

OPERATING DATA REPORT

DOCKET NO. 50-317
 DATE 4/14/80
 COMPLETED BY S.D. Vernon
 TELEPHONE 301-234-5240

OPERATING STATUS

1. Unit Name: Calvert Cliffs No. 1
2. Reporting Period: March, 1980
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): 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 MW
10. Reasons For Restrictions, If Any: No. 1 Plant was operating with a 790 MW limitation due to the turbine blade problems until 12:01 AM 4/1/80. Although the turbine blade problem has not been corrected, heater repairs and improved condenser conditions have allowed a return to capacity (820).

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.0</u>	<u>2,184.0</u>	<u>42,949.0</u>
12. Number Of Hours Reactor Was Critical	<u>722.3</u>	<u>1,774.5</u>	<u>34,214.1</u>
13. Reactor Reserve Shutdown Hours	<u>7.6</u>	<u>7.6</u>	<u>1,068.1</u>
14. Hours Generator On-Line	<u>710.2</u>	<u>1,738.2</u>	<u>33,440.2</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>1,740,808</u>	<u>3,502,495.2</u>	<u>78,839,484.0</u>
17. Gross Electrical Energy Generated (MWH)	<u>575,112</u>	<u>1,091,782</u>	<u>25,904,312</u>
18. Net Electrical Energy Generated (MWH)	<u>549,264</u>	<u>1,027,267</u>	<u>24,676,473</u>
19. Unit Service Factor	<u>95.5</u>	<u>79.6</u>	<u>77.9</u>
20. Unit Availability Factor	<u>95.5</u>	<u>79.6</u>	<u>77.9</u>
21. Unit Capacity Factor (Using MDC Net)	<u>91.1</u>	<u>58.1</u>	<u>70.9</u>
22. Unit Capacity Factor (Using DER Net)	<u>87.4</u>	<u>55.7</u>	<u>68.0</u>
23. Unit Forced Outage Rate	<u>4.5</u>	<u>1.9</u>	<u>8.7</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: _____

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

Forecast

Achieved

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

POOR ORIGINAL

8004250407

(9/77)

OPERATING DATA REPORT

DOCKET NO. 50-318
 DATE 4/14/80
 COMPLETED BY S.D. Merson
 TELEPHONE 301-234-5240

OPERATING STATUS

1. Unit Name: Calvert Cliffs No. 2
2. Reporting Period: March, 1980
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	<u>744</u>	<u>2,184</u>	<u>26,304</u>
12. Number Of Hours Reactor Was Critical	<u>744.0</u>	<u>1,964.9</u>	<u>21,909.8</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>413.1</u>
14. Hours Generator On-Line	<u>744.0</u>	<u>1,956.7</u>	<u>21,565.2</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>1,906,192.8</u>	<u>5,035,836.0</u>	<u>53,280,067.8</u>
17. Gross Electrical Energy Generated (MWH)	<u>643,786</u>	<u>1,691,733</u>	<u>17,696,956</u>
18. Net Electrical Energy Generated (MWH)	<u>616,390</u>	<u>1,617,927</u>	<u>16,874,947</u>
19. Unit Service Factor	<u>100.0</u>	<u>89.6</u>	<u>82.0</u>
20. Unit Availability Factor	<u>100.0</u>	<u>89.6</u>	<u>82.0</u>
21. Unit Capacity Factor (Using MDC Net)	<u>100.4</u>	<u>89.8</u>	<u>78.7</u>
22. Unit Capacity Factor (Using DER Net)	<u>98.0</u>	<u>87.7</u>	<u>75.9</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.00</u>	<u>5.3</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: _____
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 4/14/80
COMPLETED BY S.D. Merson
TELEPHONE 301-234-5240

