



Nuclear Group
P.O. Box 4
Shippingport, PA 15077-0004

Telephone (412) 393-6000

February 6, 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, D.C. 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 January, 1997.

Respectfully,

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

DTJ/slp

Enclosures

cc: NRC Regional Office
King of Prussia, PA

130038



The Nuclear Professionals

9702130149 970131
PDR ADOCK 05000334
R PDR

NARRATIVE SUMMARY OF
MONTHLY OPERATING EXPERIENCE

UNIT 1

JANUARY 1997

January 1 through January 23 The Unit operated at a nominal value of 100% output.

January 24 At 1900 hours, the Unit began a power reduction to approximately 90% output to clear the "B" Waterbox of the Main Unit Condenser for repair of a tube leak. An output of approximately 90% was achieved at 1940 hours.

January 25 Following clearing of the "B" Waterbox for repair of a tube leak, the Unit began to escalate output to approximately 97% at 0235 hours. The Unit achieved approximately 97% output at 0530 hours.

January 26 Following satisfactory repair of two tube leaks in the "B" Waterbox, the "D" Waterbox was cleared for testing, however, no tube leaks were found. Following return of both waterboxes to service, a return to full power was commenced at 2300 hours.

January 27 A nominal value of 100% output was achieved at 0146 hours.

January 28 through January 31 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.

January 1 through January 31 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.

January 24 The Analog Rod Position Indication (ARPI) for control rod H-2 was declared inoperable at 1944 hours due to reading greater than the Technical Specification limit of 12 steps. Actual rod position was verified to be within the 12 step limit by obtaining primary detector voltage readings.

NARRATIVE SUMMARY OF
MONTHLY OPERATING EXPERIENCE

UNIT 1

JANUARY 1997

(Continued)

January 25

After the ARPI returned to within 12 steps, control rod H-2 was declared operable at 1030 hours. Overhaul of the detector for control rod H-2 has been planned for during the next refueling outage.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-334
UNIT BVPS Unit 1
DATE February 3, 1997
COMPLETED BY David T. Jones
TELEPHONE (412) 393-4962

MONTH January 1997

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>834</u>	17	<u>826</u>
2	<u>826</u>	18	<u>826</u>
3	<u>821</u>	19	<u>825</u>
4	<u>819</u>	20	<u>829</u>
5	<u>822</u>	21	<u>830</u>
6	<u>831</u>	22	<u>827</u>
7	<u>831</u>	23	<u>832</u>
8	<u>831</u>	24	<u>814</u>
9	<u>829</u>	25	<u>791</u>
10	<u>832</u>	26	<u>810</u>
11	<u>829</u>	27	<u>830</u>
12	<u>826</u>	28	<u>830</u>
13	<u>824</u>	29	<u>828</u>
14	<u>823</u>	30	<u>828</u>
15	<u>823</u>	31	<u>827</u>
16	<u>826</u>		

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: 02/04/97
 COMPLETED BY: DAVID T. JONES
 TELEPHONE: (412) 393-4062

OPERATING STATUS

1. UNIT NAME: BEAVER VALLEY POWER STATION, UNIT 1	*****		
2. REPORTING PERIOD: JANUARY 1997	*Notes		*
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:

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

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

	THIS MONTH	YEAR TO DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD:	744.0	744.0	181944.0
12. NO. OF HRS. REACTOR WAS CRITICAL:	744.0	744.0	121391.9
13. REACTOR RESERVE SHUTDOWN HOURS:	0.0	0.0	4482.8
14. HOURS GENERATOR WAS ON LINE:	744.0	744.0	119230.6
15. UNIT RESERVE SHUTDOWN HOURS:	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GEN. (MWH):	1957638.0	1957638.0	289231380.5
17. GROSS ELECT. ENERGY GEN. (MWH):	648420.0	648420.0	93516012.0
18. NET ELECTRICAL ENERGY GEN. (MWH):	613780.0	613780.0	87475349.0
19. UNIT SERVICE FACTOR: (PERCENT)	100.0	100.0	67.3
20. UNIT AVAILABILITY FACTOR: (PERCENT)	100.0	100.0	67.3
21. UNIT CAPACITY FACTOR (MDC): PCT	101.8	101.8	61.7
22. UNIT CAPACITY FACTOR (DER): PCT	98.8	98.8	59.8
23. UNIT FORCED OUTAGE RATE: (PERCENT)	0.0	0.0	14.9

