

UNIT 1

OPERATING DATA REPORT

Docket No. 50-317
February 15, 1994
Prepared by Frank Piazza
Telephone: (410) 260-3821

OPERATING STATUS

- 1. UNIT NAME Calvert Cliffs Unit 1
2. REPORTING PERIOD JANUARY 1994
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) 830
8. CHANGE IN CAPACITY RATINGS NONE
9. POWER LEVEL TO WHICH RESTRICTED N/A
10. REASONS FOR RESTRICTIONS N/A

Table with 4 columns: Item, This month, Year-to-Date, Cumulative to Date. Rows include: 11. HOURS IN REPORTING PERIOD, 12. NUMBER OF HOURS REACTOR WAS CRITICAL, 13. REACTOR RESERVE SHUTDOWN HOURS, 14. HOURS GENERATOR ON LINE, 15. UNIT RESERVE SHUTDOWN HOURS, 16. GROSS THERMAL ENERGY GENERATED (MWH), 17. GROSS ELECTRICAL ENERGY GEN'TED (MWH), 18. NET ELECTRICAL ENERGY GENERATED (MWH), 19. UNIT SERVICE FACTOR, 20. UNIT AVAILABILITY FACTOR, 21. UNIT CAPACITY FACTOR (USING MDC NET), 22. UNIT CAPACITY FACTOR (USING DER NET), 23. UNIT FORCED OUTAGE RATE, 24. SHUTDOWNS SCHEDULED OVER THE NEXT

SIX MONTHS (TYPE, DATE AND DURATION):
Refueling, February 8, 1994, 90 Days

25. IF SHUTDOWN AT END OF REPORT PERIOD,
ESTIMATED DATE OF START-UP:
February 2, 1994

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-317
 UNIT NAME Calvert Cliffs-U1
 DATE February 15, 1994
 COMPLETED BY Frank Piazza
 TELEPHONE (410) 260-3821

REPORT MONTH January 1994

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
94-01	940124	F	182.6	A	3	317/94-01	ED	INVT	<p>The Unit automatically shutdown on 1/24/94 at 0926 due to a loss of the 120 Vac Vital Panel 1Y02. The loss of the panel was due to the failure of the voltage regulator card in the 12 Vital Inverter which resulted in the loss of the 120 Vac Vital Panel and the Unit trip.</p> <p>Circuit cards were replaced and load tested both statically and dynamically. Due to the ongoing trouble shooting to determine the exact cause of the failure, an Unusual Event #3765 was declared and the Unit was cooled down and entered into Mode 5 at 2105 on 1/26/94.</p> <p>A Significant Incident Finding Team was established to investigate the cause and to determine long term corrective resolutions.</p>

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. 50-317
 Calvert Cliffs Unit No. 1
 February 15, 1994
 Prepared by Frank Piazza
 Telephone: (410) 260-3821

JANUARY 1994

Day	Average Daily Power Level (MWe-Net)	Day	Average Daily Power Level (MWe-Net)
1	867	17	863
2	867	18	866
3	868	19	867
4	868	20	870
5	868	21	870
6	883	22	870
7	886	23	870
8	868	24	323
9	867	25	0
10	854	26	0
11	853	27	0
12	866	28	0
13	869	29	0
14	872	30	0
15	871	31	0
16	868		

DOCKET NO. 50-317
CALVERT CLIFFS - UNIT 1
February 15, 1994

SUMMARY OF OPERATING EXPERIENCE

January 1994

The unit began the month at 100% reactor power (870 MWe).

On 1/24/94 at 0926, the unit tripped due to a loss of the 120 Vac Vital Panel 1Y02. The loss of the Panel was due to the failure of the voltage regulator in the 12 Vital Inverter. A Significant Incident Finding Team was immediately formed to investigate the cause of the inverter failure and to determine future corrective actions. Because the root cause for the inverter failure was not determined in sufficient time, the unit commenced cooldown at 1050 on 1/26/94 as required by Technical Specifications and entered Mode 5 at 2105. The Inverter Voltage Regulator Board was subsequently found to be faulty and was replaced.

The Unit ended the month shutdown in Mode 3 after starting a plant heat-up.

REFUELING INFORMATION REQUEST

1. Name of facility: Calvert Cliffs Nuclear Power Plant, Unit No. 1.
2. Scheduled date for next refueling shutdown: February 8, 1994. *
3. Scheduled date for restart following refueling: May 9, 1994.
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

Operation after refueling will require either "Core Operating Limits Report" or will require a change to Technical Specification 3/4.2.2, "Linear Heat Rate".

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

Submitted September 1993 for Core Operating Limits Report.
6. Important licensing considerations associated with the refueling.

None identified at this time.
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 2014

* Entry has changed since last report.

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

NOTE 2: 72 Spent Fuel Assemblies in the ISFSI.