MONTH March, 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>600</u>
2	<u>326</u>
3	<u>683</u>
4	<u>736</u>
5	<u>697</u>
6	<u>718</u>
7	<u>823</u>
8	<u>827</u>
9	<u>828</u>
10	<u>815</u>
11	<u>807</u>
12	<u>824</u>
13	<u>828</u>
14	<u>824</u>
15	<u>823</u>
16	<u>823</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>819</u>
18	<u>822</u>
19	<u>826</u>
20	<u>795</u>
21	<u>790</u>
22	<u>770</u>
23	<u>768</u>
24	<u>813</u>
25	<u>285</u>
26	<u>295</u>
27	<u>810</u>
28	<u>752</u>
29	<u>757</u>
30	<u>824</u>
31	<u>822</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 4/14/80
 COMPLETED BY S.D.Merson
 TELEPHONE 301-234-5240

MONTH March, 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>859</u>
2	<u>819</u>
3	<u>860</u>
4	<u>860</u>
5	<u>861</u>
6	<u>859</u>
7	<u>860</u>
8	<u>860</u>
9	<u>859</u>
10	<u>857</u>
11	<u>838</u>
12	<u>821</u>
13	<u>826</u>
14	<u>737</u>
15	<u>610</u>
16	<u>602</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>799</u>
18	<u>862</u>
19	<u>862</u>
20	<u>861</u>
21	<u>862</u>
22	<u>696</u>
23	<u>856</u>
24	<u>862</u>
25	<u>862</u>
26	<u>861</u>
27	<u>862</u>
28	<u>860</u>
29	<u>863</u>
30	<u>863</u>
31	<u>862</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 #1
 DATE 4/14/80
 COMPLETED BY S. D. Jerson
 TELEPHONE 301-234-5240

REPORT MONTH March, 1980

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
80-02	800301	F	9.7	a	3		HF	PUMPXX	Leak on #14 circulating water pump cooler impinging on the intake structure high-water level trip circuitry caused loss of all circulating water pumps.
80-03	800325	F	24.1	a	3		RC	CONROD	Loss of voltage supply to the control rods and drives.

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 Cliff #2
DATE 4/14/80
COMPLETED BY S. D. Merson
TELEPHONE 301-234-5240

REPORT MONTH March, 1980

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
									No outages or reductions.

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

4/10/80

REFUELING INFORMATION REQUEST

1. Name of Facility: Calvert Cliffs Nuclear Power Plant, Unit No. 1
2. Scheduled date for next Refueling Shutdown: October 17, 1980
3. Scheduled date for restart following refueling: December 10, 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.

September 11, 1980

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) 364

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

704 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, 1983

4/10/80

REFUELING INFORMATION REQUEST

1. Name of Facility: Calvert Cliffs Nuclear Power Plant, Unit No. 2
2. Scheduled date for next refueling shutdown: January 1, 1980
3. Scheduled date for restart following refueling: February 18, 1981
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.

November 20, 1980

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) 364

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

704 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, 1983

SUMMARY OF UNIT I OPERATING EXPERIENCE-MARCH 1980

- 3/1 At the beginning of this reporting period Unit I was operating at 730 MWe with the reactor at 85% power, while conducting core physics measurements to verify that the power distribution anomaly had been rectified. At 1125 reduced load to 600 MWe due to loss of #11 steam generator feed pump from erroneous actuation of fire system deluge. At 2132 the reactor tripped due to loss of condenser vacuum when all six circulating water pumps tripped due to a salt water leak spraying on the circulating water room high water level protective circuitry.
- 3/2 The reactor was brought critical at 0510 and the unit paralleled at 0715. Load was increased to 730 MWe at 2030.
- 3/6 Increased load to capacity (850 MWe) at 2300.
- 3/10 Decreased load to 835 MWe to repair a steam leak on 15B feed water heater.
- 3/11 Resumed full load operation (860 MWe) at 2200.
- 3/20 At 2130 load was reduced to 700 MWe to investigate salt water leakage into the main condenser.
- 3/21 After plugging one condenser tube resumed full load operation (855 MWe) at 1200.
- 3/22 Decreased load to 710 MWe to clean condenser water boxes at 1830.
- 3/23 Increased load to capacity (855 MWe) at 1430.
- 3/25 At 0850 the reactor tripped due to voltage instability on the reactor trip bus caused by #12 motor generator set. At 2030 the reactor was brought critical and the unit paralleled at 2316.

