

ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT

MONTHLY OPERATING REPORT
TO THE
NUCLEAR REGULATORY COMMISSION
FEBRUARY 1996

UNIT 1
DOCKET NUMBER 50-390
LICENSE NUMBER NPF-90

9603200168 960312
PDR ADOCK 05000390
R PDR

OPERATIONAL SUMMARY
FEBRUARY 1996

UNIT 1

At the beginning of February 1996 Watts Bar Nuclear Plant Unit 1 continued in Mode 2. On February 3, Unit 1 was placed in Mode 3 pending receipt of the full power operating license. The full power operating license was issued on February 7, 1996.

On February 8, 1996, the unit entered Mode 1. On February 10, 1996, the main turbine tripped while flashing the main generator field. The initial investigation considered the cause as a trip due to low oil pressure caused by debris in the oil, which was thought to have clogged flow orifices. On February 11, 1996, Unit 1 was placed in Mode 3 for turbine oil cleanup.

On February 16, 1996, the unit entered Mode 1. On February 17, 1996, at 0114 EST, the main turbine tripped while flashing the main generator field. The trip was caused by a failure in the design of a turbine trip circuit to account for instabilities during the generator field flash. On the 17th at 1602 EST, the main generator was placed on-line. At 1855 EST, TVA operators manually tripped the turbine due to hotwell level instability.

On February 19, 1996, at 1416 EST, the main generator was placed on-line. At 1501 EST, TVA operators again manually tripped the main turbine due to hotwell level instability. At 1502 EST, TVA operators also manually tripped the reactor due to low steam generator levels resulting from the hotwell level problem. The unit was placed in Mode 3 at this time.

On February 21, 1996, the unit was placed in Mode 4 to investigate the hotwell level problem. Details of this event are documented as Licensee Event Report 50-390/96004. The unit remained in Mode 4 the remainder of the month.

CHALLENGES TO THE PRESSURIZER POWER OPERATED RELIEF VALVES
OR PRESSURIZER SAFETY VALVES

There were no challenges to this equipment during this reporting period.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-390 UNIT No. One DATE: 3/5/96
 COMPLETED BY: Larry Parscale TELEPHONE: (423) 365-2335
 MONTH: February 1996

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	N/A	16	N/A
2	N/A	17	-22.3 ¹
3	N/A	18	-34.2
4	N/A	19	-32.2
5	N/A	20	-34.2
6	N/A	21	-34.2
7	N/A	22	-34.2
8	N/A	23	-34.2
9	N/A	24	-34.2
10	N/A	25	-34.2
11	N/A	26	-34.2
12	N/A	27	-34.2
13	N/A	28	-34.2
14	N/A	29	-34.2
15	N/A		

¹ Calculated based on an 8 hour day. Reporting period began on February 17, 1996 at 1602 EST upon initial placement of main generator on-line.

OPERATING DATA REPORT

DOCKET NO. 50-390
 DATE 3/5/96
 COMPLETED BY L. Parscale
 TELEPHONE (423)365-2335

NOTES

OPERATING STATUS

1. Unit Name: Watts Bar Unit One
2. Reporting Period: February 1996
3. Licensed Thermal Power (MWT): 3411
4. Nameplate Rating (Gross MWe): 1269.8
5. Design Electrical Rating (Net MWe): 1160
6. Maximum Dependable Capacity (Gross MWe): 1166
7. Maximum Dependable Capacity (Net MWe): 1125
8. If Changes Occur in Capacity Ratings (Item Numbers 3 through 7) Since Last Report, Give Reasons: The change of licensed thermal power resulted from the issuance of the full power operating license on February 7, 1996.

9. Power Level To Which Restricted, If Any (Net MWe): None (See below.)
10. Reasons for Restrictions, If Any: Please note that the full power license restricted operation not to exceed 50% power until the requirements of 10CFR73.55(c)(7) and (8) were fully implemented. By letter dated February 15, 1996, TVA certified compliance with these requirements.

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>296</u>	<u>296</u>	<u>296</u> ¹
12. Number of Hours Reactor Was Critical	<u>47.0</u>	<u>47.0</u>	<u>47.0</u> ¹
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>3.6</u>	<u>3.6</u>	<u>3.6</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWh)	<u>13,191</u>	<u>13,191</u>	<u>13,191</u> ¹
17. Gross Electrical Energy Generated (MWh)	<u>143.5</u>	<u>143.5</u>	<u>143.5</u>
18. Net Electrical Energy Generated (MWh)	<u>-9962.2</u>	<u>-9962.2</u>	<u>-9962.2</u>
19. Unit Service Factor	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
20. Unit Availability Factor	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
21. Unit Capacity Factor (Using MDC Net)	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
22. Unit Capacity Factor (Using DER Net)	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
23. Unit Forced Outage Rate	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>None except those associated with the power ascension test program.</u>			

25. If Shut Down at End of Report Period, Estimated Date of Startup: 3/4/96

¹ Initial electrical generation occurred in February. Therefore, in accordance with Regulatory Guide 1.16, "Instructions For Completing Operating Data Report," there were no reporting period hours in January, and Reactor Hours Critical And Gross Thermal Energy Generated were reported in the January Monthly Operating Report for information only. As such, January values are not included in the Year-To-Date or Cumulative values above. Report period began February 17 at 1602 EST. A breakdown is as follows:

	Hours Reactor Critical	Thermal Energy Generated
February 1 to 17 (1602)	222.2 hours	36,582 MWT
February 17 (1602) to 29	47.0 hours	13,191 MWT
Total	269.2	49,773 MWT

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: February 1996

DOCKET NO: 50/390
 UNIT NAME: WBN-1
 DATE: 3/5/96
 COMPLETED BY: L. Parscale
 TELEPHONE: (423)365-2335

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
N/A	951109	S	N/A	D	9	N/A	N/A	N/A	Initial Fuel Load and mode escalation commenced with receipt of low power license on November 9, 1995. A full power license was received on February 7, 1996 with initial power generation occurring on February 17, 1996 at 1602 EST.
1	960217	F	43.4	A	N/A	N/A	SD	STR	At approximately 1655 EST on February 17, generator load reduction was initiated due to loss of sufficient secondary side feedwater/condensate flow. At 1855 EST, a manual turbine trip was initiated. The cause of the event was high suction strainer delta P at the condenser hotwell pumps. The strainers were cleaned, secondary side water cleanup was initiated and the unit returned to service.

¹F: Forced
 S: Scheduled

²Reason:
 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)

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

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

⁵Exhibit 1-Same Source

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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.
2	960219	F	249.0	H	1	96004	SD	LIT	At approximately 1501 on February 19, the turbine was manually tripped due to a loss of sufficient feedwater/ condensate flow. At approximately 1502, the reactor was manually tripped. The root cause of the event was the failure of the hotwell level control system to maintain an adequate water supply to the suction of the hotwell pumps. Corrective actions include design and modifications to the hotwell level indication, and changes to operating procedures for maintaining hotwell level during transient conditions.

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ENCLOSURE 2