



**Duquesne Light**

Nuclear Group  
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May 7, 1997

Beaver Valley Power Station  
Unit 1 - Docket No. 50-334, License No. DPR-66  
Unit 2 - Docket No. 50-412, License No. NPF-73  
Monthly Operating Report

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Gentlemen:

In accordance with Appendix A, Technical Specifications, the Monthly Operating Report is submitted for Unit 1 and Unit 2 for the month of April, 1997.

Respectfully,

R. L. LeGrand  
Division Vice President,  
Nuclear Operations /  
Plant Manager

DTJ/slp

Enclosures

cc: NRC Regional Office  
King of Prussia, PA

9705150247 970430  
PDR ADOCK 05000334  
R PDR



The Nuclear Professionals



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NARRATIVE SUMMARY OF  
MONTHLY OPERATING EXPERIENCE

UNIT 1

APRIL 1997

April 1 through April 4	The Unit began the report period shutdown in Mode 5 to continue with repair of the "A" Reactor Coolant Loop Cold Leg Isolation Valve.
April 5 through April 10	Upon satisfactory completion of repairs to the "A" Reactor Coolant Loop Cold Leg Isolation Valve, reactor coolant system heatup began while several issues were resolved prior to entering Mode 4.
April 11	Mode 4 was entered at 0313 hours as plant heatup continued and as preparations were made for entering Mode 3.
April 12	Mode 3 was entered at 1421 hours as plant heatup continued and as preparations were made for entering Mode 2.
April 13	Mode 2 was entered at 2214 hours and the Reactor was taken critical at 2313 hours.
April 14	Mode 1 was entered at 0328 hours. The Unit was synchronized to the electrical grid at 0711 hours and began power escalation towards 100% output.
April 15	The Unit achieved a nominal value of 100% output at 2115 hours.
April 16 through April 30	The Unit operated at a nominal value of 100% output for the remainder of the report period.

In addition to the above, the following events which also occurred during the report period are being reported as required by Technical Specifications.

April 1 through April 30	The Automatic Rod Position Deviation Monitor, although still functional, was not considered operable per Technical Specifications. The limiting condition for operation as specified in the Technical Specifications was met because the deviations between the indicated rod positions were verified to be within their 12 step limits by obtaining analog/digital rod positions at least once every 4 hours.
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NARRATIVE SUMMARY OF  
MONTHLY OPERATING EXPERIENCE

UNIT 1

APRIL 1997

(Continued)

- April 14      With the Unit in Mode 2 and the Reactor critical, the Analog Rod Position Indication (ARPI) for Control Rod G-3 was declared inoperable at 0001 hours due to reading greater than the Technical Specification limit of 12 steps. In addition, the primary detector voltage readings also verified the control rod to be low outside of the 12 step limit. The limiting condition for operation as specified in the Technical Specifications was met because the trippability of the control rod was verified, and the high neutron flux trip setpoint was reduced to  $\leq 85\%$  of rated thermal power. Following recalibration of the ARPI for Control Rod G-3, a channel check was performed satisfactorily and Control Rod G-3 was declared operable at 0226 hours.
- April 15      At 1645 hours, the Analog Rod Position Indication (ARPI) for Control Rod H-2 was declared inoperable due to reading greater than the Technical Specification limit of 12 steps. In addition, the primary detector voltage readings also verified the control rod to be high outside of the 12 step limit. The limiting condition for operation as specified in the Technical Specifications was met because the control rod position was verified to be within the 12 step limit by using the incore movable detectors.
- April 16      Following recalibration of the ARPI for Control Rod H-2, a channel check was performed satisfactorily and Control Rod H-2 was declared operable at 0600 hours.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-334  
 UNIT BVPS Unit 1  
 DATE May 2, 1997  
 COMPLETED BY David T. Jones  
 TELEPHONE (412) 393-4962

MONTH April 1997

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	823
2	0	18	826
3	0	19	825
4	0	20	826
5	0	21	826
6	0	22	825
7	0	23	826
8	0	24	827
9	0	25	827
10	0	26	824
11	0	27	824
12	0	28	824
13	0	29	824
14	209	30	819
15	670	31	---
16	821		

INSTRUCTIONS

On this form, list the average daily unit power level MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

