

CHARLES H. CRUSE  
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December 15, 1995

U. S. Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant  
Unit Nos. 1 & 2, Docket Nos. 50-317 & 50-318  
November 1995 Operating Data Reports

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The subject reports are being sent to you as required by Technical Specification 6.9.1.6.

Should you have any questions, please contact Mr. Bruce Mrowca at (410) 260-3989.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Charles H. Cruse", is written over a horizontal line.

CHC/HOO/bjd

Attachments

cc: D. A. Brune, Esquire  
J. E. Silberg, Esquire  
L. B. Marsh, NRC  
D. G. McDonald, Jr., NRC  
T. T. Martin, NRC  
Resident Inspector, NRC

R. A. Hartfield, NRC  
R. I. McLean, DNR  
J. H. Walter, PSC  
P. Lewis, INPO  
K. N. Larson, ANI

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UNIT 1

# OPERATING DATA REPORT

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Docket No. 50-317  
December 15, 1995  
Prepared by Herman O. Olsen  
Telephone: (410) 260-6734

## OPERATING STATUS

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1. UNIT NAME	Calvert Cliffs Unit 1
2. REPORTING PERIOD	NOVEMBER 1995
3. LICENSED THERMAL POWER (MWT)	2700
4. NAMEPLATE RATING (GROSS MWe)	918
5. DESIGN ELECTRICAL RATING (NET MWe)	845
6. MAXIMUM DEPENDABLE CAP'Y (GROSS MWe)	865
7. MAXIMUM DEPENDABLE CAP'Y (NET MWe)	835
8. CHANGE IN CAPACITY RATINGS	NONE
9. POWER LEVEL TO WHICH RESTRICTED	N/A
10. REASONS FOR RESTRICTIONS	N/A

	This month	Year- to-Date	Cumulative to Date
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11. HOURS IN REPORTING PERIOD	720	8,016	180,277
12. NUMBER OF HOURS REACTOR WAS CRITICAL	611.0	7,801.4	130,682.1
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	3,019.4
14. HOURS GENERATOR ON LINE	564.2	7,743.2	127,979.7
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,291,179	20,402,235	325,570,128
17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)	423,345	6,699,128	108,069,744
18. NET ELECTRICAL ENERGY GENERATED (MWH)	398,376	6,414,593	102,908,861
19. UNIT SERVICE FACTOR	78.4	96.6	71.0
20. UNIT AVAILABILITY FACTOR	78.4	96.6	71.0
21. UNIT CAPACITY FACTOR (USING MDC NET)	66.3	95.8	69.1
22. UNIT CAPACITY FACTOR (USING DER NET)	65.5	94.7	67.6
23. UNIT FORCED OUTAGE RATE	21.6	3.4	8.5
24. SHUTDOWNS SCHEDULED OVER THE NEXT SIX MONTHS (TYPE, DATE AND DURATION):			
Refueling 03/15/96 54 days			

25. IF SHUTDOWN AT END OF REPORT PERIOD,  
ESTIMATED DATE OF START-UP:  
N/A

# AVERAGE DAILY UNIT POWER LEVEL

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Docket No. 50-317  
Calvert Cliffs Unit No. 1  
December 15, 1995  
Prepared by Herman O. Olsen  
Telephone: (410) 260-6734

NOVEMBER 1995  
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Average Daily Power Level		Average Daily Power Level	
Day	(MWe-Net)	Day	(MWe-Net)
1	855	17	-32
2	854	18	-31
3	853	19	-32
4	856	20	245
5	856	21	578
6	856	22	577
7	856	23	578
8	859	24	580
9	527	25	581
10	-33	26	580
11	-33	27	582
12	36	28	582
13	775	29	584
14	855	30	584
15	858		
16	811		

# UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-317  
 UNIT NAME Calvert Cliffs-U1  
 DATE December 15, 1995  
 COMPLETED BY Herman O. Olsen  
 TELEPHONE (410) 260-6734

REPORT MONTH November 1995

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
95-005	110995	F	74.0	A	2	95-005	JB	TC	On 11/09/95 at 1501 the reactor was manually tripped due to increasing Steam Generator levels, after attempts by the operators to place the feedwater regulating valve controller in manual failed. The digital feedwater control module output signal was not responding, having a slowly increasing signal trend which caused the feedwater regulating valve to slowly open. The controller was sent to the vendor for further root cause analysis. Additional corrective actions are underway to address other causal factors.
95-006	111695	F	81.8	A	2	95-006	JK	SCO	On 11/16/95 at 2252 the reactor was manually tripped following a loss of one Main Feed Pump. Trouble shooting determined that oil losses from the trip mechanism and turbine thrust allowed oil pressure to drop and trip the pump before the standby oil pump could restore pressure. The cause for the initial oil drop has not been determined.
09-007	112095	F	247.3	H	5		JK	SCO	On 11/20/95 at 1640 reactor power was restored to 70% while trouble shooting and repairs were made to the Steam Generator Feed Pump Control system. Power remained at 70% through the end of the month.

