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Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657
410 495-4101



December 13, 1996

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 1996 Operating Data Reports

The subject reports are being sent to you as required by Technical Specification 6.6.4.

Should you have any questions, please contact Mr. Kenneth Greene at (410) 495-4385.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Peter Katz", is written over a horizontal line.

PEK/HOO/bjd

Attachments

cc: D. A. Brune, Esquire
J. E. Silberg, Esquire
Director, Project Directorate I-1, NRC
A. W. Dromerick, NRC
H. J. Miller, 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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PDR ADOCK 05000317
R PDR

190045

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UNIT 1

OPERATING DATA REPORT

Docket No. 50-317
December 14, 1996
Prepared by Herman O. Olsen
Telephone: (410) 495-6734

OPEPATING STATUS

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|                                         |                       |
|-----------------------------------------|-----------------------|
| 1. UNIT NAME                            | Calvert Cliffs Unit 1 |
| 2. REPORTING PERIOD                     | NOVEMBER 1996         |
| 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-<br>to-Date | Cumulative<br>to Date |
|--------------------------------------------------------------------------------|------------|------------------|-----------------------|
|                                                                                | -----      | -----            | -----                 |
| 11. HOURS IN REPORTING PERIOD                                                  | 720        | 8,040            | 189,061               |
| 12. NUMBER OF HOURS REACTOR WAS CRITICAL                                       | 720.0      | 5,125.4          | 136,551.5             |
| 13. REACTOR RESERVE SHUTDOWN HOURS                                             | 0.0        | 0.0              | 3,019.4               |
| 14. HOURS GENERATOR ON LINE                                                    | 720.0      | 5,019.2          | 133,742.9             |
| 15. UNIT RESERVE SHUTDOWN HOURS                                                | 0.0        | 0.0              | 0.0                   |
| 16. GROSS THERMAL ENERGY GENERATED (MWH)                                       | 1,941,163  | 13,221,055       | 340,723,059           |
| 17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)                                      | 648,734    | 4,381,204        | 113,092,904           |
| 18. NET ELECTRICAL ENERGY GENERATED (MWH)                                      | 623,507    | 4,177,302        | 107,701,795           |
| 19. UNIT SERVICE FACTOR                                                        | 100.0      | 62.4             | 70.7                  |
| 20. UNIT AVAILABILITY FACTOR                                                   | 100.0      | 62.4             | 70.7                  |
| 21. UNIT CAPACITY FACTOR (USING MDC NET)                                       | 103.7      | 62.2             | 68.9                  |
| 22. UNIT CAPACITY FACTOR (USING DER NET)                                       | 102.5      | 61.5             | 67.4                  |
| 23. UNIT FORCED OUTAGE RATE                                                    | 0.0        | 14.1             | 8.5                   |
| 24. SHUTDOWNS SCHEDULED OVER THE NEXT<br>SIX MONTHS (TYPE, DATE AND DURATION): | N/A        |                  |                       |
| 25. IF SHUTDOWN AT END OF REPORT PERIOD,<br>ESTIMATED DATE OF START-UP:        | N/A        |                  |                       |

# UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-317  
 UNIT NAME Calvert Cliffs-U1  
 DATE December 13, 1996  
 COMPLETED BY Herman O. Olsen  
 TELEPHONE (410) 495-6734

REPORT MONTH November 1996

| NO. | DATE | TYPE <sup>1</sup> | DURATION<br>(HOURS) | REASON <sup>2</sup> | METHOD OF<br>SHUTTING<br>DOWN<br>REACTOR <sup>3</sup> | LICENSEE<br>EVENT<br>REPORT # | SYSTEM<br>CODE <sup>4</sup> | COMPONENT<br>CODE <sup>5</sup> | CAUSE & CORRECTIVE<br>ACTION TO<br>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. 1.
  2. Scheduled date for next refueling shutdown: March 1998
  3. Scheduled date for restart following refueling: May 1998
  4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?  
  
N/A
  5. Scheduled date(s) for submitting proposed licensing action and supporting information.  
  
N/A
  6. Important licensing considerations associated with the refueling.  
  
N/A
  7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.  
  
(a) 217                      (b) 1402 (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:        360 Spent Fuel Assemblies in the ISFSI. \*

\*        Entry has changed since last reported.

# AVERAGE DAILY UNIT POWER LEVEL

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Docket No. 50-317

Calvert Cliffs Unit No. 1

December 14, 1996

Prepared by Herman O. Olsen

Telephone: (410) 495-6734

NOVEMBER 1996

\*\*\*\*\*

| Day | Average Daily Power Level<br>(MWe-Net) | Day | Average Daily Power Level<br>(MWe-Net) |
|-----|----------------------------------------|-----|----------------------------------------|
| 1   | 862                                    | 17  | 866                                    |
| 2   | 864                                    | 18  | 861                                    |
| 3   | 865                                    | 19  | 862                                    |
| 4   | 864                                    | 20  | 866                                    |
| 5   | 866                                    | 21  | 867                                    |
| 6   | 866                                    | 22  | 867                                    |
| 7   | 865                                    | 23  | 867                                    |
| 8   | 865                                    | 24  | 868                                    |
| 9   | 864                                    | 25  | 867                                    |
| 10  | 866                                    | 26  | 868                                    |
| 11  | 867                                    | 27  | 866                                    |
| 12  | 867                                    | 28  | 869                                    |
| 13  | 867                                    | 29  | 868                                    |
| 14  | 867                                    | 30  | 867                                    |
| 15  | 868                                    |     |                                        |
| 16  | 867                                    |     |                                        |

DOCKET NO. 50-317  
CALVERT CLIFFS - UNIT 1  
December 13, 1996

## SUMMARY OF OPERATING EXPERIENCE

November 1996

The unit operated at 100% power for the entire month.

