



Beaver Valley Power Station  
P. O. Box 4  
Shippingport, PA 15077

L-00-063

May 5, 2000

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 NRC Generic Letter 97-02, "Revised Contents of the Monthly Operating Report", and Unit 1 and 2 Technical Specification 6.9.4, the "Monthly Operating Report" is submitted for Unit 1 and Unit 2 for the month of April 2000.

Respectfully,

Lew W. Myers  
Senior Vice-President - Nuclear

DTJ/slp  
Enclosures  
cc: NRC Regional Office  
King of Prussia, PA

IE24

# UNIT SHUTDOWNS

DOCKET NO. 50-334  
UNIT NAME BVPS Unit #1  
DATE May 2, 2000  
COMPLETED BY David T. Jones  
TELEPHONE (412) 393-4962

REPORTING PERIOD: April 2000

| No. | Date   | Type<br>F: Forced<br>S: Scheduled | Duration<br>(Hours) | Reason<br>(1) | Method of<br>Shutting<br>Down (2) | Cause / Corrective Actions<br><br>Comments                                                                                                                                                                                                                                                                                                                             |
|-----|--------|-----------------------------------|---------------------|---------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3   | 000401 | S                                 | 106.1               | C             | 4                                 | The Unit remained shutdown for its planned 13th Refueling Outage.                                                                                                                                                                                                                                                                                                      |
| 4   | 000405 | F                                 | 59.1                | C             | 5                                 | The planned 13th Refueling Outage was extended to complete startup activities which were delayed due to an unplanned required overhaul of the 1A Inside Recirculation Spray Pump.                                                                                                                                                                                      |
| 5   | 000408 | S                                 | 9.7                 | B             | 5                                 | The Unit was removed from service to permit planned Turbine overspeed trip testing, and a planned balance move on the Turbine in order to reduce bearing vibrations. (The Reactor remained critical.)                                                                                                                                                                  |
| 6   | 000409 | S                                 | 19.7                | B             | 5                                 | The Unit was removed from service to permit another planned balance move on the Turbine in order to further reduce bearing vibrations. (The Reactor remained critical.)                                                                                                                                                                                                |
| 7   | 000417 | F                                 | 25.0                | A             | 2                                 | The Reactor was manually tripped in response to a decrease in Condenser vacuum caused by a loss of auxiliary steam pressure. The loss of auxiliary steam pressure occurred when a steam supply pressure control valve failed closed due to a loss of its actuator air supply caused by blown packing from the actuator. The valve was repaired and the Unit restarted. |

## (1) 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)

## (2) Method

- 1 - Manual
- 2 - Manual Trip / Scram
- 3 - Automatic Trip / Scram
- 4 - Continuation
- 5 - Other (Explain)

## UNIT SHUTDOWNS

|              |                |
|--------------|----------------|
| DOCKET NO.   | 50-334         |
| UNIT NAME    | BVPS Unit #1   |
| DATE         | May 2, 2000    |
| COMPLETED BY | David T. Jones |
| TELEPHONE    | (412) 393-4962 |

REPORTING PERIOD: April 2000

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### SUMMARY:

The Unit began the report period shutdown in Mode 5 (cold shutdown) as startup from the planned 13th Refueling Outage continued. On 04/04/00, plant heatup continued as Mode 4 was entered at 0632 hours and Mode 3 was entered at 1906 hours. Mode 2 was entered at 2233 hours on 04/06/00 and the Reactor was taken critical at 0001 hours on 04/07/00. Mode 1 was entered at 1152 hours, and the Unit was synchronized to the electrical grid at 2207 hours on 04/07/00 officially ending the 13th Refueling Outage. Output was then escalated to approximately 23% output for fuel preconditioning. At 0755 hours on 04/08/00, the Unit began to shutdown in preparation for a planned Turbine Overspeed Trip Test. The Unit was removed from service at 1151 hours on 04/08/00. While shutdown, a planned balance move was also performed on the Turbine in order to reduce bearing vibrations. The Unit was then resynchronized to the electrical grid at 2137 hours on 04/08/00, and taken to approximately 27% output for fuel preconditioning. At 1846 hours on 04/09/00, the Unit began to shutdown in preparation for another planned balance move on the Turbine in order to further reduce bearing vibrations. The Unit was removed from service at 2016 hours and entered Mode 2 at 2051 hours on 04/09/00. The Reactor has remained critical during all prior shutdown evolutions since starting up on 04/07/00. Following completion of the balance move on the Turbine, the Unit entered Mode 1 at 1323 hours and was resynchronized to the electrical grid at 1556 hours on 04/10/00. The Unit was then taken to approximately a 27% output plateau for fuel preconditioning. Following completion of a flux map at approximately 27% output, the Unit commenced to increase power towards 75% output at 1913 hours on 04/11/00. An output plateau of approximately 67% output was achieved at 1100 hours on 04/12/00 for fuel preconditioning. Following completion of a flux map at approximately 67% output, the Unit commenced to increase power towards 90% output at 0340 hours on 04/14/00. An output plateau of approximately 83% output was achieved at 0938 hours on 04/14/00 for fuel preconditioning. Following completion of a flux map at approximately 83% output, the Unit commenced to increase power towards 90% output at 0835 hours on 04/15/00. An output plateau of approximately 91% output was achieved at 1105 hours on 04/15/00 for calibration of nuclear instrumentation. On 04/16/00 at 2015 hours, the Unit commenced to increase output to full power. A nominal value of 100% output was achieved at 0537 hours on 04/17/00.