SUMMARY OF UNIT I OPERATING EXPERIENCE-MARCH 1980

- 3/26 At 0127 during startup the reactor tripped at 15% power on high axial flux offset due to control rods being inserted for previous power swings. The reactor was brought critical at 0350 and the unit paralleled at 1104.
- 3/27 Resumed full load operation (850 MWe) at 1600. At 2319 load was decreased to 755 MWe to investigate salt water leakage into the main condenser.
- 3/28 Increased load to capacity (850 MWe) at 1655 after plugging one condenser tube. At 2110 decreased load to 765 MWe to investigate salt water leakage into the main condenser.
- 3/29 Resumed full load operation (850 MWe) at 2130 after plugging one condenser tube.
- 3/30 Load was decreased to 840 MWe at 2100 for variable Tave testing.
- 3/31 Increased load to capacity (865 MWe) at 2300. At the end of this reporting period Unit I was operating at 865 MWe with the reactor at 100% power.

SUMMARY OF UNIT II OPERATING EXPERIENCE-MARCH 1980

- 3/1 At the beginning of this reporting period Unit II was operating at 900 MWe with the reactor at 100% power.
- 3/2 Decreased load to 765 MWe at 1100 due to ice forming on the intake traveling screens. Resumed full load operation (900 MWe) at 2030.
- 3/11 At 1000 load was reduced to 860 MWe for physics testing.
- 3/13 Increased load to capacity (900 MWe) at 2100.
- 3/14 Decreased load to 645 MWe due to control problems on #21 & 22 steam generator feed pumps at 1300.
- 3/17 Resumed full load operation (905 MWe) at 1200.
- 3/22 Decreased load to 640 MWe at 0730 for maintenance on #22 steam generator feed pump.
- 3/23 Increased load to capacity (910 MWe) at 0200.
- 3/31 At the end of this reporting period Unit II was operating at 910 MWe with the reactor at 100% power.

SAFETY-RELATED MAINTENANCE

UNIT I

GROUP I&C

MONTH MARCH YEAR 1980

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Engineered Safety Features Actuation System/Channel "ZE" Pressurizer Pressure Signal Isolator 1-E/E-102B	0-79-4443 11/30/79	Defective signal Isolator	Greater than .1 volt deviation from the other channels	Replaced the Signal Isolator
Reactor Protection System/Channel "A" Axial Power Distribution Calculator	IC-79-134 12/18/79	Defective + 18 VDC power supply	Decreased output from the 10 VDC reference supply	Replaced the + 18 VDC power supply
Reactor Protection System/#12 Steam Generator Pressure Indication 1-PI-1023D	0-80-38 1/4/80	Dirty terminals on Loop Resistor	Greater than 22 psi difference in Indication between channel "D" and the other channels	Cleaned the Resistor Terminals
Reactor Protection System/#12 Steam Generator Pressure Indication 1-PI-1023 A, B, C	0-80-76 1/8/80	Dirty terminals on Loop Resistor	Greater than 22 psi difference in Indication between the four channels	Cleaned the Resistor Terminals

SAFETY-RELATED MAINTENANCE

UNIT IGROUP I&CMONTH MARCH YEAR 1980

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Safety Injection System / #13 High Pressure Safety Injection Pump, Pressure Transmitter and Indicating Instrument	0-80-21 1/4/80	The indicating Instrument 1-PI-301Z and associated transmitter were out of adjustment	Low differential pressure indication across the pump	Adjusted both instruments
Reactor Protection System / Trip Test Cable Channel "C"	IC-79-129 12/5/79	Faulty trip test cable	Could not read trip unit input voltage	Replaced trip test cable
Nuclear Instrumentation / Incore Detectors	IC-79-056 7/23/79	End of Life	Detector instrument malfunction	Replaced 16 incore detectors

