



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

John A. Scalice
Site Vice President, Watts Bar Nuclear Plant

MAY 15 1997

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

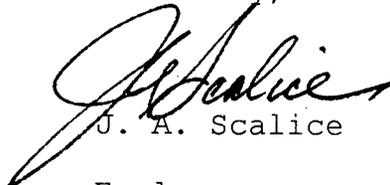
In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) - APRIL 1997 MONTHLY OPERATING
REPORT

The enclosure provides the April 1997 Monthly Operating Report
as required by WBN Technical Specification Section 5.9.4.

If you have any questions concerning this matter, please call
P. L. Pace at (423) 365-1824.

Sincerely,


J. A. Scalice

Enclosure
cc: See page 2

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PDR ADCK 05000390
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U.S. Nuclear Regulatory Commission

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MAY 15 1997

PLP:RMB:

cc (Enclosure):

NRC Resident Inspector
Watts Bar Nuclear Plant
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Spring City, Tennessee 37381

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ENCLOSURE

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT (WBN)

MONTHLY OPERATING REPORT

APRIL 1997

UNIT 1

DOCKET NUMBER 50-390

LICENSE NUMBER NPF-90

**OPERATIONAL SUMMARY
APRIL 1997**

I. WATTS BAR UNIT 1 OPERATIONAL SUMMARY

Watts Bar Nuclear Plant Unit 1 began April 1997 at full power. The unit operated at or near full power until April 20. At 01:25 on April 20, the unit experienced an automatic reactor trip. Investigation into the cause of the trip determined that the main transformer phase A capacitance tap connector from the 500KV bushing to the potential transformer had experienced arcing due to moisture in the bushing well. This fault caused the generator backup relay (121GB) to operate which initiated a turbine and reactor trip. Following maintenance repairs, the unit achieved criticality at 14:25 on April 21. The unit was synchronized to the grid at 19:34 on April 21. The turbine was manually tripped at 01:23 on April 22 in accordance with turbine overspeed test procedures. The unit was synchronized to the grid at 03:40 on April 22 and achieved full power operation on April 23. 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 April 1997.

AVERAGE DAILY UNIT POWER LEVEL

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

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

MONTH April 1997

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1.	1159.0	16.	1151.8
2.	1147.4	17.	1154.3
3.	1138.0	18.	1157.6
4.	1144.2	19.	1147.5
5.	1133.4	20.	15.2
6.	1087.5	21.	0
7.	1150.1	22.	279.9
8.	1156.9	23.	1113.0
9.	1158.8	24.	1135.7
10.	1162.3	25.	1136.2
11.	1149.2	26.	1135.7
12.	1140.6	27.	1133.6
13.	1159.8	28.	1128.0
14.	1161.1	29.	1130.6
15.	1153.6	30.	1132.0

OPERATING DATA REPORT

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

- | | | |
|-----|---|-------------------|
| 1. | Unit Name: | <u>WBN Unit 1</u> |
| 2. | Reporting Period: | <u>April 1997</u> |
| 3. | Licensed Thermal Power (MWt): | <u>3411</u> |
| 4. | Nameplate Rating (Gross MWe): | <u>1269.8</u> |
| 5. | Design Electrical Rating (Net MWe): | <u>1150.9</u> |
| 6. | Maximum Dependable Capacity (Gross MWe): | <u>1172</u> |
| 7. | Maximum Dependable Capacity (Net MWe): | <u>1117</u> |
| 8. | If changes Occur in Capacity Rating
(Item Numbers 3 & 7) Since Last Report, Give Reasons: <u>Design Electrical Rating (Net MWe) revised to more closely reflect Design Gross Generation Goal less service loads experienced during the plant's first year of commercial operation.</u> | |
| 9. | Power Level To Which Restricted, If any (net MWe): <u>N/A</u> | |
| 10. | Reasons for Restrictions, If any: <u>N/A</u> | |

	<u>This Month</u>	<u>Yr-to-Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	<u>719.0</u>	<u>2879.0</u>	<u>8136.0</u>
12. Number of Hours Reactor was Critical	<u>682.0</u>	<u>2496.6</u>	<u>7322.0</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>674.6</u>	<u>2456.0</u>	<u>7260.2</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
16. Gross Thermal Energy Generated (MWh)	<u>2236507</u>	<u>7986354</u>	<u>23817256</u>
17. Gross Electric Energy Generated (MWh)	<u>785682</u>	<u>2801367</u>	<u>8211912</u>
18. Net Electrical Energy Generated (MWh)	<u>747001</u>	<u>2654621</u>	<u>7796014</u>
19. Unit Service Factor	<u>93.8</u>	<u>85.3</u>	<u>89.2</u>
20. Unit Availability Factor	<u>93.8</u>	<u>85.3</u>	<u>89.2</u>
21. Unit Capacity Factor (Using MDC Net)	<u>93.0</u>	<u>82.5</u>	<u>85.8</u>
22. Unit Capacity Factor (Using DER Net)	<u>90.3</u>	<u>80.1</u>	<u>83.3</u>
23. Unit Forced Outage Rate	<u>6.2</u>	<u>14.7</u>	<u>5.6</u>

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: APRIL 1997

DOCKET NO: 50-390
UNIT NAME: WBN-1
DATE: 5/2/97
COMPLETED BY: R. D. Tolley
TELEPHONE: (423) 365-3550

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁵	Cause and Corrective Action to Prevent Recurrence
28	970420	F	42.1	A	3	390/97-010	EL	RLY	Main transformer phase A capacitance tap connector from the 500 Kv bushing to the potential transformer experienced arcing due to moisture in the bushing well. Corrective action included clearing of the capacitance tap bushing area; application of RTV sealant on exposed surfaces; and reconfiguration of fire protection nozzels such that water would not spray directly into the connectors.
29	970422	F	2.3	B	9	N/A	N/A	N/A	Turbine over speed test - no corrective actions required.

¹ F: Force
S: Scheduled

² 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)

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

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

⁵ Exhibit I-Same Source