.0
14. Hours Generator On-Line	713.3	5,593.0	43,645.7
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,834,637	14,412,589	104,979,381
17. Gross Electrical Energy Generated (MWH)	592,117	4,669,938	34,264,171
18. Net Electrical Energy Generated (MWH)	565,932	4,454,361	32,646,609
19. Unit Service Factor	99.1	85.4	77.8
20. Unit Availability Factor	99.1	85.4	77.8
21. Unit Capacity Factor (Using MDC Net)	95.3	82.9	72.0
22. Unit Capacity Factor (Using DER Net)	93.0	80.5	68.9
23. Unit Forced Outage Rate	0.9	11.7	8.9
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 10-14-81  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

## OPERATING STATUS

1. Unit Name: CALVERT CLIFFS NO. 2
2. Reporting Period: September, 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	6,551	39,455
12. Number Of Hours Reactor Was Critical	595.9	4,954.6	33,374.4
13. Reactor Reserve Shutdown Hours	100.6	272.7	714.5
14. Hours Generator On-Line	520.3	4,817.2	32,854.3
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,337,688	11,357,461	80,109,092
17. Gross Electrical Energy Generated (MWH)	432,896	3,777,497	26,506,464
18. Net Electrical Energy Generated (MWH)	408,650	3,587,507	25,257,481
19. Unit Service Factor	72.3	73.5	83.3
20. Unit Availability Factor	72.3	73.5	83.3
21. Unit Capacity Factor (Using MDC Net)	68.8	66.4	78.4
22. Unit Capacity Factor (Using DER Net)	67.2	64.8	75.8
23. Unit Forced Outage Rate	27.7	7.9	5.6

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 #1  
DATE 10-14-81  
COMPLETED BY Elaine Lotito  
TELEPHONE (301) 787-5363

MGNTH September, 1981

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>765</u>
2	<u>794</u>
3	<u>798</u>
4	<u>820</u>
5	<u>823</u>
6	<u>809</u>
7	<u>825</u>
8	<u>839</u>
9	<u>817</u>
10	<u>841</u>
11	<u>795</u>
12	<u>775</u>
13	<u>785</u>
14	<u>835</u>
15	<u>599</u>
16	<u>650</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>745</u>
18	<u>737</u>
19	<u>745</u>
20	<u>717</u>
21	<u>791</u>
22	<u>847</u>
23	<u>848</u>
24	<u>791</u>
25	<u>798</u>
26	<u>846</u>
27	<u>767</u>
28	<u>771</u>
29	<u>772</u>
30	<u>836</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 #2  
 DATE 10-14-81  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

MONTH September, 1981

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>794</u>
2	<u>742</u>
3	<u>815</u>
4	<u>758</u>
5	<u>790</u>
6	<u>830</u>
7	<u>811</u>
8	<u>828</u>
9	<u>778</u>
10	<u>840</u>
11	<u>777</u>
12	<u>805</u>
13	<u>797</u>
14	<u>776</u>
15	<u>839</u>
16	<u>839</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>841</u>
18	<u>782</u>
19	<u>782</u>
20	<u>845</u>
21	<u>447</u>
22	<u>--</u>
23	<u>--</u>
24	<u>--</u>
25	<u>--</u>
26	<u>--</u>
27	<u>--</u>
28	<u>--</u>
29	<u>--</u>
30	<u>662</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

REPORT MONTH SEPTEMBER, 1981

DOCKET NO. 50-317  
 UNIT NAME Calvert Cliffs #1  
 DATE October 15, 1981  
 COMPLETED BY Elaine Lo-Itto  
 TELEPHONE (301) 787-5363

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
81-15	810915	F	3.6	A	3		XX	ZZZZZZ	Loss of condenser vacuum.
81-16	810915	F	3.1	A	4		XX	ZZZZZZ	Tripped on low steam generator level.

<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  
 5-Load reduction  
 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

# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH SEPTEMBER, 1981

DOCKET NO. 50-318  
 UNIT NAME Calvert Cliffs #2  
 DATE October 15, 1981  
 COMPLETED BY Elaine Lotito  
 TELEPHONE (301) 787-5363

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
81-11	810921	F	36.0	A	2		XX	ZZZZZZ	Trip due to a break in 26 A feedwater line.
81-12	810923	F	38.8	A	4		CD	Valvex	21 Main Steam isolation valve failed to open.
81-13	810924	F	124.9	A	4		XX	ZZZZZZ	Leaking generator hydrogen cooler.