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

<sup>2</sup> Reason:  
 A - Equipment Failure  
 B - Maintenance or Test  
 C - Refueling  
 D - Regulatory Restriction  
 E - Operator Training & License Examination  
 F - Administrative  
 G - Operational Error  
 H - Other

<sup>3</sup> Method:  
 1 - Manual  
 2 - Manual Scram.  
 3 - Automatic Scram.  
 4 - Continued  
 5 - Reduced Load  
 9 - Other

<sup>4</sup> IEEE Standard 805-1984

<sup>5</sup> IEEE Standard 803A-1983

## REFUELING INFORMATION REQUEST

1. Name of facility: Calvert Cliffs Nuclear Power Plant, Unit No. 1.
2. Scheduled date for next refueling shutdown: March 15, 1996 #
3. Scheduled date for restart following refueling: May 8, 1996 \* #
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

Yes.

- a. License amendment to allow installation of a new diesel generator.
  - b. License amendment to reflect the new electrical distribution system configuration.
  - c. An amendment and exemption to allow the use of four lead fuel assemblies with advance cladding materials.
  - d. License amendment to extend some instrument surveillances to allow a delayed start of the refueling outage.
  - e. License amendment to extend the requirement to do an ILRT so that the test does not have to be performed this outage.
  - f. License amendment to modify the MTC limits to account for additional steam generator tubes plugged.
  - g. License amendment which would allow the sleeving of steam generator tubes as a repair method.
5. Scheduled date(s) for submitting proposed licensing action and supporting information.
- a. October 2, 1995
  - b. November 1, 1995 \*
  - c. July 13, 1995
  - d. October 20, 1995
  - e. December 1995 \*
  - f. January 1996
  - g. November 1995
6. Important licensing considerations associated with the refueling.

Physical modifications required to bring Calvert Cliffs in compliance with the Station Blackout rule will be completed in the 1996 Unit 1 refueling outage.

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

(a) 217

(b) 1434 (Note 2)

**Spent fuel pools are common to Units 1 and 2.**

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

(a) 4710 (Note 1)

(b) 0

9. The projected date of the last refueling that can be discharged to the Spent Fuel Pool assuming the present licensed capacity and maintaining space for one full core off-load.

**March 2007**

**NOTE 1: 4710 total licensed site storage capacity.  
(1830 pool + 2880 ISFSI)**

**NOTE 2: 240 Spent Fuel Assemblies in the ISFSI.**

**\* Entry has changed since last reported.**

**# These are the dates reported in the Business Plan.**

DOCKET NO. 50-317  
CALVERT CLIFFS - UNIT 1  
December 15, 1995

## SUMMARY OF OPERATING EXPERIENCE

November 1995

The unit began the month at 100% (840 MWe).

A #11 Steam Generator high level alarm was received and after verifying that the level was increasing, plant operators attempted to place the feedwater regulating valve controller in manual. When these efforts failed, the reactor was manually tripped at 1501 on 11/09/95. Trouble shooting and repairs were made to the feedwater regulating valve controller and the reactor was returned to 100% power at 0915 on 11/13/95.

The reactor was manually tripped at 2252 on 11/16/95 when #12 feedwater pump tripped. Trouble shooting identified several minor problems that together, combined to increase the pump's sensitivity to trip conditions. Adjustments were made to correct these problems. The cause for the initial drop in the trip mechanism's hydraulic oil pressure has not been determined. The unit was returned to operation at 0837 on 11/20/95 and limited to the maximum power level for single feedwater pump operation while evaluating the pump's performance.

The unit continued to operate at 70% power (575 MWe) for the remainder of the month.