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

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 ($\geq 20\%$)

Docket No. 50-334

Unit Name BVPS Unit #1

Date February 3, 1997

Completed By David T. Jones

Telephone (412) 393-4962

REPORT MONTH January 1997

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
None									

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

NARRATIVE SUMMARY OF
MONTHLY OPERATING EXPERIENCE

UNIT 2

JANUARY 1997

January 1 through January 2	The Unit began the report period operating at approximately 93% output while planned repair of the "B" Separator Drain Receiver Drain Pump occurred offsite.
January 3	Following repair and return of the "B" Separator Drain Receiver Drain Pump to service, the Unit commenced a return to full power at 1814 hours.
January 4	A nominal value of 100% output was achieved at 0546 hours.
January 5	The Unit operated at a nominal value of 100% output.
January 6	At 0150 hours, approximately 20 MWe of output was lost due to multiple secondary plant related component problems. At 0556 hours, the Unit experienced a Reactor trip from approximately 98% output due to a Turbine Generator trip. This was initiated by spurious operation of a Main Transformer Ground Protection Relay unrelated to the secondary plant problems occurring at the time. The Unit was subsequently stabilized in Mode 3.
January 7 through January 9	The Unit remained in Mode 3 while several secondary plant related component problems which were observed prior to the trip and during the post-trip event recovery required resolution prior to the Unit starting up.
January 10	The Unit remained in Mode 3 while preparations for entering Mode 2 proceeded. At 2249 hours, startup activities were aborted due to a potential problem concerning flood seals on the Recirculation Spray Pumps.
January 11	At 1550 hours, Technical Specification 3.0.3 was entered based on a design basis challenge of the Recirculation Spray Pumps during a flood scenario. Flexible boot flood seals were missing/degraded from all four Recirculation Spray Pumps between the pump casings and floor as required by the UFSAR. The Unit initiated a cooldown to Mode 5 at 1645 hours while installation of flood seals proceeded. Mode 4 was entered at 2221 hours.
January 12	Mode 5 was entered at 2205 hours.
January 13	Following installation of the flood seals for each Recirculation Spray Pump, the Unit commenced to heatup to Mode 4 at 2220 hours. Mode 4 was entered at 2240 hours.

NARRATIVE SUMMARY OF
MONTHLY OPERATING EXPERIENCE

UNIT 2

JANUARY 1997

(Continued)

January 14	Mode 3 was entered at 0239 hours. Mode 2 was entered at 1752 hours and the reactor was taken critical at 1912 hours. Mode 1 was entered at 2036 hours.
January 15	The Unit was synchronized to the electrical grid at 1310 hours and began power escalation at 1558 hours. Per a Station Management decision, escalation to full power was halted at approximately 28% output at 1900 hours to evaluate the impact on Beaver Valley of an industry event concerning a potential water hammer issue with the Recirculation Spray System.
January 16	The Unit remained at approximately 28% output while evaluation of the impact of the potential water hammer issue with the Recirculation Spray System at Beaver Valley continued.
January 17	Following satisfactory evaluation of the impact of the potential water hammer issue with the Recirculation Spray System at Beaver Valley, the Unit commenced a load increase towards 100% output at 2155 hours.
January 18 through January 19	The Unit continued to increase output towards full power while verification of secondary plant operations continued.
January 20	The Unit achieved a nominal value of 100% output at 1224 hours.
January 21 through January 31	The Unit operated at a nominal value of 100% output for the remainder of the report period.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-412
UNIT BVPS Unit 2
DATE February 3, 1997
COMPLETED BY David T. Jones
TELEPHONE (412) 393-4962

