
 UNIT 1

OPERATING DATA REPORT

Docket No. 50-317
 May 17, 1988
 Prepared by C. Behnke
 Telephone: (301) 260-4871

OPERATING STATUS
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|                                         |                       |
|-----------------------------------------|-----------------------|
| 1. UNIT NAME                            | Calvert Cliffs Unit 1 |
| 2. REPORTING PERIOD                     | APRIL 1988            |
| 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) | 860                   |
| 7. MAXIMUM DEPENDABLE CAP'Y (NET MWe)   | 825                   |
| 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<br>to Date |
|--------------------------------------------------------------------------------|--------------|--------------|-----------------------|
| -----                                                                          |              |              |                       |
| 11. HOURS IN REPORTING PERIOD                                                  | 719          | 2,903        | 113,796               |
| 12. NUMBER OF HOURS REACTOR WAS CRITICAL                                       | 194.3        | 2,378.3      | 88,765.5              |
| 13. REACTOR RESERVE SHUTDOWN HOURS                                             | 0.0          | 0.0          | 3,019.4               |
| 14. HOURS GENERATOR ON LINE                                                    | 192.9        | 2,351.3      | 86,804.2              |
| 15. UNIT RESERVE SHUTDOWN HOURS                                                | 0.0          | 0.0          | 0.0                   |
| 16. GROSS THERMAL ENERGY GENERATED (MWH)                                       | 470,945      | 6,099,545    | 218,174,263           |
| 17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)                                      | 158,913      | 2,051,480    | 72,267,192            |
| 18. NET ELECTRICAL ENERGY GENERATED (MWH)                                      | 151,894      | 1,967,731    | 69,003,692            |
| 19. UNIT SERVICE FACTOR                                                        | 26.8         | 81.0         | 76.3                  |
| 20. UNIT AVAILABILITY FACTOR                                                   | 26.8         | 81.0         | 76.3                  |
| 21. UNIT CAPACITY FACTOR (USING MDC NET)                                       | 25.6         | 82.2         | 73.5                  |
| 22. UNIT CAPACITY FACTOR (USING DER NET)                                       | 25.0         | 80.2         | 71.8                  |
| 23. UNIT FORCED OUTAGE RATE                                                    | 0.0          | 1.1          | 9.9                   |
| 24. SHUTDOWNS SCHEDULED OVER THE NEXT<br>SIX MONTHS (TYPE, DATE AND DURATION): | None         |              |                       |
| 25. IF SHUTDOWN AT END OF REPORT PERIOD,<br>ESTIMATED DATE OF START-UP:        | May 29, 1988 |              |                       |

Note: Line 21 "Cumulative" factor no longer uses a weighted average.  
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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-317

UNIT NAME Calvert Cliffs-U1

DATE May 11, 1988

COMPLETED BY C. Behnke

REPORT MONTH April, 1988

TELEPHONE (301)260-4871

| 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 |
|-------|--------|-------------------|------------------|---------------------|----------------------------------------------|-------------------------|--------------------------|-----------------------------|-------------------------------------------------|
| 88-02 | 880409 | S                 | 526.1            | C                   | 1                                            | N/A                     | N/A                      | N/A                         | Shutdown for Refueling operations.              |

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

<sup>2</sup> 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)

<sup>3</sup> Method:  
1-Manual  
2-Manual Scram.  
3-Automatic Scram.  
4-Other (Explain)

<sup>4</sup> Exhibit G-Instructions for Preparation of Data Entry Sheets for License Event Report (LER) File (NUREG-0161)

<sup>5</sup> Exhibit I - Same Source

AVERAGE DAILY UNIT POWER LEVEL

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Docket No. 50-317  
 Calvert Cliffs Unit No. 1  
 May 12, 1988  
 Completed by C. Behnke  
 Telephone: (301) 260-4871

MAY 1988

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| Day | Average Daily Power Level<br>(MWe-Net) | Day | Average Daily Power Level<br>(MWe-Net) |
|-----|----------------------------------------|-----|----------------------------------------|
| 1   | 841                                    | 17  | 0                                      |
| 2   | 841                                    | 18  | 0                                      |
| 3   | 804                                    | 19  | 0                                      |
| 4   | 841                                    | 20  | 0                                      |
| 5   | 837                                    | 21  | 0                                      |
| 6   | 831                                    | 22  | 0                                      |
| 7   | 676                                    | 23  | 0                                      |
| 8   | 658                                    | 24  | 0                                      |
| 9   | 0                                      | 25  | 0                                      |
| 10  | 0                                      | 26  | 0                                      |
| 11  | 0                                      | 27  | 0                                      |
| 12  | 0                                      | 28  | 0                                      |
| 13  | 0                                      | 29  | 0                                      |
| 14  | 0                                      | 30  | 0                                      |
| 15  | 0                                      |     |                                        |
| 16  | 0                                      |     |                                        |

Summary of U-1 Operating Experience  
April 1988

| <u>Date</u> | <u>Time</u> | <u>Event Description</u>                                                                 |
|-------------|-------------|------------------------------------------------------------------------------------------|
| 4/1         | 0000        | Began at 97% derated power (2nd Stage MSR, out of service due to leakage) 840 MWe (net). |
| 4/6         | 1500        | Reduced power for phase isolation testing (93%) to 820 MWe (net).                        |
| 4/7         | 1110        | Reduced power for Alterex testing. At 2100, increasing power to 70%.                     |
| 4/8         | 1115        | SGFP testing.                                                                            |
| 4/8         | 2115        | Ramp-down commenced for shutdown.                                                        |
| 4/9         | 0152        | Unit removed from grid.                                                                  |

Summary of U-1 Operating Experience  
April 1988

The Unit began the month at the 97% derated maximum for out of service 2nd Stage MSR's (leakage).

