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



August 15, 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
July 1996 Operating Data Reports

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) 495-3989.

Very truly yours,

RJ Thetman FOR PEK

PEK/HOO/bjd

Attachments

cc: D. A. Brune, Esquire
J. E. Silberg, Esquire
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UNIT 1

OPERATING DATA REPORT

August 15, 1996
Prepared by Herman O. Olsen
Telephone: (410) 495-6734

OPERATING STATUS

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|                                         |                       |
|-----------------------------------------|-----------------------|
| 1. UNIT NAME                            | Calvert Cliffs Unit 1 |
| 2. REPORTING PERIOD                     | JULY 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             | 744        | 5,111            | 186,132               |
| 12. NUMBER OF HOURS REACTOR WAS CRITICAL  | 55.1       | 2,196.4          | 133,622.5             |
| 13. REACTOR RESERVE SHUTDOWN HOURS        | 0.0        | 0.0              | 3,019.4               |
| 14. HOURS GENERATOR ON LINE               | 0.0        | 2,139.6          | 130,863.3             |
| 15. UNIT RESERVE SHUTDOWN HOURS           | 0.0        | 0.0              | 0.0                   |
| 16. GROSS THERMAL ENERGY GENERATED (MWH)  | 0          | 5,619,077        | 333,121,081           |
| 17. GROSS ELECTRICAL ENERGY GEN'TED (MWH) | 0          | 1,879,636        | 110,591,336           |
| 18. NET ELECTRICAL ENERGY GENERATED (MWH) | (8,035)    | 1,779,413        | 105,303,906           |
| 19. UNIT SERVICE FACTOR                   | 0.0        | 41.9             | 70.3                  |
| 20. UNIT AVAILABILITY FACTOR              | 0.0        | 41.9             | 70.3                  |
| 21. UNIT CAPACITY FACTOR (USING MDC NET)  | 0.0        | 41.7             | 68.5                  |
| 22. UNIT CAPACITY FACTOR (USING DER NET)  | 0.0        | 41.2             | 67.0                  |
| 23. UNIT FORCED OUTAGE RATE               | 100.0      | 26.9             | 8.7                   |
| 24. SHUTDOWNS SCHEDULED OVER THE NEXT     |            |                  |                       |

SIX MONTHS (TYPE, DATE AND DURATION):

N/A                      () Represents a negative value

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

N/A

# UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-317  
UNIT NAME Calvert Cliffs-U1  
DATE August 15, 1996  
COMPLETED BY Herman O. Olsen  
TELEPHONE (410) 495-6734

REPORT MONTH July 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                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|--------|-------------------|---------------------|---------------------|-------------------------------------------------------|-------------------------------|-----------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 96002 | 033096 | S                 | 89.8                | C                   | 4                                                     | N/A                           | N/A                         | N/A                            | The unit was shutdown for a planned Refueling Outage.                                                                                                                                                                                                                                                                                                                                                                                     |
| 96005 | 062696 | F                 | 163.3               | A                   | 4                                                     | N/A                           | AB                          | MO                             | 11B Reactor Coolant Pump motor was replaced due to a stator winding failure. Investigation into the root cause of the failure is on going.                                                                                                                                                                                                                                                                                                |
| 96006 | 070796 | F                 | 490.9               | A                   | 4                                                     | N/A                           | AB                          | P                              | 11B Reactor Coolant Pump experienced high vibration following the motor replacement. The problem was determined to be located in the pump end. Inspection of the pump identified that the suction diffuser locking device failed. The pump was repaired. The other reactor coolant pumps were inspected to verify that their locking devices were intact. A root cause analysis is being conducted to determine the cause of the failure. |

<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

# AVERAGE DAILY UNIT POWER LEVEL

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Docket No. 50-317  
Calvert Cliffs Unit No. 1  
August 15, 1996  
Prepared by Herman O. Olsen  
Telephone: (410) 495-6734