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

<sup>2</sup>  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance of 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

October 14, 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: January 5, 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.

October 5, 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 and 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

\*Information changed from last month

October 14, 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: June 30, 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.

March 29, 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

\*Information changed from last month



## SUMMARY OF UNIT 1 OPERATING EXPERIENCE - SEPTEMBER 1981

- 9/1 At the beginning of this reporting period Unit 1 was operating at 795 MWe with the reactor at 92% power, while investigating saltwater leakage into the Main Condenser.
- 9/2 After plugging 2 condenser tubes resumed full load operation (870 MWe) at 1930.
- 9/3 At 0840 load was reduced to 800 MWe to investigate saltwater leakage into the main condenser. After plugging 2 condenser tubes load was increased to 855 MWe at 1910. At 2100 load was reduced to 810 MWe to investigate saltwater leakage into the main condenser.
- 9/4 Located and plugged 1 leaking condenser tube. Load was increased to capacity (865 MWe) at 0700.
- 9/5 At 1855 load was reduced to 800 MWe to investigate saltwater leakage into the main condenser.
- 9/6 Increased load to capacity (880 MWe) at 0135 after plugging 2 condenser tubes. At 1135 load was reduced to 790 MWe to investigate saltwater leakage into the main condenser. After plugging 1 condenser tube resumed full load operation (865 MWe) at 2210.
- 9/7 At 1630 load was reduced to 800 MWe to investigate saltwater leakage into the main condenser. Located and plugged 2 leaking condenser tubes. Resumed full load operation (865 MWe) at 2210.
- 9/9 At 0130 load was reduced to 780 MWe to investigate saltwater leakage into the main condenser. Load was increased to 875 MWe at 0800 when indications of saltwater leakage disappeared.
- 9/11 At 1150 load was reduced to 800 MWe to investigate saltwater leakage into the main condenser.
- 9/12 Increased load to capacity (880 MWe) at 1900 after plugging 1 condenser tube.
- 9/13 At 0140 load was reduced to 800 MWe to investigate saltwater leakage into the main condenser. Load was increased to 880 MWe at 1100 when indications of saltwater leakage disappeared. At 1559 load was reduced to 785 MWe to investigate saltwater leakage into the main condenser. Increased load to capacity

(875 MWe) at 2245 after plugging 1 condenser tube.

- 9/15 At 0100 load was reduced to 785 MWe to investigate saltwater leakage into the main condenser. At 1925 the reactor tripped due to loss of condenser vacuum when #15 Circulating Water pump tripped. The reactor was brought critical at 2141. At 2305 the reactor tripped on low steam generator level while attempting to parallel the main turbine. Located and plugged 4 leaking condenser tubes.
- 9/16 The reactor was brought critical at 0016 and the unit paralleled at 0209. Load was limited to 765 MWe at 0630 to investigate Saltwater leakage into the main condenser. Load was increased to 875 MWe at 1600 when indications of saltwater leakage disappeared. At 2210 load was reduced to 775 MWe to investigate saltwater leakage into the main condenser.
- 9/20 At 0700, load was reduced to 635 MWe to repair a leaking gasket on 12 Heater Drain Tank level control valve. After plugging 5 condenser tubes resumed full load operation (875MWe) at 1715. At 2000 load was reduced to 790 MWe to investigate saltwater leakage into the main condenser.
- 9/21 Increased load to capacity (880 MWe) at 1800 after plugging 1 condenser tube.
- 9/24 At 0200 load was reduced to 785 MWe to investigate saltwater leakage into the main condenser. After plugging 2 condenser tubes resumed full load operation (880 MWe) at 1400. At 2245 load was reduced to 800 MWe to investigate saltwater leakage into the main condenser.
- 9/25 Located and plugged 1 leaking condenser tube. Resumed full load operation (880 MWe) at 1630.
- 9/27 At 0400 load was reduced to 780 MWe to investigate saltwater leakage into the main condenser.
- 9/28 Increased load to capacity (875 MWe) at 1050 after plugging 2 condenser tubes. At 1225 load was reduced to 795 MWe to investigate saltwater leakage into the main condenser.
- 9/30 Load was increased to 880MWe at 0600 when indications of saltwater leakage disappeared. At the end of this reporting period Unit 1 was operating at 880 MWe with the reactor at 100% power.

