

OPERATING DATA REPORT

DOCKET NO. 50-312
 DATE 8/15/79
 COMPLETED BY S. D. Merson
 TELEPHONE 301-234-5240

OPERATING STATUS

1. Unit Name: Calvert Cliffs No. 1
2. Reporting Period: July, 1979
3. Licensed Thermal Power (MWt): 2700
4. Nameplate Rating (Gross MWe): 918
5. Design Electrical Rating (Net MWe): 845
6. Maximum Dependable Capacity (Gross MWe): 845
7. Maximum Dependable Capacity (Net MWe): 810
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): 790 MWe
10. Reasons For Restrictions, If Any: Blade problems in the high-pressure turbine.

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744</u>	<u>5,087</u>	<u>37,092</u>
12. Number Of Hours Reactor Was Critical	<u>500.1</u>	<u>2,725.1</u>	<u>28,813.7</u>
13. Reactor Reserve Shutdown Hours	<u>10.6</u>	<u>133.3</u>	<u>1,026.9</u>
14. Hours Generator On-Line	<u>361.4</u>	<u>2,558.2</u>	<u>28,103.2</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>750,249.6</u>	<u>6,312,686.8</u>	<u>67,582,891.2</u>
17. Gross Electrical Energy Generated (MWH)	<u>220,637</u>	<u>2,039,053</u>	<u>22,425,388</u>
18. Net Electrical Energy Generated (MWH)	<u>200,561</u>	<u>1,936,086</u>	<u>21,391,074</u>
19. Unit Service Factor	<u>48.6</u>	<u>50.3</u>	<u>75.8</u>
20. Unit Availability Factor	<u>48.6</u>	<u>50.3</u>	<u>75.8</u>
21. Unit Capacity Factor (Using MDC Net)	<u>33.3</u>	<u>47.0</u>	<u>71.2</u>
22. Unit Capacity Factor (Using DER Net)	<u>31.9</u>	<u>45.0</u>	<u>68.2</u>
23. Unit Forced Outage Rate	<u>49.8</u>	<u>26.8</u>	<u>9.9</u>

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: _____

	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

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OPERATING DATA REPORT

DOCKET NO. 50-318
 DATE 8/15/79
 COMPLETED BY S. D. Merson
 TELEPHONE 301-234-5240

OPERATING STATUS

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Unit Name: <u>Calvert Cliffs No. 2</u> 2. Reporting Period: <u>July, 1979</u> 3. Licensed Thermal Power (MWt): <u>2700</u> 4. Nameplate Rating (Gross MWe): <u>911</u> 5. Design Electrical Rating (Net MWe): <u>845</u> 6. Maximum Dependable Capacity (Gross MWe): <u>845</u> 7. Maximum Dependable Capacity (Net MWe): <u>810</u> 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: | <p style="text-align: center;">Notes</p> |
|--|--|

9. Power Level To Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744	5,087	20,447
12. Number Of Hours Reactor Was Critical	670.1	4,763.9	17,756.4
13. Reactor Reserve Shutdown Hours	73.9	121.2	340.6
14. Hours Generator On-Line	652.2	4,670.0	17,481.8
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,713,842.4	12,120,564.0	43,004,580.6
17. Gross Electrical Energy Generated (MWH)	559,959	4,037,009	14,291,081
18. Net Electrical Energy Generated (MWH)	535,152	3,862,106	13,630,135
19. Unit Service Factor	87.7	91.8	85.5
20. Unit Availability Factor	87.7	91.8	85.5
21. Unit Capacity Factor (Using MDC Net)	88.8	93.7	82.3
22. Unit Capacity Factor (Using DER Net)	85.1	89.8	78.9
23. Unit Forced Outage	10.6	3.7	5.3

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Calvert Cliffs No. 2 is scheduled for a planned outage starting October 14, 1979, and will be six weeks in duration for general inspection and refueling.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: August 3, 1979

26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-317
 UNIT Calvert Cliffs #1
 DATE 8/15/79
 COMPLETED BY S. D. Merson
 TELEPHONE 301-234-5240

MONTH - July, 1979

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-	17	471
2	-	18	607
3	-	19	727
4	-	20	765
5	-	21	73
6	-	22	-
7	-	23	476
8	-	24	498
9	-	25	606
10	-	26	274
11	-	27	448
12	-	28	709
13	-	29	674
14	71	30	786
15	315	31	772
16	326		

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.

783 279

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-318
 UNIT Calvert Cliffs #2
 DATE 8/15/79
 COMPLETED BY S. D. Merson
 TELEPHONE 301-234-5240

MONTH July, 1979

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	839
2	837
3	837
4	736
5	833
6	837
7	838
8	837
9	837
10	838
11	836
12	834
13	824
14	812
15	830
16	827

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	827
18	828
19	824
20	791
21	830
22	830
23	830
24	831
25	830
26	826
27	815
28	31
29	-
30	-
31	-

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.

