



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

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

MAR 17 1997

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

Gentlemen:

In the Matter of
Tennessee Valley Authority

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)

Docket No. 50-390

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - FEBRUARY 1997 MONTHLY
OPERATING REPORT

The enclosure provides the February 1997 Monthly Operating Report as required by WBN Technical Specification 5.9.4. Also included is a revised January 1997 summary sheet to reflect the adjustment in the maximum dependable capacity, from 1122 to 1117 (Net MWe).

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 ADOCK 05000390
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U.S. Nuclear Regulatory Commission
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cc (Enclosure):

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

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Region II
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ENCLOSURE

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT UNIT 1

MONTHLY OPERATING REPORT
TO THE
NUCLEAR REGULATORY COMMISSION
FEBRUARY 1997

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

OPERATIONAL SUMMARY
FEBRUARY 1997

WATTS BAR NUCLEAR PLANT UNIT 1

Watts Bar Nuclear Plant Unit 1 began February 1997 with the reactor critical and the generator off line for condenser maintenance. The unit was synchronized to the grid at 03:33 on February 1. The unit achieved full power on February 5 and operated at or near full power until February 18. On February 18, power reduction to approximately 40% was initiated for plugging of a leaking condenser tube.

Following condenser maintenance, power ascension began on February 20 and full power was achieved on February 21. The unit operated at or near full power for the remainder of the month.

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 February 1997.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-390 UNIT No. One DATE: 3/3/97
 COMPLETED BY: Randy D. Tolley TELEPHONE: (423) 365-3550
 MONTH: February 1997

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
|-----|--|
| 1 | <u>278.7</u> |
| 2 | <u>891.3</u> |
| 3 | <u>1103.2</u> |
| 4 | <u>1096.0</u> |
| 5 | <u>1126.5</u> |
| 6 | <u>1150.2</u> |
| 7 | <u>1147.9</u> |
| 8 | <u>1131.0</u> |
| 9 | <u>1139.6</u> |
| 10 | <u>1155.8</u> |
| 11 | <u>1155.0</u> |
| 12 | <u>1151.3</u> |
| 13 | <u>1150.2</u> |
| 14 | <u>1147.4</u> |
| 15 | <u>1150.2</u> |
| 16 | <u>1149.5</u> |

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
|-----|--|
| 17 | <u>1149.3</u> |
| 18 | <u>1131.5</u> |
| 19 | <u>534.7</u> |
| 20 | <u>839.8</u> |
| 21 | <u>1118.0</u> |
| 22 | <u>1143.2</u> |
| 23 | <u>1144.9</u> |
| 24 | <u>1124.7</u> |
| 25 | <u>1134.4</u> |
| 26 | <u>1123.7</u> |
| 27 | <u>1106.9</u> |
| 28 | <u>1114.9</u> |
| | <u> </u> |
| | <u> </u> |
| | <u> </u> |

OPERATING DATA REPORT

DOCKET NO.: 50-390
 DATE: 3/3/97
 COMPLETED BY: R. D. Tolley
 TELEPHONE: (423) 365-3550

OPERATING STATUS

1. Unit Name: Watts Bar Unit One
2. Reporting Period: February 1997
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): 1172
7. Maximum Dependable Capacity (Net MWe): 1117
8. If Changes Occur in Capacity Ratings (Item Numbers 3 through 7) Since Last Report, Give Reasons:
Items 6 and 7 revised to more accurately reflect actual plant operating capacities.
9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons for Restrictions, If Any: N/A