Reduced power (1500) for phase isolation testing. Remained at 93% until 4/7/88 at 1300 when power was reduced to 50% for SGFP testing.

Unit returned to 97% (5AM) on 4/8/88. Began ramp-down for shutdown at 1300. Unit removed from the grid at 0152, 4/9/88 for Refueling/ILRT Scheduled Outage. Unit remained off-line through the end of this reporting period (scheduled to return on or about May 29th).

May 5, 1988

REFUELING INFORMATION REQUEST

1. Name of facility: Calvert Cliffs Nuclear Power Plant, Unit No. 1.
2. Scheduled date for next refueling shutdown: April 8, 1988
3. Scheduled date for restart following refueling: May 26, 1988
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 for unit 1's first 24 month cycle.

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

February 17, 1988 (actual submittal date was February 12, 1988)

6. Important licensing considerations associated with the refueling.

Reload fuel will be similar to that reload fuel inserted into Calvert Cliffs Unit 2 Eighth Cycle except for four lead demonstration assemblies manufactured by Advanced Nuclear Fuels

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

(a) 217                      (b) 1235

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) 1830                      (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 offload.

April, 1991

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 UNIT 2

OPERATING DATA REPORT

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Docket No. 50-318  
 May 12, 1988  
 Prepared by C. Behrke  
 Telephone: (301) 260-4871

OPERATING STATUS

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|                                         |                       |
|-----------------------------------------|-----------------------|
| 1. UNIT NAME                            | Calvert Cliffs Unit 2 |
| 2. REPORTING PERIOD                     | APRIL 1988            |
| 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) | 860                   |
| 7. MAXIMUM DEPENDABLE CAP'Y (NET MWe)   | 825                   |
| 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<br>to Date |
|---------------------------------------------------------------------------------|-------------|--------------|-----------------------|
|                                                                                 | -----       |              |                       |
| 11. HOURS IN REPORTING PERIOD                                                   | 719         | 2,903        | 97,151                |
| 12. NUMBER OF HOURS REACTOR WAS CRITICAL                                        | 618.0       | 1,975.7      | 79,819.5              |
| 13. REACTOR RESERVE SHUTDOWN HOURS                                              | 0.0         | 0.0          | 1,296.6               |
| 14. HOURS GENERATOR ON LINE                                                     | 613.4       | 1,966.3      | 78,647.9              |
| 15. UNIT RESERVE SHUTDOWN HOURS                                                 | 0.0         | 0.0          | 0.0                   |
| 16. GROSS THERMAL ENERGY GENERATED (MWH)                                        | 1,638,533   | 5,194,779    | 198,535,443           |
| 17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)                                       | 551,496     | 1,762,169    | 65,650,270            |
| 18. NET ELECTRICAL ENERGY GENERATED (MWH)                                       | 500,227     | 1,691,405    | 62,682,463            |
| 19. UNIT SERVICE FACTOR                                                         | 85.3        | 67.7         | 81.0                  |
| 20. UNIT AVAILABILITY FACTOR                                                    | 85.3        | 67.7         | 81.0                  |
| 21. UNIT CAPACITY FACTOR (USING MDC NET)                                        | 89.4        | 70.6         | 78.2                  |
| 22. UNIT CAPACITY FACTOR (USING DER NET)                                        | 87.3        | 69.0         | 76.4                  |
| 23. UNIT FORCED OUTAGE RATE                                                     | 12.4        | 5.0          | 5.6                   |
| 24. SHUTDOWNS SCHEDULED OVER THE NEXT<br>SIX MONTHS (TYPE, DATE AND DURATION):  | None        |              |                       |
| 25. IF UNIT IS SHUTDOWN AT END OF REPORT PERIOD,<br>ESTIMATED DATE OF START-UP: | May 2, 1988 |              |                       |

Note: Line 21 "Cumulative" factor no longer uses a weighted average.