783 280

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-317
UNIT NAME Calvert Cliffs #1
DATE 8/15/79
COMPLETED BY S. D. Merson
TELEPHONE 301-234-5240

REPORT MONTH July, 1979

200
783

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
79-4	790625	F	326.9	C	4	N/A	RC	FUELXX	Forced outage due to late return from previous scheduled outage.
79-5	790721	S	24.1	B	1	N/A	ZZ	ZZZZZZ	Conducted turbine overspeed test.
79-6	790722	F	14.9	A	3	N/A	HA	ZZZZZZ	Forced outage due to loss of field to the exciter which initiated a unit trip.
79-7	790726	F	16.7	A	3	N/A	CH	ZZZZZZ	Forced outage due to high level in No. 11 B feed water heater which initiated a reactor trip.

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-Other (Explain)

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

⁵
Exhibit I - Same Source

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-318
UNIT NAME Calvert Cliffs #2
DATE 8/15/79
COMPLETED BY S. D. Merson
TELEPHONE 301-234-5240

REPORT MONTH July, 1979

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
79-11	790728	S	14.8	B	4	N/A	CH	VALVE ⁵	Scheduled outage to furmanite feed water check valve. Reactor remained critical during this outage. Shutdown at 21:20 on 790728.
79-12	790728	F	77.0	A	1	N/A	ZZ	ZZZZZZ	Forced outage due to condenser tube failures.

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-Other (Explain)

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

⁵
 Exhibit I - Same Source

(9/77)

703 202

8/3/79

REFUELING INFORMATION REQUEST

1. Name of Facility: Calvert Cliffs Nuclear Power Plant, Unit No. 1
2. Scheduled date for next Refueling Shutdown: April 19, 1980
3. Scheduled date for restart following refueling: May 29, 1980
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.

February 22, 1980

6. Important licensing considerations associated with refueling.

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

Selected fuel assemblies will be modified by installation of sleeves in the guide tubes.

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

(a) 217 (b) 300

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.

1056 Licensed
728 Currently Installed
650 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, 1983

783 293

8/3/79

REFUELING INFORMATION REQUEST

1. Name of Facility: Calvert Cliffs Nuclear Power Plant, Unit 2
2. Scheduled date for next Refueling Shutdown: October 14, 1979
3. Scheduled date for restart following refueling: November 21, 1979
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

A preliminary review of the design and safety analysis indicate that no changes to the Technical Specification or other amendments are required and that there will be no unreviewed safety questions as defined by 10 CFR 50.59 involved with this reload core design.**

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

August 22, 1979 (if required) **

6. Important licensing considerations associated with refueling.

None, reload fuel will be identical 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) 300

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 required or is planned, in number of fuel assemblies.

1056 Licensed
728 Currently Installed
650 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, 1983

** Information has changed since last monthly report.

793 204

SUMMARY OF UNIT 1 OPERATING EXPERIENCE

July 1979

- 7/1 At the beginning of this reporting period, Unit 1 was shutdown for its scheduled third refueling outage.
- 7/8 Commenced reactor coolant system heatup at 0650.
- 7/10 The reactor was brought critical at 1717 and commenced low power physics testing.
- 7/14 The Unit was paralleled at 1455 and began increasing load to 50% power physics test plateau.
- 7/16 At 2230 began increasing load to capacity.
- 7/19 Escalated power to 96% whereupon received numerous in-core detector alarms. Power was reduced to 94% to clear the alarms.
- 7/20 Began reducing load at 2300 to work on 11 feedwater regulating valve and conduct turbine overspeed test.
- 7/21 The Unit was taken off the line at 0825.
- 7/22 At 0857 the Unit was paralleled. The turbine tripped due to loss of field to the exciter at 0930. The Unit was again paralleled at 2332.
- 7/23 Increased load to 705 MWe whereupon began decreasing load to 550 MWe due to condenser ΔT and repair of 12 heater drain tank level control valve.
- 7/26 Began increasing power to full load operation and at 0938 the reactor tripped on high level in 11B feedwater heater. The reactor was brought critical at 1725 and the Unit paralleled at 2020. At 2251 the reactor tripped on high level in 12 moisture separator reheater drain tank.
- 7/27 The reactor was brought critical at 0139 and the Unit paralleled at 0255. Began increasing load and at 1425 started decreasing power due to 12 feedwater pump vibration problems. At 2210 began increasing load.
- 7/28 Reduced load to 750 MWe to investigate saltwater leakage into the main condenser.
- 7/29 Reduced load at 0520 to 500 MWe to clean condenser water boxes. Resumed full load operation (825 MWe) at 2000.
- 7/31 At the end of the reporting period load was being reduced to 700 MWe to clean condenser water boxes.