MONTH January 1997

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>792</u>	17	<u>161</u>
2	<u>786</u>	18	<u>530</u>
3	<u>791</u>	19	<u>820</u>
4	<u>826</u>	20	<u>831</u>
5	<u>833</u>	21	<u>834</u>
6	<u>202</u>	22	<u>831</u>
7	<u>0</u>	23	<u>840</u>
8	<u>0</u>	24	<u>839</u>
9	<u>0</u>	25	<u>839</u>
10	<u>0</u>	26	<u>840</u>
11	<u>0</u>	27	<u>839</u>
12	<u>0</u>	28	<u>842</u>
13	<u>0</u>	29	<u>828</u>
14	<u>0</u>	30	<u>828</u>
15	<u>37</u>	31	<u>827</u>
16	<u>141</u>		

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: 02/04/97
 COMPLETED BY: DAVID T. JONES
 TELEPHONE: (412) 393-4962

OPERATING STATUS

1. UNIT NAME: BEAVER VALLEY POWER STATION, UNIT 2	*****	*Notes	*
2. REPORTING PERIOD: JANUARY 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:

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

	THIS MONTH	YEAR TO DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD:	744.0	744.0	80727.0
12. NO. OF HRS. REACTOR WAS CRITICAL:	538.7	538.7	68259.7
13. REACTOR RESERVE SHUTDOWN HOURS:	0.0	0.0	0.0
14. HOURS GENERATOR WAS ON LINE:	520.8	520.8	67785.5
15. UNIT RESERVE SHUTDOWN HOURS:	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GEN. (MWH):	1232795.0	1232795.0	168444638.0
17. GROSS ELECT. ENERGY GEN. (MWH):	405361.0	405361.0	54501784.0
18. NET ELECTRICAL ENERGY GEN. (MWH):	377293.0	377293.0	51865889.0
19. UNIT SERVICE FACTOR: (PERCENT)	70.0	70.0	84.0
20. UNIT AVAILABILITY FACTOR: (PERCENT)	70.0	70.0	84.0
21. UNIT CAPACITY FACTOR (MDC): PCT	61.8	61.8	78.0
22. UNIT CAPACITY FACTOR (DER): PCT	60.7	60.7	76.9
23. UNIT FORCED OUTAGE RATE: (PERCENT)	30.0	30.0	4.7

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

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 ($\geq 20\%$)

Docket No. 50-412

Unit Name BVPS Unit #2

Date February 3, 1997

Completed By David T. Jones

Telephone (412) 393-4962

REPORT MONTH January 1997

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
1	970106	F	112.9	A	3	2-97-001	EB	RELAYX	The Unit experienced a Reactor trip from approximately 98% output due to a Turbine Generator trip which was initiated by spurious operation of a Main Transformer Ground Protection Relay. This relay protection was removed from service since it was only needed to be in service for backfeed conditions only.
2	970110	F	91.0	H	9	2-97-002	SB	PUMPXX	Per Technical Specification requirements, the Unit cooled down to cold shutdown conditions while missing/degraded flexible boot flood seals were installed on the four Recirculation Spray Pumps in accordance with the UFSAR and design basis.
3	970114	F	19.3	H	9	N/A	ZZ	ZZZZZZ	The Unit remained shutdown to complete preparations for startup.

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

UNIT SHUTDOWNS AND POWER REDUCTIONS ($\geq 20\%$)

Docket No. 50-412
 Unit Name BVPS Unit #2
 Date February 3, 1997
 Completed By David T. Jones
 Telephone (412) 393-4962

REPORT MONTH January 1997

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
4	970115	F	0	F	9	N/A	SB	PUMPXX	The Unit halted escalation to full power at approximately 28% output to evaluate the impact on Beaver Valley of an industry event concerning a potential water hammer issue with the Recirculation Spray System.

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