The Unit continued to operate at a nominal value of 100% output until 1309 hours on 04/17/00, when the Reactor was manually tripped in response to a decrease in Condenser vacuum caused by a loss of auxiliary steam pressure. The Unit was stabilized in Mode 3 as preparations for startup continued. On 04/18/00, Mode 2 was entered at 0550 hours, the Reactor was taken critical at 0657 hours, Mode 1 was entered at 0749 hours, the Unit was synchronized to the electrical grid at 1408 hours, then power was escalated to approximately 29% output. At 1841 hours on 04/18/00, the Unit commenced to reduce output due to increasing backpressure in the Main Unit Condenser. The power reduction was halted at approximately 10% output at 1900 hours on 04/18/00 with stable Condenser vacuum, but continuing air inleakage into the Main Unit Condenser. At 1940 hours on 04/18/00, Reactor power had been increased and stabilized at approximately 15% output. The source of the air inleakage into the Main Unit Condenser was discovered and repaired, and the Unit was returned to approximately 29% output at 0700 hours on 04/19/00. The Unit remained at approximately 29% output due to a secondary Chemistry hold until 1115 hours on 04/20/00, when the Unit commenced to increase output to full power. A nominal value of 100% output was achieved at 0539 hours on 04/21/00.

(continued on the next page)

## UNIT SHUTDOWNS

|              |                |
|--------------|----------------|
| DOCKET NO.   | 50-334         |
| UNIT NAME    | BVPS Unit #1   |
| DATE         | May 2, 2000    |
| COMPLETED BY | David T. Jones |
| TELEPHONE    | (412) 393-4962 |

REPORTING PERIOD: April 2000

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### SUMMARY:

The Unit continued to operate at a nominal value of 100% output until 1150 hours on 04/23/00, when a load reduction to 60% output was commenced to repair a degrading oil leak on the "A" Main Feedwater Pump. A reduced output of approximately 61% was achieved at 1529 hours on 04/23/00. Following completion of repair of the oil leak on the "A" Main Feedwater Pump, the Unit commenced to return to full power at 2340 hours on 04/23/00. A nominal value of 100% output was achieved at 0800 hours on 04/24/00. The Unit continued to operate at a nominal value of 100% output for the remainder of the report period.

In addition to the above, the following event which also occurred during the report period is being reported as required by Technical Specification 3.1.3.2, Note (3). On 04/23/00 at 1222 hours, the Analog Rod Position Indication (ARPI) for Control Rod F10 read greater than the Technical Specification limit of 12 steps. At 1236 hours, the ARPI for Control Rod F10 was returned to within the 12 step limit and was declared operable.

# OPERATING DATA REPORT

DOCKET NO.: 50-334  
UNIT NAME: BVPS UNIT #1  
REPORT DATE: 05/02/00  
COMPLETED BY: DAVID T. JONES  
TELEPHONE: (412) 393-4962

1a. REPORTING PERIOD: APRIL 2000  
1. DESIGN ELECTRICAL RATING (Net Mwe): 835  
2. MAX. DEPENDABLE CAPACITY (Net Mwe): 810

