

PETER E. KATZ  
Plant General Manager  
Calvert Cliffs Nuclear Power Plant

Baltimore Gas and Electric Company  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, Maryland 20657  
410 495-4101



November 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  
October 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. 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

9611210129 961031  
PDR ADOCK 05000317  
R PDR

210043

IE241

\*\*\*\*\*  
UNIT 1

OPERATING DATA REPORT

\*\*\*\*\*

Docket No. 50-317  
November 15, 1996  
Prepared by Herman O. Olsen  
Telephone: (410) 495-6734

OPERATING STATUS

~~~~~

|                                         |                       |
|-----------------------------------------|-----------------------|
| 1. UNIT NAME                            | Calvert Cliffs Unit 1 |
| 2. REPORTING PERIOD                     | OCTOBER 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             | 745          | 7,320            | 188,341               |
| 12. NUMBER OF HOURS REACTOR WAS CRITICAL  | 745.0        | 4,405.4          | 135,831.5             |
| 13. REACTOR RESERVE SHUTDOWN HOURS        | 0.0          | 0.0              | 3,019.4               |
| 14. HOURS GENERATOR ON LINE               | 745.0        | 4,299.2          | 133,022.9             |
| 15. UNIT RESERVE SHUTDOWN HOURS           | 0.0          | 0.0              | 0.0                   |
| 16. GROSS THERMAL ENERGY GENERATED (MWH)  | 1,997,350    | 11,279,892       | 338,781,896           |
| 17. GROSS ELECTRICAL ENERGY GEN'TED (MWH) | 663,401      | 3,732,470        | 112,444,170           |
| 18. NET ELECTRICAL ENERGY GENERATED (MWH) | 636,975      | 3,553,795        | 107,078,288           |
| 19. UNIT SERVICE FACTOR                   | 100.0        | 58.7             | 70.6                  |
| 20. UNIT AVAILABILITY FACTOR              | 100.0        | 58.7             | 70.6                  |
| 21. UNIT CAPACITY FACTOR (USING MDC NET)  | 102.4        | 58.1             | 68.8                  |
| 22. UNIT CAPACITY FACTOR (USING DER NET)  | 101.2        | 57.5             | 67.3                  |
| 23. UNIT FORCED OUTAGE RATE               | 0.0          | 16.1             | 8.6                   |

24. SHUTDOWNS SCHEDULED OVER THE NEXT  
SIX MONTHS (TYPE, DATE AND DURATION):  
N/A

\* Time change

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 November 15, 1996  
 COMPLETED BY Herman O. Olsen  
 TELEPHONE (410) 495-6734

REPORT MONTH October 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) 1426 (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: 336 Spent Fuel Assemblies in the ISFSI. \*

\* Entry has changed since last reported.

# AVERAGE DAILY UNIT POWER LEVEL

\*\*\*\*\*

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

OCTOBER 1996

\*\*\*\*\*

| Day | Average Daily Power Level<br>(MWe-Net) | Day | Average Daily Power Level<br>(MWe-Net) |
|-----|----------------------------------------|-----|----------------------------------------|
| 1   | 851                                    | 17  | 861                                    |
| 2   | 852                                    | 18  | 862                                    |
| 3   | 853                                    | 19  | 862                                    |
| 4   | 859                                    | 20  | 855                                    |
| 5   | 858                                    | 21  | 856                                    |
| 6   | 859                                    | 22  | 862                                    |
| 7   | 859                                    | 23  | 863                                    |
| 8   | 859                                    | 24  | 862                                    |
| 9   | 858                                    | 25  | 863                                    |
| 10  | 858                                    | 26  | 863                                    |
| 11  | 860                                    | 27  | 898                                    |
| 12  | 778                                    | 28  | 863                                    |
| 13  | 803                                    | 29  | 862                                    |
| 14  | 856                                    | 30  | 862                                    |
| 15  | 861                                    | 31  | 862                                    |
| 16  | 861                                    |     |                                        |

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

## SUMMARY OF OPERATING EXPERIENCE

October 1996

The unit began the month at 100% power.

On 10/12/96 at 0400 power was reduced to 90% for waterbox cleaning. At 0850 power was reduced to 85% for Main Turbine Control Valve testing. Control Valve testing was completed at 1020 and power was returned to approximately 90%. Waterbox cleaning was completed and power was restored to 100% on 10/13/96 at 2220.

On 10/20/96 at 2152 while testing Control Element Assembly (CEA) movement, CEA-41 was dropped into the core. Power was immediately reduced to 90%. The CEA was recovered and power was restored to 100% on 10/21/96 at 0200.

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

\*\*\*\*\*  
UNIT 2

# OPERATING DATA REPORT

\*\*\*\*\*

Docket No. 50-318  
November 15, 1996  
Prepared by Herman O. Olsen  
Telephone: (410) 495-6734

## OPERATING STATUS ~~~~~

|                                         |                       |
|-----------------------------------------|-----------------------|
| 1. UNIT NAME                            | Calvert Cliffs Unit 2 |
