



U.S. Nuclear Regulatory Commission  
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PLP:RAS

cc (Enclosure):

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ENCLOSURE

TENNESSEE VALLEY AUTHORITY  
WATTS BAR NUCLEAR PLANT (WBN)

MONTHLY OPERATING REPORT

JUNE 1997

UNIT 1

DOCKET NUMBER 50-390

LICENSE NUMBER NPF-90

## **OPERATIONAL SUMMARY JUNE 1997**

### **I. WATTS BAR UNIT 1 OPERATIONAL SUMMARY**

Watts Bar Nuclear Plant Unit 1 began June 1997 at full power. The unit operated at or near full power until June 17. At 06:35 on June 17, unit power was reduced to 80 percent due to Main Feedwater Pump B shaft failure. Full power operation was resumed at 18:44 on June 30. The unit operated at or near full power for the remainder of the month.

### **II. CHALLENGES TO THE PRESSURIZER POWER OPERATED RELIEF VALVES OR PRESSURIZER SAFETY VALVES**

There were no challenges to the pressurizer power operated relief valves or pressurizer safety valves during the month of June 1997.

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-390 UNIT NO. ONE DATE: July 2, 1997

COMPLETED BY: R. D. Tolley TELEPHONE: (423) 365-3550

MONTH: June 1997

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1.	<u>1120.8</u>	17.	<u>931.1</u>
2.	<u>1124.7</u>	18.	<u>879.6</u>
3.	<u>1125.3</u>	19.	<u>887.1</u>
4.	<u>1122.4</u>	20.	<u>883.0</u>
5.	<u>1131.2</u>	21.	<u>883.4</u>
6.	<u>1131.9</u>	22.	<u>883.8</u>
7.	<u>1132.5</u>	23.	<u>881.1</u>
8.	<u>1131.9</u>	24.	<u>882.0</u>
9.	<u>1132.1</u>	25.	<u>881.5</u>
10.	<u>1126.1</u>	26.	<u>884.2</u>
11.	<u>1122.8</u>	27.	<u>930.4</u>
12.	<u>1114.6</u>	28.	<u>877.6</u>
13.	<u>1112.9</u>	29.	<u>848.6</u>
14.	<u>1117.2</u>	30.	<u>995.4</u>
15.	<u>1116.8</u>		
16.	<u>1113.1</u>		

## OPERATING DATA REPORT

Docket No. **50-390**  
 Date: **July 2, 1997**  
 Completed By: **R. D. Tolley**  
 Telephone: **(423) 365-3550**

1. Unit Name: **WBN Unit 1**
2. Reporting Period: **June 1997**
3. Licensed Thermal Power (MWt): **3411**
4. Nameplate Rating (Gross Mwe): **1269.8**
5. Design Electrical Rating (Net Mwe): **1150.9**
6. Maximum Dependable Capacity (Gross MWe): **1172**
7. Maximum Dependable Capacity (Net MWe): **1117**
8. If changes Occur in Capacity Rating  
(Item Numbers 3 & 7) Since Last Report, Give Reasons: **N/A**
9. Power Level To Which Restricted, If any (net MWe): **N/A**
10. Reasons for Restrictions, If any: **N/A**

	<b><u>This Month</u></b>	<b><u>Year-to-Date</u></b>	<b><u>Cumulative</u></b>
11. Hours in Reporting Period	<b><u>720.0</u></b>	<b><u>4343.0</u></b>	<b><u>9600.0</u></b>
12. Number of Hours Reactor was Critical	<b><u>720.0</u></b>	<b><u>3960.6</u></b>	<b><u>8786.0</u></b>
13. Reactor Reserve Shutdown Hours	<b><u>0.0</u></b>	<b><u>0.0</u></b>	<b><u>0.0</u></b>
14. Hours Generator On-Line	<b><u>720.0</u></b>	<b><u>3920.0</u></b>	<b><u>8724.2</u></b>
15. Unit Reserve Shutdown Hours	<b><u>0.0</u></b>	<b><u>0.0</u></b>	<b><u>0.0</u></b>
16. Gross Thermal Energy Generated (MWh)	<b><u>2237128</u></b>	<b><u>12742579</u></b>	<b><u>28573481</u></b>
17. Gross Electric Energy Generated (MWh)	<b><u>770777</u></b>	<b><u>4449304</u></b>	<b><u>9859849</u></b>
18. Net Electrical Energy Generated (MWh)	<b><u>732119</u></b>	<b><u>4223719</u></b>	<b><u>9365112</u></b>
19. Unit Service Factor	<b><u>100.0</u></b>	<b><u>90.3</u></b>	<b><u>90.9</u></b>
20. Unit Availability Factor	<b><u>100.0</u></b>	<b><u>90.3</u></b>	<b><u>90.9</u></b>
21. Unit Capacity Factor (Using MDC Net)	<b><u>91.0</u></b>	<b><u>87.1</u></b>	<b><u>87.3</u></b>
22. Unit Capacity Factor (Using DER Net)	<b><u>88.4</u></b>	<b><u>84.5</u></b>	<b><u>84.8</u></b>
23. Unit Forced Outage Rate	<b><u>0.0</u></b>	<b><u>9.7</u></b>	<b><u>4.7</u></b>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): **Refueling Outage, 9/5/97, 40 days**
25. If Shutdown at End of Report Period, Estimate Date of Startup: **N/A**

**UNIT SHUTDOWNS AND POWER REDUCTIONS**  
**REPORT MONTH: June 1997**

DOCKET NO: 50-390  
UNIT NAME: WBN-1  
DATE: 7/2/97  
COMPLETED BY: R. D. Tolley  
TELEPHONE: (423) 365-3550

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report No.	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause and Corrective Action to Prevent Recurrence
31	970617	F	0.0	A	5	N/A	SJ	P	Power reduction due to main feedwater pump B shaft failure. The cause for the failure was determined to be corrosion assisted fatigue. The shaft was replaced. New shaft was machined with radius at keyway edge. New alignment tolerances were obtained from the vendor. TVA is currently pursuing shafts made of more corrosion resistant/robust design.

<sup>1</sup> F: Force  
S: Scheduled

<sup>2</sup> Reason:  
A-Equipment Failure (Explain)  
B-Maintenance or Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training and License Examination  
F-Administrative  
G-Operational Error (Explain)  
H- Other (Explain)

<sup>3</sup> Method  
1-Manual  
2-Manual Scram  
3-Automatic Scram  
4-Continuation of Existing Outage  
5-Reduction  
9-Other

<sup>4</sup> Exhibit G - Instructions for (NUREG  
Preparation of Data Entry sheets  
for Licensee Event Report (LER)  
File - NUREG - 1022

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