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\*Notes\*  
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|                                      | THIS MONTH | YEAR TO DATE | CUMULATIVE  |
|--------------------------------------|------------|--------------|-------------|
| 3a. HOURS IN REPORTING PERIOD:       | 719.0      | 2903.0       | 210383.0    |
| 3. NO. OF HRS. REACTOR WAS CRITICAL: | 558.2      | 1650.7       | 138772.6    |
| 4. SERVICE HOURS GENERATOR ON LINE:  | 499.5      | 1589.6       | 136370.8    |
| 5. UNIT RESERVE SHUTDOWN HOURS:      | 0.0        | 0.0          | 0.0         |
| 6. NET ELECTRICAL ENERGY GEN. (MWH): | 295596.0   | 1163171.0    | 100955271.0 |
| 7. GROSS ELECT. ENERGY GEN. (MWH):   | 323416.0   | 1243711.0    | 107907734.0 |
| 8. GROSS THERMAL ENERGY GEN. (MWH):  | 1013809.0  | 3728193.0    | 333067429.5 |
| 9. UNIT AVAILABILITY FACTOR (%):     | 69.5       | 54.8         | 66.3        |
| 10. UNIT CAPACITY FACTOR (MDC) (%):  | 50.8       | 49.5         | 61.2        |
| 11. UNIT FORCED OUTAGE RATE (%):     | 14.4       | 5.0          | 17.7        |

# UNIT SHUTDOWNS

DOCKET NO. 50-412  
 UNIT NAME BVPS Unit #2  
 DATE May 2, 2000  
 COMPLETED BY David T. Jones  
 TELEPHONE (412) 393-4962

REPORTING PERIOD: April 2000

| No. | Date | Type                      | Duration<br>(Hours) | Reason<br>(1) | Method of<br>Shutting<br>Down (2) | Cause / Corrective Actions |
|-----|------|---------------------------|---------------------|---------------|-----------------------------------|----------------------------|
|     |      | F: Forced<br>S: Scheduled |                     |               |                                   | Comments                   |
|     |      |                           |                     |               |                                   | NONE                       |

## (1) 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)

## (2) Method

- 1 - Manual
- 2 - Manual Trip / Scram
- 3 - Automatic Trip / Scram
- 4 - Continuation
- 5 - Other (Explain)

## SUMMARY:

The Unit began the report period operating at a nominal value of 100% output. The Unit continued to operate at a nominal value of 100% output until 2300 hours on 04/29/00, when a load reduction to 40% output was commenced to repack the "A" Heater Drain Pump. A reduced output of approximately 40% was achieved at 0400 hours on 04/30/00. Following completion of maintenance on the "A" Heater Drain Pump, the Unit commenced to return to full power at 1545 hours on 04/30/00. The Unit was at approximately 95% output at the end of the report period and achieved a nominal value of 100% output at 0110 hours on 05/01/00.

# OPERATING DATA REPORT

DOCKET NO.: 50-412  
UNIT NAME: BVPS UNIT #2  
REPORT DATE: 05/02/00  
COMPLETED BY: DAVID T. JONES  
TELEPHONE: (412) 393-4962

1a. REPORTING PERIOD: APRIL 2000  
1. DESIGN ELECTRICAL RATING (Net Mwe): 836  
2. MAX. DEPENDABLE CAPACITY (Net Mwe): 820

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\*Notes\*  
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|                                      | THIS MONTH | YEAR TO DATE | CUMULATIVE  |
|--------------------------------------|------------|--------------|-------------|
| 3a. HOURS IN REPORTING PERIOD:       | 719.0      | 2903.0       | 109166.0    |
| 3. NO. OF HRS. REACTOR WAS CRITICAL: | 719.0      | 2903.0       | 87706.9     |
| 4. SERVICE HOURS GENERATOR ON LINE:  | 719.0      | 2903.0       | 87088.1     |
| 5. UNIT RESERVE SHUTDOWN HOURS:      | 0.0        | 0.0          | 0.0         |
| 6. NET ELECTRICAL ENERGY GEN. (MWH): | 596235.0   | 2266489.0    | 67425079.0  |
| 7. GROSS ELECT. ENERGY GEN. (MWH):   | 627218.0   | 2389520.0    | 71327216.0  |
| 8. GROSS THERMAL ENERGY GEN. (MWH):  | 1875908.0  | 7155351.0    | 218067785.0 |
| 9. UNIT AVAILABILITY FACTOR (%):     | 100.0      | 100.0        | 79.8        |
| 10. UNIT CAPACITY FACTOR (MDC) (%):  | 101.1      | 95.2         | 75.1        |
| 11. UNIT FORCED OUTAGE RATE (%):     | 0.0        | 0.0          | 11.7        |