JULY 1996

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| Average Daily Power Level |           | Average Daily Power Level |           |
|---------------------------|-----------|---------------------------|-----------|
| Day                       | (MWe-Net) | Day                       | (MWe-Net) |
| 1                         | -9        | 17                        | -9        |
| 2                         | -9        | 18                        | -8        |
| 3                         | -8        | 19                        | -8        |
| 4                         | -8        | 20                        | -7        |
| 5                         | -8        | 21                        | -7        |
| 6                         | -8        | 22                        | -8        |
| 7                         | -8        | 23                        | -7        |
| 8                         | -8        | 24                        | -7        |
| 9                         | -8        | 25                        | -7        |
| 10                        | -8        | 26                        | -8        |
| 11                        | -8        | 27                        | -11       |
| 12                        | -8        | 28                        | -26       |
| 13                        | -8        | 29                        | -29       |
| 14                        | -8        | 30                        | -31       |
| 15                        | -7        | 31                        | -32       |
| 16                        | -10       |                           |           |

### 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) 1522 (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.

DOCKET NO. 50-317  
CALVERT CLIFFS - UNIT 1  
August 15, 1996

## SUMMARY OF OPERATING EXPERIENCE

### July 1996

The unit began the month in Mode 5 (cold shutdown), in a forced extension of the refueling outage, due to an internal short on 11B Reactor Coolant Pump Stator.

The motor for 11B Reactor Coolant Pump was replaced. On 07/07/96 at 0610 while performing a plant heatup, high vibrations were detected on 11B Reactor Coolant Pump. Investigation identified that the suction diffuser was detached due to a failed locking device. This caused the impeller to be unbalanced. The pump was repaired and the other reactor coolant pumps were inspected to verify the integrity of their locking devices.

Plant heatup was commenced on 07/27/96 at 2025. The reactor reached criticality on 07/29/96 at 1652.

The unit remained in Mode 2 (startup) to perform low power physics testing through the end of the month.

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UNIT 2

OPERATING DATA REPORT

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Docket No. 50-318  
August 15, 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	JULY 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	744	5,111	169,487
12. NUMBER OF HOURS REACTOR WAS CRITICAL	744.0	4,984.3	126,227.1
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	1,296.6
14. HOURS GENERATOR ON LINE	744.0	4,956.2	124,529.6
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,943,977	13,178,039	319,508,250
17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)	647,217	4,387,427	105,576,955
18. NET ELECTRICAL ENERGY GENERATED (MWH)	621,799	4,213,157	100,942,601
19. UNIT SERVICE FACTOR	100.0	97.0	73.5
20. UNIT AVAILABILITY FACTOR	100.0	97.0	73.5
21. UNIT CAPACITY FACTOR (USING MDC NET)	99.5	98.1	72.0
22. UNIT CAPACITY FACTOR (USING DER NET)	98.9	97.6	70.5
23. UNIT FORCED OUTAGE RATE	0.0	3.5	5.5
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			

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-318
 UNIT NAME Calvert Cliffs-U2
 DATE August 15, 1996
 COMPLETED BY Herman O. Olsen
 TELEPHONE (410) 495-6734

REPORT MONTH July 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
									There were no significant power reductions for this month.

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

AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-318
Calvert Cliffs Unit No. 2
August 15, 1996
Prepared by Herman O. Olsen
Telephone: (410) 495-6734

JULY 1996

Day	Average Daily Power Level (MWe-Net)	Day	Average Daily Power Level (MWe-Net)
1	843	17	836
2	841	18	834
3	838	19	835
4	839	20	835
5	841	21	835
6	840	22	833
7	841	23	833
8	842	24	832
9	841	25	832
10	836	26	830
11	837	27	830
12	837	28	830
13	837	29	831
14	836	30	829
15	838	31	830
16	838		

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: May 5, 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. Deleted.
 - e. License Amendment to clarify wording on shutdown cooling maintenance Technical Specification to allow purging 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. October 1996
 - b. August 1, 1996*
 - c. September 1996*
 - d. Deleted
 - e. September 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) 1522 (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.

DOCKET NO. 50-318
CALVERT CLIFFS - UNIT 2
August 15, 1996

SUMMARY OF OPERATING EXPERIENCE

July 1996

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