OPERATING DATA REPORT

DOCKET NO.: 50-334  
 REPORT DATE: 05/02/97  
 COMPLETED BY: DAVID T. JONES  
 TELEPHONE: (412) 393-4962

OPERATING STATUS

- \* \* \* \* \*
- |   |      |           |   |
|---|------|-----------|---|
| 1. UNIT NAME: BEAVER VALLEY POWER STATION, UNIT 1 |      | *Notes    | * |
| 2. REPORTING PERIOD: APRIL 1997                   |      | *         | * |
| 3. LICENSED THERMAL POWER (Mwt):                  | 2652 | *         | * |
| 4. NAMEPLATE RATING (Gross MWe):                  | 923  | *         | * |
| 5. DESIGN ELECTRICAL RATING (Net MWe):            | 835  | *         | * |
| 6. MAX. DEPENDABLE CAPACITY (Gross MWe):          | 860  | *         | * |
| 7. MAX. DEPENDABLE CAPACITY (Net MWe):            | 810  | * * * * * | * |

8. IF CHANGES OCCUR IN CAPACITY RATINGS SINCE LAST REPORT, GIVE REASONS:

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9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (Net MWe): None  
 10. REASONS FOR RESTRICTIONS, IF ANY: N/A

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	THIS MONTH	YEAR TO DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD:	719.0	2879.0	184079.0
12. NO. OF HRS. REACTOR WAS CRITICAL:	408.8	2262.9	122910.8
13. REACTOR RESERVE SHUTDOWN HOURS:	0.0	0.0	4482.8
14. HOURS GENERATOR WAS ON LINE:	400.8	2254.9	120741.5
15. UNIT RESERVE SHUTDOWN HOURS:	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GEN. (MWH):	1023580.0	5879346.0	293153088.5
17. GROSS ELECT. ENERGY GEN. (MWH):	337912.0	1957555.0	94825147.0
18. NET ELECTRICAL ENERGY GEN. (MWH):	314092.0	1841345.0	88702914.0
19. UNIT SERVICE FACTOR: (PERCENT)	55.7	78.3	67.3
20. UNIT AVAILABILITY FACTOR: (PERCENT)	55.7	78.3	67.3
21. UNIT CAPACITY FACTOR (MDC): PCT	53.9	79.0	61.8
22. UNIT CAPACITY FACTOR (DER): PCT	52.3	76.6	59.9
23. UNIT FORCED OUTAGE RATE: (PERCENT)	44.3	21.7	15.1

24. SHUTDOWNS SCHEDULED OVER NEXT SIX MONTHS (TYPE, DATE, AND DURATION OF EACH):  
THE UNIT'S 12TH REFUELING OUTAGE IS SCHEDULED TO BEGIN ON 9/5/97 AND LAST FOR 45 DAYS.

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25. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: \_\_\_\_\_

26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

	FORECAST	ACHIEVED
INITIAL CRITICALITY	<u>N/A</u>	<u>N/A</u>
INITIAL ELECTRICITY	<u>N/A</u>	<u>N/A</u>
COMMERCIAL OPERATION	<u>N/A</u>	<u>N/A</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS (≥20%)

Docket No. 50-334  
 Unit Name BVPS Unit #1  
 Date May 2, 1997  
 Completed By David T. Jones  
 Telephone (412) 393-4962

REPORT MONTH April 1997

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
4	970401	F	109.8	A	4	N/A	CB	VALVEX	The Unit remained in cold shutdown to complete repair of a body-to-bonnet flange joint leak on the "A" Reactor Coolant Loop Cold Leg Isolation Valve.
5	970405	F	209.4	H	9	N/A	ZZ	ZZZZZZ	The Unit continued with reactor coolant system heatup and startup activities, resolving several issues prior to entering Mode 4 and prior to synchronizing to the electrical grid.

<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 Exam  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram  
 4-Cont'd. from Previous Month  
 5-Reduction  
 9-Other

<sup>4</sup>  
 Exhibit F-Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG0161).

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

NARRATIVE SUMMARY OF  
MONTHLY OPERATING EXPERIENCE

UNIT 2

APRIL 1997

- April 1            The Unit began the report period operating at approximately 59% output to complete repair of the mechanical seal on the "A" Main Feedwater Pump. Following completion of repairs, the Unit began to increase power towards 100% output at 0850 hours. The Unit achieved a nominal value of 100% output at 1755 hours.
- April 2  
through  
April 12        The Unit operated at a nominal value of 100% output.
- April 13        At 0302 hours, the Unit began to decrease output to approximately 39% to evaluate a steam leak at the manway on the Moisture Separator Drain Receiver Tank for possible leak repair. An output of approximately 39% was achieved at 0612 hours.
- April 14        The Unit remained at approximately 39% output while preparations for leak repair of the manway on the Moisture Separator Drain Receiver Tank continued.
- April 15        The Unit began to increase power towards 100% output at 1145 hours. The Unit achieved a nominal value of 100% output at 2125 hours.
- April 16  
through  
April 30        The Unit operated at a nominal value of 100% output.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-412  
 UNIT BVPS Unit 2  
 DATE May 2, 1997  
 COMPLETED BY David T. Jones  
 TELEPHONE (412) 393-4962

