

DUQUESNE LIGHT COMPANY
Beaver Valley Power Station

NARRATIVE SUMMARY OF MONTHLY OPERATING EXPERIENCE-NOVEMBER 1980

- November 1 through November 9 Station in Operating Mode 3 with the Reactor Coolant System temperature and pressure at approximately 545F and 2220 PSIG, respectively.
- November 10 through November 11 Station in Operating Mode 3 with the Reactor Coolant System temperature and pressure at approximately 545[°] and 2220 PSIG, respectively. Commenced diluting of the Reactor Coolant System for the approach to initial criticality at 2210 hours on November 10. Initial criticality was achieved at 0535 hours on November 11 and Low Power Physics Testing was begun.
- November 11 through November 15 Station in Operating Mode 2 in the Low Power Physics testing decade. Low Power Physics testing was in progress. On November 14 at 1952 hours the reactor was manually tripped in accordance with the Low Power Physics testing procedure. The reactor was returned to criticality at 0515 hours on November 15.
- November 16 Station in Operating Mode 2 in the Low Power Physics testing decade. At 2330 hours the reactor was manually tripped for Low Power Physics testing and at 0605 hours it was returned to criticality.
- November 17 Station in Operating Mode 2 in the Low Power Physics testing decade. At 1403 hours a Reactor Trip and Safety Injection occurred. One channel of the Steam Break Protection System was failing low, oscillating about the trip point, and it was decided to place the channel in the tripped mode. The wrong channel was selected causing a 2/3 Low Steam Pressure Safety Injection & Reactor Trip. At 2015 hours batching of the Boron Injection Tank was begun.
- November 18 through November 19 Station in Operating Mode 3 with the Reactor Coolant System temperature and pressure at approximately 542F and 2235 PSIG. The reactor was returned to criticality at 2030 hours on November 19.
- November 20 Station in Operating Mode 2 with a nominal 2% thermal power. Main Unit warm-up was in progress and the turbine achieved synchronous speed at 1842 hours. At 1851 hours a reactor trip occurred due to a turbine trip from high steam generator level when the operator had difficulty controlling the levels in MANUAL.
- November 21 Station in Operating Mode 3 with the Reactor Coolant System temperature and pressure at approximately 530F and 2235 PSIG. The reactor was taken critical at 0246 hours and the Unit was synchronized at 0650 hours. At 0728 hours the turbine and reactor tripped due to 1B high Steam Generator level during transfer from the main feed-water system bypass flow control valves to the main flow control valves when a faulty signal isolator removed the feedwater flow signal to the automatic level controller.

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NARRATIVE SUMMARY OF MONTHLY OPERATING EXPERIENCE - November 1980

- November 22 Station in Operating Mode 3. The Reactor Coolant System temperature and pressure were approximately 545F and 2235 PSIG. The reactor was returned to criticality at 1029 hours and the Main Unit was synchronized at 1345 hours.
- November 23 Station in Operating Mode 1 at 35.5% reactor power. At 0058 hours a reactor trip occurred due to a turbine trip during performance of turbine thrust bearing test. The reactor was returned to criticality at 0338 hours. At 0642 hours the reactor tripped on a 1A low Steam Generator level due to the Main Feedwater System Bypass automatic Flow Control valve not working properly. The reactor was returned to criticality at 1010 hours. The reactor tripped again at 1847 hours on a 1B low steam generator level when the 1B Main Feed Valve appeared to stroke very slowly with respect to the 1A and 1C Main Feed Valves. The reactor was returned to criticality at 2100 hours and the Main Unit was synchronized at 2155 hours.
- November 24 Station in Operating Mode 1 at a nominal 35.5% reactor power level.
through
November 25
- November 26 Station in Operating Mode 1 at a nominal 46% reactor power level. At 0144 hours the reactor tripped due to a turbine trip when a technician inadvertently laid a relay case against the rectifier mounting studs in the Electro-Hydraulic Control Cabinet causing a loss of Electro-Hydraulic Control DC Voltage. The reactor was returned to criticality at 0413 hours and the Main Unit was synchronized at 0524 hours.
- November 27 Station in Operating Mode 1 at a nominal 43% reactor power level.
through
November 30

DUQUESNE LIGHT COMPANY
Beaver Valley Power Station

MAJOR SAFETY-RELATED MAINTENANCE-NOVEMBER 1980

1. Calibration of the Rod Position Indicators were done by the Station maintenance and test groups.
2. Calibration of Pressurizer Level Transmitters were completed.
3. Hot setting inspections of approximately 90% of the Grinnel Snubbers were completed.