 UNIT 2

OPERATING DATA REPORT

Docket No. 50-318
 February 15, 1994
 Prepared by Frank Piazza
 Telephone: (410) 260-3821

OPERATING STATUS

1. UNIT NAME	Calvert Cliffs Unit 2
2. REPORTING PERIOD	JANUARY 1994
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)	860
7. MAXIMUM DEPENDABLE CAP'Y (NET MWe)	830
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	744	147,600
12. NUMBER OF HOURS REACTOR WAS CRITICAL	571.2	571.2	106,608.0
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	1,296.6
14. HOURS GENERATOR ON LINE	568.0	568.0	105,091.6
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,509,766	1,509,766	268,375,309
17. GROSS ELECTRICAL ENERGY GEN'TED (MWH)	506,297	506,297	88,662,166
18. NET ELECTRICAL ENERGY GENERATED (MWH)	483,609	483,609	84,726,743
19. UNIT SERVICE FACTOR	76.3	76.3	71.2
20. UNIT AVAILABILITY FACTOR	76.3	76.3	71.2
21. UNIT CAPACITY FACTOR (USING MDC NET)	78.3	78.3	69.6
22. UNIT CAPACITY FACTOR (USING DER NET)	76.9	76.9	67.9
23. UNIT FORCED OUTAGE RATE	23.7	23.7	5.8
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 February 15, 1994
 COMPLETED BY Frank Piazza
 TELEPHONE (410) 260-3821

REPORT MONTH January 1994

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
94-01	940112	F	176.0	A	3	318/9401	EI	RLY	<p>Unit automatically shutdown at 0552 on 1/12/94 when a protective relay for the 13KV Voltage Regulator which was being installed, but not yet operational, caused the supply breaker (# 252-2103) for the Service Transformer (# U-4000-22) to open. This resulted in the loss of the Service Transformer and actuation of other safety features to trip the Unit.</p> <p>A ground in the associated 125 VDC control circuit interacted with the 125 VDC ground detection system producing a signal which actuated the protective relay and tripped the Unit.</p> <p>All leads for the new voltage regulator protective circuits for both Units were disconnected and the voltage regulator bypass switches were tagged in the shut position, removing the possibility of the circuitry tripping either Unit.</p> <p>A Significant Incident Finding Team was established to investigate the event.</p>

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
 February 15, 1994
 Prepared by Frank Piazza
 Telephone: (410) 260-3821

JANUARY 1994

Day	Average Daily Power Level (MWe-Net)	Day	Average Daily Power Level (MWe-Net)
1	871	17	0
2	869	18	0
3	870	19	168
4	871	20	856
5	871	21	863
6	853	22	865
7	853	23	868
8	776	24	867
9	871	25	864
10	885	26	866
11	886	27	866
12	196	28	869
13	0	29	869
14	0	30	869
15	0	31	869
16	0		

DOCKET NO. 50-318
CALVERT CLIFFS - UNIT 2
February 15, 1994

SUMMARY OF OPERATING EXPERIENCE

January 1994

The Unit began the month at 100% reactor power (875 MWe). The reactor power was reduced to approximately 82% (720 MWe) on 1/8/94 at 0200 for planned maintenance, Main Turbine valve testing, and water box cleaning. Power was restored to 100% (870 MWe) at 2330 on 1/8/94.

On 1/12/94 at 0552, a protective relay for a 13 KV Voltage Regulator that was being installed, but not yet in operation, actuated on a spurious signal and caused a reactor trip. The trip was a result of the opening of the feeder breaker (# 252-2103) for the 13 KV/4 KV step down transformer (U-4000-22). The reactor tripped immediately when protective safety equipment actuated. The spurious relay actuation was caused by an intermittent ground on the DC control power circuit which generated a signal to a new solid state seal-in-relay. This seal-in-relay was overly sensitive because its associated sensor was not yet connected. As part of the immediate corrective actions, the voltage regulator protective circuits for both Units were disconnected and the voltage regulator bypass switches were tagged in the shut position. This action eliminated the possibility of the circuit tripping either Unit until resolution of the problem was completed. A Significant Incident Finding Team was also established to investigate the event for the long term corrective resolutions.

While in a shutdown condition, a leak was detected in the leak off detection line which monitors reactor vessel head seal leak. The line was repaired while the Unit was shutdown.

The Unit was returned to power and paralleled to the grid on 1/19/94 at 1350, remaining at 100% power (865 MWe) for the remainder of the month.

REFUELING INFORMATION REQUEST

1. Name of facility: Calvert Cliffs Nuclear Power Plant, Unit No. 2
2. Scheduled date for next refueling shutdown: March 3, 1995.
3. Scheduled date for restart following refueling: May 17, 1995.
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

Unknown.

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

Unknown.

6. Important licensing considerations associated with the refueling.

None identified at this time.

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 2016.

* Entry has changed since last report.

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

NOTE 2: 72 Spent Fuel Assemblies in the ISFSI.