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SUMMARY OF UNIT 2 OPERATING EXPERIENCE

July 1979

- 7/1 At the beginning of this reporting period, Unit 2 was operating at 880 MWe with the reactor at 100% power.
- 7/4 At 0145 Control Element Assembly (CEA) 2 dropped into the core. Reactor power was immediately reduced to less than 70% in accordance with the Technical Specifications. CEA 2 was withdrawn back to its group at 0307. Full load operation (880 MWe) resumed at 1115.
- 7/13 Reduced load at 2300 to 800 MWe to work on the Amertap System. Resumed full load operation (880 MWe) at 0700.
- 7/20 Load was decreased to 720 MWe to clean condenser water boxes. Full load operation (820 MWe) was resumed at 0900.
- 7/27 At 2210, started decreasing load to furmanite feedwater check valve.
- 7/28 The Unit was taken off the line at 0410. The reactor was shutdown at 2120 due to a major condenser tube rupture.
- 7/29 At 1450 the reactor was in cold shutdown.
- 7/31 At the end of this reporting period, Unit 2 was shutdown to clean up secondary chemistry.

783 206

SAFETY-RELATED MAINTENANCE

UNIT I
 GROUP MACHINE SHOP
 MONTH JULY YEAR 1979

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
#12 Salt Water Pump	M-78-407 9/28/78	Excessive shaft sleeve wear	Excessive Packing gland leakage	Installed new stainless steel shaft sleeve
1-AFW-3988 Auxiliary Feed Water Trip Valve	0-78-4008 5/11/79	Valve was held open by strainer.	Valve would not close completely	Reshaped strainer and reinstalled
1-RV-325 #12 Charging Pump Discharge Relief Valve	M-79-156 2/9/79	Pitted valve disc	Valve leaking past seat	Replaced valve disc
#11 Steam Generator	M-79-260 5/3/79	Initial clamp installation was imprpr	Steam seperator was loose on its mounting	Replaced clamp on seperator

783 207

SAFETY-RELATED MAINTENANCE

UNIT IGROUP MACHINE SHOPMONTH JULYYEAR 1979

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
1-CV-5156 #12 Service Water Heat Exchanger Emergency Salt Water Discharge Valve	0-79-883 6/7/79	Solenoid sticking and mechanical binding	Valve did not close completely	Replaced solenoid and reshimed actua- tor mounting plate
#11 Main Steam Isolation Valve #2 High Pressure Pump Surge Spressor	0-79-1505 5/17/79	Cyclic fatigue	Hole in bladder	Replaced bladder

783 208

SAFETY-RELATED MAINTENANCE

UNIT IGROUP I&CMONTH JULY YEAR 1979

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Reactor Protection System/Channel "C" Δ T Power Potentiometer	0-79-372 2/16/79	Defective temperature detectors	Δ T Power potentiometer setting out of specified range.	Replaced temperature detectors
Engineered Safety Features Actuation/ Containment Radiation Signal	0-79-1049 4/2/79	Defective signal isolator	CRS module would not trip when given an alarm condition	Replaces signal isolator

783 209

SAFETY-RELATED MAINTENANCE

UNIT IGROUP "E" SHOPMONTH JULY YEAR 1979

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Breaker 52-1121/#13 Containment Filter	E-79-62 4/27/79	Defective amptector	Erratic trips of breaker	Replaced defective amptector
#13 Inverter	0-79-1330 4/30/79	Defective silicon controlled rectifier	Inverter would not start	Replaced silicon controlled rectifier
Reactor Trip Switchgear/TCB-8	E-79-74 5/22/79	Defective under voltage relay	Would not trip TCB-8 on undervoltage	Replaced under voltage relay

703 290

SAFETY-RELATED MAINTENANCE

UNIT IIGROUP MACHINE SHOPMONTH JULYYEAR 1979

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
#23 Salt Water Pump	0-78-1391 4/10/79	Water in guide bearing	High guide bearing temperature	Remove pump and replaced bearing
#21 Salt Water Pump Discharge Check Valve	0-78-3246 12/29/78	Corrosion	Valve leaking past seat	Removed check valve and rebuilt corroded area using belzona

783 250

SAFETY-RELATED MAINTENANCE

UNIT II

GROUP I&C

MONTH JULY YEAR 1979

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Engineered Safety Features Actuation System/Turbine Trip Actuation Relay	0-79-1507 5/16/79	Isolation module was defective	Reactor bus under-voltage trip from channel ZG	Installed new isolation module
Reactor Protective System/Channel "C" Containment Pressure Trip Unit #TU-9	0-79-1215 4/16/79	Broken plastic plug	Could not plug in test cable	Installed new trip unit
Reactor Protective System/Channel "D" RPS Flow	IC-79-2014 2/22/79	Defective flow transmitter	Flow signal oscillations	Replaced flow transmitter
Reactor Protective System/Channel "B" RPS Total Flow	IC-79-2012 2/22/79	Defective flow transmitter	Flow signal oscillations	Replaced flow transmitter

707 209

SAFETY-RELATED MAINTENANCE

UNIT II

GROUP "E" SHOP

MONTH JULY YEAR 1979

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
21 Emergency Diesel Generator	0-79-1014 3/27/79	Damaged wiring harness and motor operated potentiometer	Could not load generator while regulator was in auto	Replaced potentiometer and wiring harness.
797 298				