| | This Month | Yr-to-Date | Cumulative |
|--|----------------|----------------|-----------------|
| 11. Hours in Reporting Period | <u>672.0</u> | <u>1416.0</u> | <u>6673.0</u> |
| 12. Number of Hours Reactor Was Critical | <u>672.0</u> | <u>1287.5</u> | <u>6112.9</u> |
| 13. Reactor Reserve Shutdown Hours | <u>0.0</u> | <u>0.0</u> | <u>0.0</u> |
| 14. Hours Generator On-Line | <u>668.5</u> | <u>1263.3</u> | <u>6067.5</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>2147746</u> | <u>4104385</u> | <u>19935287</u> |
| 17. Gross Electrical Energy Generated (MWh) | <u>749594</u> | <u>1441137</u> | <u>6851682</u> |
| 18. Net Electrical Energy Generated (MWh) | <u>714955</u> | <u>1367859</u> | <u>6509252</u> |
| 19. Unit Service Factor | <u>99.5</u> | <u>89.2</u> | <u>90.9</u> |
| 20. Unit Availability Factor | <u>99.5</u> | <u>89.2</u> | <u>90.9</u> |
| 21. Unit Capacity Factor (Using MDC Net) | <u>95.2</u> | <u>86.5</u> | <u>87.3</u> |
| 22. Unit Capacity Factor (Using DER Net) | <u>91.7</u> | <u>83.3</u> | <u>84.1</u> |
| 23. Unit Forced Outage Rate | <u>0.5</u> | <u>10.8</u> | <u>2.6</u> |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): | <u>N/A</u> | | |
| 25. If Shut Down at End of Report Period, Estimated Date of Startup: | <u>N/A</u> | | |

REVISED
OPERATING DATA REPORT

DOCKET NO.: 50-390
DATE: 3/3/97
COMPLETED BY: R. D. Tolley
TELEPHONE: (423)365-3550

OPERATING STATUS

1. Unit Name: Watts Bar Unit One
2. Reporting Period: January 1997
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): 1172
7. Maximum Dependable Capacity (Net MWe): 1117
8. If Changes Occur in Capacity Ratings (Item Numbers 3 through 7) Since Last Report, Give Reasons:
Items 6 and 7 have been revised principally due to a thermal performance improvement achieved by identifying and isolating a leakage path through the feedwater long cycle recirculation line.
9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons for Restrictions, If Any: N/A

| | This Month | Yr-to-Date | Cumulative |
|--|----------------|----------------|-----------------|
| 11. Hours in Reporting Period | <u>744.0</u> | <u>744.0</u> | <u>6001.0</u> |
| 12. Number of Hours Reactor Was Critical | <u>615.5</u> | <u>615.5</u> | <u>5440.9</u> |
| 13. Reactor Reserve Shutdown Hours | <u>0.0</u> | <u>0.0</u> | <u>0.0</u> |
| 14. Hours Generator On-Line | <u>594.9</u> | <u>594.9</u> | <u>5399.0</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>1956638</u> | <u>1956638</u> | <u>17787540</u> |
| 17. Gross Electrical Energy Generated (MWh) | <u>691543</u> | <u>691543</u> | <u>6102088</u> |
| 18. Net Electrical Energy Generated (MWh) | <u>652904</u> | <u>652904</u> | <u>5794297</u> |
| 19. Unit Service Factor | <u>80.0</u> | <u>80.0</u> | <u>90.0</u> |
| 20. Unit Availability Factor | <u>80.0</u> | <u>80.0</u> | <u>90.0</u> |
| 21. Unit Capacity Factor (Using MDC Net) | <u>78.6</u> | <u>78.6</u> | <u>86.4</u> |
| 22. Unit Capacity Factor (Using DER Net) | <u>75.7</u> | <u>75.7</u> | <u>83.2</u> |
| 23. Unit Forced Outage Rate | <u>20.0</u> | <u>20.0</u> | <u>2.9</u> |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): | <u>N/A</u> | | |
| 25. If Shut Down at End of Report Period, Estimated Date of Startup: | <u>N/A</u> | | |

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: February 1997

DOCKET NO: 50-390
 UNIT NAME: WBN-1
 DATE: 3/3/97
 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 |
|-----|--------|-------------------|------------------|---------------------|--|---------------------------|--------------------------|-----------------------------|---|
| 25 | 970127 | F | 3.5 | A | 1 | N/A | SG | TBG | Forced outage caused by a ruptured condenser tube. Corrective action involved the plugging of the ruptured tube and additional tubes in the area adjacent to the ruptured tube. |
| 26 | 970218 | F | 0 | A | 5 | N/A | SG | TBG | Power reduced to approximately 40% for condenser tube plugging. |

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 I-Same Source