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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-318  
 UNIT NAME Calvert Cliffs - U2  
 DATE May 11, 1983  
 COMPLETED BY C. Behnke  
 TELEPHONE (301)260-4871

REPORT MONTH April 1988

| 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                                                                                                                                                                                                                      |
|-------|--------|-------------------|------------------|---------------------|----------------------------------------------|-------------------------|--------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 88-06 | 880401 | S                 | 18.4             | B                   | N/A                                          | N/A                     | N/A                      | N/A                         | Continued shutdown for pre-summer general maintenance mini-outage.                                                                                                                                                                                                   |
| 88-07 | 880427 | F                 | 87.2             | A                   | 2                                            | 88-04                   | HB                       | PUMPXX                      | Trip on low Steam Generator water level because 21 SGFP tripped for no apparent reason. There were no prior (or subsequent) symptoms.<br>1. Monitor trip circuitry to find root cause.<br>2. Evaluate possible replacement of installed Thrust Bearing wear monitor. |

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

<sup>2</sup> 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)

<sup>3</sup> Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

<sup>4</sup> Exhibit G-Instructions for Preparation of Data Entry Sheets for License Event Report (LER) File (NUREG-0161)

<sup>5</sup> Exhibit I - Same Source

AVERAGE DAILY UNIT POWER LEVEL

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Docket No. 50-318  
 Calvert Cliffs Unit No. 2  
 May 12, 1988  
 Completed by C. Behnke  
 Telephone: (301) 260-4871

MAY 1988

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| Average Daily Power Level<br>(MWe-Net) |     | Average Daily Power Level<br>Day (MWe-Net) |     |
|----------------------------------------|-----|--------------------------------------------|-----|
|                                        | 67  | 17                                         | 874 |
|                                        | 791 | 18                                         | 877 |
| 3                                      | 820 | 19                                         | 880 |
| 4                                      | 871 | 20                                         | 879 |
| 5                                      | 874 | 21                                         | 879 |
| 6                                      | 872 | 22                                         | 878 |
| 7                                      | 870 | 23                                         | 878 |
| 8                                      | 868 | 24                                         | 879 |
| 9                                      | 866 | 25                                         | 877 |
| 10                                     | 868 | 26                                         | 876 |
| 11                                     | 870 | 27                                         | 321 |
| 12                                     | 868 | 28                                         | 0   |
| 13                                     | 871 | 29                                         | 0   |
| 14                                     | 872 | 30                                         | 0   |
| 15                                     | 873 |                                            |     |
| 16                                     | 874 |                                            |     |



Summary of U-2 Operating Experience  
April 1988

| <u>Date</u> | <u>Time</u> | <u>Event Description</u>                                                                                                                                                                                                            |
|-------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4/1         | 0000        | Unit began shutdown in the Pre-Summer General Maintenance Outage (day #35 of 35). The original 23 day schedule was extended (primarily) due to 2-FW-130/133 replacements and FWH 25A/B associated repairs/welds/RTs (radio-graphs). |
| 4/1         | 1821        | Paralleled unit to grid, began power ramp-up.                                                                                                                                                                                       |
| 4/2         | 0200        | Held at 85% for STP-M-213; at 0845 held power to investigate #4 bearing on the Main Turbine. By 1020, began ramp up to 100%.                                                                                                        |
| 4/3         | 1455        | Reduced power to clean waterboxes, returned to full power at 2020.                                                                                                                                                                  |
| 4/27        | 0850        | Unit manually tripped when S/G levels decreased - lost #21 SGFP.                                                                                                                                                                    |
| 4/30        | 2400        | Unit remained shutdown for repairs to #22 S/G Main Steam hanger.                                                                                                                                                                    |

Summary of U-2 Operating Experience  
April 1988

The Unit began this reporting period shut down.

On April 1 at 1821, paralleled Unit to grid; began power ramp-up.

Held at 85% power (0200, 4/2/88) for STP testing, STP-M-213; at 0845, while investigating #4 Main Turbine bearing temperature; @ 1020 began ramp-up.

At 1455, (4-3-88) reduced power to clean waterboxes (returned at 2020).

At 0850 on April 27th, Unit was manually tripped when S/G levels decreased too low (due to loss of #21 SGFP). Stayed shutdown until May 2.

May 5, 1988

REFUELING INFORMATION REQUEST

1. Name of facility: Calvert Cliffs Nuclear Power Plant, Unit No. 2.
2. Scheduled date for next refueling shutdown: April 1, 1989
3. Scheduled date for restart following refueling: May 15, 1989
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.

February 9, 1989

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) 1235

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) 1830                      (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 offload.

April, 1991



CHARLES CENTER • P. O. BOX 1475 • BALTIMORE, MARYLAND 21203

May 11, 1988

JAMES R. LEMONS  
MANAGER  
NUCLEAR OPERATIONS DEPARTMENT

Document Control Desk  
U.S. Nuclear Regulatory Commission  
1 White Flint North  
Floor P1-Room 37  
11555 Rockville Pike  
Rockville, MD 20850

ATTENTION: Document Control Desk

SUBJECT: April Operating Data Reports for Calvert Cliffs  
Units 1 and 2 (Dockets 50-317 and 50-318)

Gentlemen:

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

If there are any questions, please contact Carl Behnke,  
(301) 260-4871.

Sincerely,

J. R. Lemons  
Manager-Nuclear Operations Department

JRL/CB/jaf

Enclosures

cc: W. T. Russell (NRC)  
S. A. McNeil (NRC)  
D. Trimble (NRC)  
P. Ross (NRC)  
T. Magette (DNR)  
D. Reilly (INPO)  
K. Gibbard (DOE)  
K. Gromack (CE)

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