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UNIT 2

OPERATING DATA REPORT

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Docket No. 50-318  
December 14, 1996  
Prepared by Herman O. Olsen  
Telephone: (410) 495-6734

OPERATING STATUS  
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1. UNIT NAME	Calvert Cliffs Unit 2
2. REPORTING PERIOD	NOVEMBER 1996
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	8,040	172,416
12. NUMBER OF HOURS REACTOR WAS CRITICAL	662.3	7,855.6	129,098.4
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	1,296.6
14. HOURS GENERATOR ON LINE	652.4	7,817.6	127,391.0
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,719,196	20,785,461	327,115,672
17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)	573,822	6,883,116	108,072,644
18. NET ELECTRICAL ENERGY GENERATED (MWH)	549,776	6,608,322	103,337,766
19. UNIT SERVICE FACTOR	90.6	97.2	73.9
20. UNIT AVAILABILITY FACTOR	90.6	97.2	73.9
21. UNIT CAPACITY FACTOR (USING MDC NET)	90.9	97.8	72.5
22. UNIT CAPACITY FACTOR (USING DER NET)	90.4	97.3	70.9
23. UNIT FORCED OUTAGE RATE	9.4	3.1	5.4
24. SHUTDOWNS SCHEDULED OVER THE NEXT SIX MONTHS (TYPE, DATE AND DURATION): Refueling 03/14/96 46 days			
25. IF UNIT IS SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF START-UP: N/A			

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-318
 UNIT NAME Calvert Cliffs-U2
 DATE December 13, 1996
 COMPLETED BY Herman O. Olsen
 TELEPHONE (410) 495-6734

REPORT MONTH November 1996

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
96003	111796	F	67.6	A	3	96005	JB	FCV	The unit automatically tripped on 11/17/96 at 1059 due to a low steam generator level. Indications were that a feedwater regulating valve had closed while operating at 100% power. Subsequent investigation identified that the feedback spring retaining bolt on #21 Main Feed Regulating Valve positioner had broken, causing the valve to close. The valve was repaired and the unit was returned to operation on 11/20/96 at 0640. The root cause of the trip (broken bolt) is still under investigation.

¹ F: Forced
 S: Scheduled

² 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

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

⁴ IEEE Standard 805-1984

⁵ 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 28, 1997
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

Yes.

- a. License Amendment to adopt the requirements of Appendix J, Option B for Type B and C testing.
 - b. License Amendment to allow the substitution of a blind flange for the outside purge valve pressure boundary in Modes 1-4.
 - c. License Amendment to allow the use of a temporary closure in place of the equipment hatch in Modes 5 and 6.
 - d. License Amendment to lower the reactor coolant flow which supports an increased number of steam generator tubes plugged.
 - e. License Amendment to clarify wording on shutdown cooling maintenance Technical Specification to allow openings in containment during the maintenance.
 - f. License Amendment to allow electrosleeving as a repair method for steam generator tubes.
5. Scheduled date(s) for submitting proposed licensing action and supporting information.
- a. November 26, 1996 *
 - b. August 1, 1996
 - c. December 1996
 - d. January 1997
 - e. December 1996
 - f. July 26, 1996
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) 1492 (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: 360 Spent Fuel Assemblies in the ISFSI. *

* Entry has changed since last reported.

AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-318
Calvert Cliffs Unit No. 2
December 14, 1996
Prepared by Herman O. Olsen
Telephone: (410) 495-6734

NOVEMBER 1996

Day	Average Daily Power Level (MWe-Net)	Day	Average Daily Power Level (MWe-Net)
1	858	17	376
2	858	18	-29
3	861	19	-29
4	861	20	333
5	861	21	838
6	861	22	852
7	861	23	855
8	860	24	857
9	829	25	860
10	850	26	861
11	851	27	861
12	853	28	861
13	854	29	861
14	856	30	861
15	858		
16	857		

DOCKET NO. 50-318
CALVERT CLIFFS - UNIT 2
December 13, 1996

SUMMARY OF OPERATING EXPERIENCE

November 1996

The unit began the month at 100% power.

On 11/09/96 at 0357, power was reduced to approximately 95% due to a loss of a circulating water pump. Power was returned to 100% at 1640.

On 11/17/96 at 1059 an automatic reactor trip occurred due to a low steam generator water level. Based on the indications received, the operators believed that a feedwater regulating valve had closed while operating at 100% power. Subsequent investigation identified that the feedback spring retaining bolt on the positioner for #21 Main Feedwater Regulating Valve had broken. This caused the valve to close and thus caused the trip. Repairs were made to the valve and the unit was returned to operation on 11/20/96 at 0634. The unit reached 100% on 11/21/96 at 0600.

The unit remained at 100% power for the remainder of the month.