OPERATING DATA REPORT

DOCKET NO. 50-334
 D. T. 12/3/80
 COMPLETED BY D. R. Timko
 TELEPHONE 412-643-5308

OPERATING STATUS

1. Unit Name: Beaver Valley Power Station, Unit #1
2. Reporting Period: November, 1980
3. Licensed Thermal Power (MWt): 2660
4. Nameplate Rating (Gross MWe): 923
5. Design Electrical Rating (Net MWe): 852
6. Maximum Dependable Capacity (Gross MWe): 845
7. Maximum Dependable Capacity (Net MWe): 810
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

Notes

9. Power Level To Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours in Reporting Period	<u>720</u>	<u>8033</u>	<u>40,200</u>
12. Number Of Hours Reactor Was Critical	<u>333.63</u>	<u>333.63</u>	<u>14,078.34</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>4,482.8</u>
14. Hours Generator On-Line	<u>179.28</u>	<u>179.28</u>	<u>13,284.25</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>216,989.29</u>	<u>216,989.29</u>	<u>27,191,242.62</u>
17. Gross Electrical Energy Generated (MWH)	<u>46,200</u>	<u>46,200</u>	<u>8,324,140</u>
18. Net Electrical Energy Generated (MWH)	<u>21,816</u>	<u>21,816</u>	<u>7,592,559</u>
19. Unit Service Factor	<u>24.9</u>	<u>2.2</u>	<u>33.7</u>
20. Unit Availability Factor	<u>24.9</u>	<u>2.2</u>	<u>33.7</u>
21. Unit Capacity Factor (Using MDC Net)	<u>3.7</u>	<u>0.3</u>	<u>26.0</u>
22. Unit Capacity Factor (Using DER Net)	<u>3.6</u>	<u>0.3</u>	<u>24.7</u>
23. Unit Forced Outage Rate	<u>26.9</u>	<u>26.9</u>	<u>46.2</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

Major modification outage/May 15, 1981/30 days.

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>

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO 50-334
 UNIT BVPS Unit #1
 DATE 12/3/80
 COMPLETED BY D. R. Timko
 TELEPHONE 412-643-5308

MONTH November, 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	50
7	0	23	0
8	0	24	284
9	0	25	341
10	0	26	229
11	0	27	372
12	0	28	381
13	0	29	393
14	0	30	381
15	0	31	---
16	0		

INSTRUCTIONS

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

POOR ORIGINAL

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-334
 UNIT NAME BVPS Unit #1
 DATE 12/3/80
 COMPLETED BY P. R. Timko
 TELEPHONE 412-643-5308

REPORT MONTH November, 1980

No.	Date	Type	Duration (Hours)	Reason	Method of Shutting Down Reactor	Licensee Event Report #	System Code	Component Code	Cause & Corrective Action to Prevent Recurrence
1	801101	S	7794.7	H	1	N/A	ZZ	ZZZZZZ	Unit shutdown for major modifications as required by the Nuclear Regulatory Commission, including NRC Bulletins IEB79-02 and 79-14.
2	801120	F	12.0	A	3	N/A	CH	INSTRU	IB & IC steam generator bypass feed control valves did not regulate properly, causing a high steam generator level reactor trip. Adjusted limit switch on the 'C' level control valve and inserted a temporary valve position indication in the control room for the 'B' level control valve.

- 1 F: Forced
 S: Scheduled
- 2 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)
- 3 Method:
 1-Manual
 2-Manual Scram
 3-Automatic Scram
 4-Other (Explain)
- 4 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NURREG 0161)
 Exhibit I - Same Source

POOR ORIGINAL

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November, 1980

DOCKET NO. 50-334
 UNIT NAME BVPS Unit #1
 DATE 12/3/80
 COMPLETED BY D. R. Timko
 TELEPHONE 412-643-5308

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Codes	Cause & Corrective Action to Prevent Recurrence
3	801121	F	30.28	A	3	N/A	CH	INSTRU	Due to a failed feedwater flow signal isolator, the 1B main feed regulating valve went wide open during transfer from bypass flow control causing a high steam generator level trip before the operator could regain manual control.
4	801123	F	17.0	A	3	N/A	HA	INSTRU	While performing turbine thrust bearing oil trip check, the turbine tripped, which resulted in a reactor trip. Investigated thrust bearing trip circuitry, found nothing wrong.

¹
 F: Forced
 S: Scheduled

²
 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)

³
 Method:
 1 Manual
 2 Manual Scram
 3 Automatic Scram
 4 Other (Explain)

⁴
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

⁵
 Exhibit I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO 50-334
 UNIT NAME BVPS Unit #1
 DATE 12/3/80
 COMPLETED BY D. R. Timko
 TELEPHONE 412-643-5308

REPORT MONTH November

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
5	801123	F	3.08	G	3	N/A	CH	INSTRU	Operator unfamiliarity with the sluggish control action of the main feed regulating valves and feed bypass valves, when transferring from bypass flow control, caused a low steam generator level trip.
6	801126	F	3.66	G	3	N/A	HA	INSTRU	When troubleshooting an alarm problem with the turbine EH system, the EH panel power supply was inadvertently shorted out, causing a turbine trip and a reactor trip.

¹ F: Forced
 S: Scheduled

² 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)

³ Method:
 1 Manual
 2 Manual Scram
 3 Automatic Scram
 4 Other (Explain)

⁴ Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

⁵ Exhibit I - Same Source