MONTH April 1997

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	657	17	836
2	833	18	836
3	830	19	836
4	827	20	835
5	826	21	835
6	822	22	836
7	837	23	836
8	838	24	836
9	838	25	835
10	836	26	836
11	833	27	833
12	829	28	834
13	381	29	835
14	271	30	829
15	461	31	---
16	832		

INSTRUCTIONS

On this form, list the average daily unit power level MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.



OPERATING DATA REPORT

DOCKET NO.: 50-412  
 REPORT DATE: 05/02/97  
 COMPLETED BY: DAVID T. JONES  
 TELEPHONE: (412) 393-4962

OPERATING STATUS

- \*\*\*\*\*
1. UNIT NAME: BEAVER VALLEY POWER STATION, UNIT 2 \*Notes \*
2. REPORTING PERIOD: APRIL 1997 \*
3. LICENSED THERMAL POWER (Mwt): 2652 \*
4. NAMEPLATE RATING (Gross MWe): 923 \*
5. DESIGN ELECTRICAL RATING (Net MWe): 836 \*
6. MAX. DEPENDABLE CAPACITY (Gross MWe): 870 \*
7. MAX. DEPENDABLE CAPACITY (Net MWe): 820 \*\*\*\*\*

8. IF CHANGES OCCUR IN CAPACITY RATINGS SINCE LAST REPORT, GIVE REASONS:

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9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (Net MWe): None

10. REASONS FOR RESTRICTIONS, IF ANY: N/A

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	THIS MONTH	YEAR TO DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD:	719.0	2879.0	82862.0
12. NO. OF HRS. REACTOR WAS CRITICAL:	719.0	2401.7	70122.7
13. REACTOR RESERVE SHUTDOWN HOURS:	0.0	0.0	0.0
14. HOURS GENERATOR WAS ON LINE:	719.0	2375.3	69640.0
15. UNIT RESERVE SHUTDOWN HOURS:	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GEN. (MWH):	1788741.0	5980776.0	173192619.0
17. GROSS ELECT. ENERGY GEN. (MWH):	592250.0	1986841.0	56483164.0
18. NET ELECTRICAL ENERGY GEN. (MWH):	561678.0	1874129.0	53362725.0
19. UNIT SERVICE FACTOR: (PERCENT)	100.0	82.5	84.0
20. UNIT AVAILABILITY FACTOR: (PERCENT)	100.0	82.5	84.0
21. UNIT CAPACITY FACTOR (MDC): PCT	95.3	79.4	78.2
22. UNIT CAPACITY FACTOR (DER): PCT	93.4	77.9	77.0
23. UNIT FORCED OUTAGE RATE: (PERCENT)	0.0	17.5	4.9

24. SHUTDOWNS SCHEDULED OVER NEXT SIX MONTHS (TYPE, DATE, AND DURATION OF EACH):

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25. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: \_\_\_\_\_

26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

	FORECAST	ACHIEVED
INITIAL CRITICALITY	<u>N/A</u>	<u>N/A</u>
INITIAL ELECTRICITY	<u>N/A</u>	<u>N/A</u>
COMMERCIAL OPERATION	<u>N/A</u>	<u>N/A</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS (≥20%)

Docket No. 50-412  
 Unit Name BVPS Unit #2  
 Date May 2, 1997  
 Completed By David T. Jones  
 Telephone (412) 393-4962

REPORT MONTH April 1997

No.	Date	Type1	Duration (Hours)	Reason2	Method of Shutting Down Reactor3	Licensee Event Report #	System Code4	Component Code5	Cause & Corrective Action to Prevent Recurrence
10	970401	F	0	B	4	N/A	CH	PUMPXX	While operating at approximately 59% output, the Unit completed repair of the mechanical seal on the "A" Main Feedwater Pump.
11	970413	F	0	B	5	N/A	HH	HTEXCH	The Unit reduced output to approximately 39% to evaluate and leak repair a steam leak on the manway of the Moisture Separator Drain Receiver Tank.

1  
 F-Forced  
 S-Scheduled

2  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Exam  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

3  
 Method:  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram  
 4-Cont'd. from Previous Month  
 5-Reduction  
 9-Other

4  
 Exhibit F-Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG0161).

5  
 Exhibit H-Same Source