| 2. REPORTING PERIOD                     | OCTOBER 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-<br>to-Date | Cumulative<br>to Date |
|---------------------------------------------------------------------------------|--------------|------------------|-----------------------|
| 11. HOURS IN REPORTING PERIOD                                                   | 745          | 7,320            | 171,696               |
| 12. NUMBER OF HOURS REACTOR WAS CRITICAL                                        | 745.0        | 7,193.3          | 128,436.1             |
| 13. REACTOR RESERVE SHUTDOWN HOURS                                              | 0.0          | 0.0              | 1,296.6               |
| 14. HOURS GENERATOR ON LINE                                                     | 745.0        | 7,165.2          | 126,738.6             |
| 15. UNIT RESERVE SHUTDOWN HOURS                                                 | 0.0          | 0.0              | 0.0                   |
| 16. GROSS THERMAL ENERGY GENERATED (MWH)                                        | 1,987,496    | 19,066,265       | 325,396,476           |
| 17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)                                       | 657,757      | 6,309,294        | 107,498,822           |
| 18. NET ELECTRICAL ENERGY GENERATED (MWH)                                       | 631,900      | 6,058,546        | 102,787,990           |
| 19. UNIT SERVICE FACTOR                                                         | 100.0        | 97.9             | 73.8                  |
| 20. UNIT AVAILABILITY FACTOR                                                    | 100.0        | 97.9             | 73.8                  |
| 21. UNIT CAPACITY FACTOR (USING MDC NET)                                        | 101.0        | 98.5             | 72.4                  |
| 22. UNIT CAPACITY FACTOR (USING DER NET)                                        | 100.4        | 97.9             | 70.8                  |
| 23. UNIT FORCED OUTAGE RATE                                                     | 0.0          | 2.4              | 5.4                   |
| 24. SHUTDOWNS SCHEDULED OVER THE NEXT<br>SIX MONTHS (TYPE, DATE AND DURATION):  | N/A          | * Time change    |                       |
| 25. IF UNIT IS SHUTDOWN AT END OF REPORT PERIOD,<br>ESTIMATED DATE OF START-UP: | N/A          |                  |                       |

# UNIT SHUTDOWNS AND POWER REDUCTIONS

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

REPORT MONTH October 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 | 100896 | F                 | 7.8                 | H                   | 5                                                     | N/A                           | KG                          | COND                           | The maximum condenser waterbox differential temperature limit was being approached due to fouling. Power was reduced to 80% to allow waterbox cleaning. Following debris removal from the waterboxes, power was restored to 100%. |

<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

\*\*\*\*\*

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

OCTOBER 1996

\*\*\*\*\*

| Average Daily Power Level |           | Average Daily Power Level |           |
|---------------------------|-----------|---------------------------|-----------|
| Day                       | (MWe-Net) | Day                       | (MWe-Net) |
| 1                         | 847       | 17                        | 855       |
| 2                         | 846       | 18                        | 854       |
| 3                         | 847       | 19                        | 855       |
| 4                         | 855       | 20                        | 855       |
| 5                         | 854       | 21                        | 856       |
| 6                         | 855       | 22                        | 857       |
| 7                         | 854       | 23                        | 857       |
| 8                         | 811       | 24                        | 856       |
| 9                         | 762       | 25                        | 855       |
| 10                        | 828       | 26                        | 834       |
| 11                        | 856       | 27                        | 878       |
| 12                        | 854       | 28                        | 854       |
| 13                        | 854       | 29                        | 855       |
| 14                        | 859       | 30                        | 856       |
| 15                        | 856       | 31                        | 857       |
| 16                        | 855       |                           |           |

### 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 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) 1426 (Note 2) <sup>a</sup>

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: 336 Spent Fuel Assemblies in the ISFSI. \*

\* Entry has changed since last reported.

DOCKET NO. 50-318  
CALVERT CLIFFS - UNIT 2  
November 16, 1996

## SUMMARY OF OPERATING EXPERIENCE

October 1996

The unit began the month at 100% power.

On 10/08/96 at 1705, operators noted that the maximum allowed condenser waterbox differential temperature was being approached and commenced reducing power. Power was stabilized at 80% to perform waterbox cleaning. Following debris removal from the waterboxes, power was restored to 100% on 10/10/96 at 0830.

On 10/25/96 at 2210 power was reduced to 97% for Moderator Temperature Coefficient testing. Power was restored to 100% on 10/27/96 at 1400.

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