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UNIT 2

OPERATING DATA REPORT

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Docket No. 50-318  
December 15, 1995  
Prepared by Herman O. Olsen  
Telephone: (410) 260-6734

OPERATING STATUS  
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1. UNIT NAME	Calvert Cliffs Unit 2
2. REPORTING PERIOD	NOVEMBER 1995
3. LICENSED THERMAL POWER (MWT)	2700
4. NAMEPLATE RATING (GROSS MWe)	911
5. DESIGN ELECTRICAL RATING (NET MWe)	845
6. MAXIMUM DEPENDABLE CAP'Y (GROSS MWe)	870
7. MAXIMUM DEPENDABLE CAP'Y (NET MWe)	840
8. CHANGE IN CAPACITY RATINGS	NONE
9. POWER LEVEL TO WHICH RESTRICTED	N/A
10. REASONS FOR RESTRICTIONS	N/A

	This month	Year- to-Date	Cumulative to Date
11. HOURS IN REPORTING PERIOD	720	8,016	163,632
12. NUMBER OF HOURS REACTOR WAS CRITICAL	720.0	6,461.8	120,498.8
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	1,296.6
14. HOURS GENERATOR ON LINE	720.0	6,378.7	118,829.4
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,940,982	16,828,020	304,324,949
17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)	642,244	5,508,540	100,523,849
18. NET ELECTRICAL ENERGY GENERATED (MWH)	618,184	5,268,979	96,090,589
19. UNIT SERVICE FACTOR	100.0	79.6	72.6
20. UNIT AVAILABILITY FACTOR	100.0	79.6	72.6
21. UNIT CAPACITY FACTOR (USING MDC NET)	102.2	78.3	71.1
22. UNIT CAPACITY FACTOR (USING DER NET)	101.6	77.8	69.5
23. UNIT FORCED OUTAGE RATE	0.0	2.8	5.7
24. SHUTDOWNS SCHEDULED OVER THE NEXT			

SIX MONTHS (TYPE, DATE AND DURATION):  
N/A

25. IF UNIT IS SHUTDOWN AT END OF REPORT PERIOD,  
ESTIMATED DATE OF START-UP:  
N/A



# AVERAGE DAILY UNIT POWER LEVEL

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Docket No. 50-318  
Calvert Cliffs Unit No. 2  
December 15, 1995  
Prepared by Herman O. Olsen  
Telephone: (410) 260-6734

NOVEMBER 1995  
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Average Daily Power Level		Average Daily Power Level	
Day	(MWe-Net)	Day	(MWe-Net)
1	853	17	856
2	852	18	855
3	852	19	855
4	856	20	858
5	857	21	859
6	856	22	859
7	857	23	859
8	857	24	859
9	858	25	858
10	888	26	859
11	857	27	860
12	858	28	861
13	858	29	861
14	858	30	860
15	858		
16	866		

# UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-318  
 UNIT NAME Calvert Cliffs-U2  
 DATE December 15, 1995  
 COMPLETED BY Herman O. Olsen  
 TELEPHONE (410) 260-6734

REPORT MONTH November 1995

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
									There were no significant power reductions for this month.

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

<sup>2</sup> Reason:  
 A - Equipment Failure  
 B - Maintenance or Test  
 C - Refueling  
 D - Regulatory Restriction  
 E - Operator Training & License Examination  
 F - Administrative  
 G - Operational Error  
 H - Other

<sup>3</sup> Method:  
 1 - Manual  
 2 - Manual Scram.  
 3 - Automatic Scram.  
 4 - Continued  
 5 - Reduced Load  
 9 - Other

<sup>4</sup> IEEE Standard 805-1984

<sup>5</sup> IEEE Standard 803A-1983

## REFUELING INFORMATION REQUEST

1. Name of facility: Calvert Cliffs Nuclear Power Plant, Unit No. 2
2. Scheduled date for next refueling shutdown: March 14, 1997 #
3. Scheduled date for restart following refueling: April 23, 1997 #
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

No.

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

None.

6. Important licensing considerations associated with the refueling.

None.

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

(a) 217

(b) 1434 (Note 2)

Spent fuel pools are common to Units 1 and 2.

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

(a) 4710 (Note 1)

(b) 0

9. The projected date of the last refueling that can be discharged to the Spent Fuel Pool assuming the present licensed capacity and maintaining space for one full core off-load.

March 2007

**NOTE 1:** 4710 total licensed site storage capacity.  
(1830 pool + 2880 ISFSI)

**NOTE 2:** 240 Spent Fuel Assemblies in the ISFSI.

\* Entry has changed since last reported.

# These are the dates reported in the Business Plan.

DOCKET NO. 50-318  
CALVERT CLIFFS - UNIT 2  
December 15, 1995

## SUMMARY OF OPERATING EXPERIENCE

November 1995

The unit operated at 100% power (840 MWe) for the entire month.