SUMMARY OF UNIT 2 OPERATING EXPERIENCE - September 1981

- 9/1 At the beginning of this reporting period Unit 2 was operating at 775 MWe with the reactor at 89% power, while investigating Saltwater leakage into the main condenser. After plugging 1 condenser tube resumed full load operation (875MWe) at 0500.
- 9/2 At 0430 load was reduced to 790 MWe to investigate saltwater leakage into the main condenser.
- 9/3 Increased load to capacity (860 MWe) at 0001 after plugging 2 condenser tubes. At 0815 load was reduced to 770 MWe to investigate saltwater leakage into the main condenser. Load was increased to 865 MWe at 1330 when indications of saltwater leakage disappeared.
- 9/4 At 0236 load was reduced to 770 MWe to investigate saltwater leakage into the main condenser. Load was increased to 865 MWe at 0700 when indications of saltwater leakage disappeared. At 1110 load was reduced to 790 MWe to investigate saltwater leakage into the main condenser.
- 9/5 After plugging 1 condenser tube resumed full load operation (860 MWe) at 1240.
- 9/6 At 2100 load was reduced to 795 MWe to investigate saltwater leakage into the main condenser.
- 9/7 Increased load to capacity (865 MWe) at 0200 after plugging 2 condenser tubes. At 1830 load was reduced to 795 MWe to investigate saltwater leakage into the main condenser.
- 9/8 After plugging 3 condenser tubes resumed full load operation (885 MWe) at 0430.
- 9/9 At 1130 load was reduced to 755 MWe to investigate saltwater leakage into the main condenser.
- 9/10 Located and plugged 1 leaking condenser tube. Resumed full load operation (875 MWe) at 0200.
- 9/11 At 0200 load was reduced to 785 MWe to investigate saltwater leakage into the main condenser. Load was increased to 875 MWe at 0645 when indications of saltwater leakage disappeared. At 1720 load was reduced to 765 MWe to

investigate saltwater leakage into the main condenser.

- 9/12 After plugging 2 condenser tubes resumed full load operation (870 MWe) at 0800.
- 9/13 At 1510 load was reduced to 760 MWe to investigate saltwater leakage into the main condenser. Increased load to capacity (875 MWe) at 2340 after plugging 2 condenser tubes.
- 9/18 At 0400 load was reduced to 780 MWe to investigate saltwater leakage into the main condenser. After plugging 1 condenser tube resumed full load operation (875 MWe) at 1900.
- 9/19 At 1000 load was reduced to 770 MWe to investigate saltwater leakage into the main condenser. Located and plugged 2 leaking condenser tubes. Load was increased to capacity (880 MWe) at 2130.
- 9/21 At 1300 the reactor was manually tripped due to a break in 26A Feedwater Heater drain line. Problems with other feedwater heater drain lines and failure of 21 Main Steam Isolation Valve to open delayed startup.
- 9/24 The reactor was brought critical at 1300. The main turbine was tripped at 1550 due to an accumulation of water in the main generator. The reactor was shutdown at 2210.
- 9/28 The unit was paralleled at 2045.
- 9/29 Load was increased to capacity (860 MWe) at 2200.
- 9/30 At the end of this reporting period Unit 2 was operating at 860 MWe with the reactor at 100% power.

## SAFETY-RELATED MAINTENANCE

UNIT TwoCLASS UP Mechanical MaintenanceMONTH July YEAR 1981

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
#21 ECCS Room Air Damper	O-81-2994 7/17/81	Damper linkage Pin had worked loose.	Failed to operate	Replaced pin

## SAFETY-RELATED MAINTENANCE

UNIT TwoGROUP Mechanical MaintenanceMONTH June YEAR 1981

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
#22 EECS Pump room exhaust fan damper	O-81-2491 6/5/81	Damper linkage Pin missing	Failed to operate	Replaced with new pin

## SAFETY-RELATED MAINTENANCE

SHEET TwoGROUP Mechanical MaintenanceMONTH February YEAR 1981

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
#21A Reactor Coolant pump	M-81-2087 2/17/81	Oil spill in pump cavity	Damage to seal cartridge	Replaced complete seal cartridge

## SAFETY-RELATED MAINTENANCE

UNIT OneGROUP Mechanical MaintenanceMONTH February YEAR 1981

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
#11 Charging Pump	O-81-503 2/2/81	Cyclic fatigue	Excessive packing leakage	Replaced packing