SAFETY-RELATED MAINTENANCE

UNIT II

GROUP I&C

MONTH MARCH YEAR 1980

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Engineered Safety Features Actuation System/Signal Isolators for Steam Generator Pressure Instruments 2-E/E-1023A 2-E/E-1023D 2-E/E-1013D	IC-79-2167 11/30/79	Signal Isolators 2-E/E-1023 A & D were out of nominal calibration. Isolator 2-E/E-1013D was defective	Greater than .1 volt deviation between channels	Calibrated Isolators 2-E/E-1023 A & D and replaced Isolator 2-E/E-1013D
Engineered Safety Features Actuation System/Pressurizer Pressure Signal Channel "ZG"	0-79-4377 11/27/79	Pressure transmitter 2-PT-102D was out of adjustment. Also discovered the conduit at the transmitter broken	Greater than .1 volt deviation from the other channels	Adjusted the transmitter 2-PT-102D and replaced the conduit
Service Water System/#21 Service Water Head Tank Level Indication 2-LI-1579	0-79-2807 9/17/79	Low level alarm setting was out of adjustment	Low level alarm was received and an alarm condition did not exist	Adjusted the setting on the Low Level Alarm

SAFETY-RELATED MAINTENANCE

UNIT II

GROUP I&C

MONTH MARCH YEAR 1980

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Service Water System/#21 Service Water Head Tank Level Transmitter 2-LT-1579	0-79-3907 10/19/79	Level Transmitter 2-LT-1579 was defective: output non-repeatable	The Head Tank make-up valve would not operate on a low level in the tank	Replaced the Level Transmitter 2-LT-1579
Service Water System/#21 Service Water Head Tank Level Indication 2-LI-1579	0-79-4077 11/12/79	The Alarm setpoint was out of adjustment	Received low level alarm and alarm condition did not exist	Adjusted the alarm setpoint
Reactor Protection System/ Linear Power Drawer Channel "D"	0-79-2690 9/6/79	Defective card A-5 in Instrument drawer. Also dirty drawer rails.	Nuclear power signal would drift	Replaced card A-5 and cleaned the drawer rails.
Engineered Safety Features Actuation System/Channel "ZG"; #22 Steam Generator Pressure Instrument Signal Isolator 2-E/E-1023D	0-79-4478 12/3/79	Loose input terminal connections for 2-E/E-1023D	Greater than .1 volt deviation between channels	Tightened the terminal connections

SAFETY-RELATED MAINTENANCE

UNIT II

GROUP I&C

MONTH MARCH YEAR 1980

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Engineered Safety Features Actuation System/Safety Injection Actuation Signal Logic Module B-5 and Containment Isolation Signal Logic Module B-5 on Channel "ZB"	0-79-4296 11/22/79	Defective logic modules	Both logic modules failed to trip when its test button was depressed	Replaced both logic modules
Engineered Safety Features Actuation System/Channel "ZF", Containment Radiation Signal Sensor Module Signal Isolator 2-E/E-5316C and 2-E/E-5316D	IC-79-2098 10/9/79	Defective signal Isolators 2-E/E-5316C and 2-E/E-5316D	Signal oscillations from sensor modules	Replaced the signal isolators 2-E/E-5316C and 2-E/E-5316D

SAFETY-RELATED MAINTENANCE

UNIT II

GROUP 'E' SHOP

MONTH MARCH YEAR 1980

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
#22 Main Steam Isolation Valve/ Solenoid Coils in 2-SV-4047 & 4048	0-79-231 2/6/79	Defective solenoid Coils	#22 Main Steam Isolation Valve would not shut by remote control	Replaced the solenoid coils for 2-SV-4047 & 2-SV-4048

SAFETY-RELATED MAINTENANCE

UNIT TWO
 GROUP MECHANICAL MAINTENANCE
 MONTH MARCH YEAR 1980

SYSTEM OR COMPONENT	MR NO. - DATE	MALFUNCTION		CORRECTIVE ACTION
		CAUSE	RESULT	
Unit Two (2) Personnel Air Lock	0-79-4020 October 10, 1979	Broken Cam Follower	Inner door had become stuck open	Replaced cam follower