



Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609

January 14, 2000

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

Gentlemen:

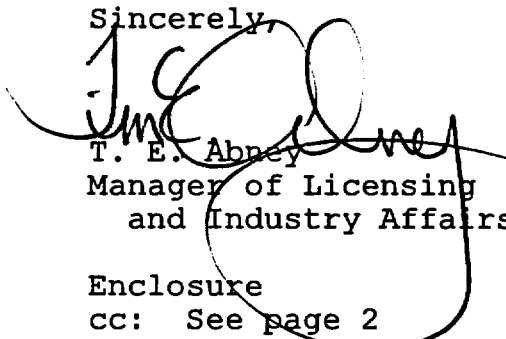
In the Matter of)	Docket Nos.	50-259
Tennessee Valley Authority)		50-260
			50-296

**BROWNS FERRY NUCLEAR PLANT (BFN) - DECEMBER 1999 MONTHLY
OPERATING REPORT**

The enclosure provides the December 1999 Monthly Operating Report as required by BFN Technical Specifications Section 5.6.4.

If you have any questions concerning this report, please call me at (256) 729-2636.

Sincerely,


T. E. Abney
Manager of Licensing
and Industry Affairs

Enclosure
cc: See page 2

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January 14, 2000

Enclosure

cc (Enclosure):

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ENCLOSURE

**TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)**

MONTHLY OPERATING REPORT

DECEMBER 1999

UNIT 1

DOCKET NUMBER 50-259

LICENSE NUMBER DPR-33

UNIT 2

DOCKET NUMBER 50-260

LICENSE NUMBER DPR-52

UNIT 3

DOCKET NUMBER 50-296

LICENSE NUMBER DPR-68

**OPERATIONAL SUMMARY
DECEMBER 1999**

BROWNS FERRY NUCLEAR PLANT UNIT 1

Unit 1 remains shutdown on administrative hold to resolve various TVA and NRC concerns. Unit 1 has been on administrative hold since June 1, 1985. As a result, TVA considers that accrual of reporting hours is suspended since the unit has a maximum dependable capacity (MDC) of zero MWe. Accordingly, TVA does not report cumulative hours for the period beginning June 1, 1985, when calculating the operating status variables.

BROWNS FERRY NUCLEAR PLANT UNIT 2

For the month of December, Unit 2 generated 853,320 megawatt hours gross electrical power and operated at a net capacity factor of 100.3 percent MDC. As of December 31, 1999, Unit 2 has operated continuously for 104 days.

BROWNS FERRY NUCLEAR PLANT UNIT 3

For the month of December, Unit 3 generated 857,200 megawatt hours gross electrical power with a net capacity factor of 100.8 percent MDC. As of December 31, 1999, Unit 3 has operated continuously for 442 days.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259 UNIT NO. ONE DATE: JAN. 7, 2000

COMPLETED BY: J. E. Wallace TELEPHONE 256-729-7874

MONTH DEC. 1999

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
DAY	(MWe-Net)	DAY	(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.	0
7.	0	23.	0
8.	0	24.	0
9.	0	25.	0
10.	0	26.	0
11.	0	27.	0
12.	0	28.	0
13.	0	29.	0
14.	0	30.	0
15.	0	31.	0
16.	0		

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-260 UNIT NO. TWO DATE: JAN. 7, 2000

COMPLETED BY: J. E. Wallace TELEPHONE 256-729-7874

MONTH DEC. 1999

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
DAY	(MWe-Net)	DAY	(MWe-Net)
1.	1138	17.	865
2.	1136	18.	1138
3.	1139	19.	1132
4.	1136	20.	1134
5.	1134	21.	1136
6.	1138	22.	1136
7.	1138	23.	1133
8.	1138	24.	1137
9.	1138	25.	1136
10.	1146	26.	1136
11.	1146	27.	1134
12.	1138	28.	1138
13.	1138	29.	1136
14.	1135	30.	1135
15.	1031	31.	1139
16.	1139		

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-296 UNIT NO. THREE DATE: JAN. 7, 2000

COMPLETED BY: J. E. Wallace TELEPHONE 256-729-7874

MONTH DEC. 1999

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
DAY	(MWe-Net)	DAY	(MWe-Net)
1.	1137	17.	1124
2.	1133	18.	1120
3.	1127	19.	981
4.	1131	20.	1132
5.	1130	21.	1132
6.	1135	22.	1132
7.	1141	23.	1134
8.	1122	24.	1131
9.	1116	25.	1132
10.	1138	26.	1132
11.	1132	27.	1131
12.	1128	28.	1139
13.	1139	29.	1137
14.	1133	30.	1131
15.	1126	31.	1141
16.	1129		

OPERATING DATA REPORT

Docket No. 50-259
 Date: January 7, 2000
 Completed By: J. E. Wallace
 Telephone: (256) 729-7874

1. Unit Name: **BFN Unit 1**
 2. Reporting Period: **December 1999**
 3. Licensed Thermal Power (MWt): **3293**
 4. Nameplate Rating (Gross Mwe): **1152**
 5. Design Electrical Rating (Net Mwe): **1065**
 6. Maximum Dependable Capacity (Gross MWe): **0**
 7. Maximum Dependable Capacity (Net MWe): **0**

8. If changes occur in Capacity Rating (Item Numbers 3 Through 7) Since Last Report, Give Reasons: **N/A**

9. Power Level To Which Restricted, If any (net MWe): **0**

10. Reasons for Restrictions, If any: **Administrative Hold**

	<u>This Month</u>	<u>Yr-To-Date</u>	<u>Cumulative*</u>
11. Hours in Reporting Period	<u>0</u>	<u>0</u>	<u>95743</u>
12. Number of Hours Reactor was Critical	<u>0</u>	<u>0</u>	<u>59521</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>6997</u>
14. Hours Generator On-Line	<u>0</u>	<u>0</u>	<u>58267</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWh)	<u>0</u>	<u>0</u>	<u>168066787</u>
17. Gross Electric Energy Generated (MWh)	<u>0</u>	<u>0</u>	<u>55398130</u>
18. Net Electrical Energy Generated (MWh)	<u>0</u>	<u>0</u>	<u>53796427</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>60.9</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>60.9</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>0</u>	<u>52.8</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>0</u>	<u>52.8</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>0</u>	<u>25.6</u>

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

25. If Shutdown at End of Report Period, Estimate Date of Startup: **To Be Determined**

* Excludes hours under Administrative Hold
 (June 1, 1985 to present)

OPERATING DATA REPORT

Docket No. 50-260
 Date: January 7, 2000
 Completed By: J. E. Wallace
 Telephone: (256) 729-7874

1. Unit Name: BFN Unit 2
 2. Reporting Period: December 1999
 3. Licensed Thermal Power (MWt): 3458
 4. Nameplate Rating (Gross Mwe): 1190
 5. Design Electrical Rating (Net Mwe): 1120
 6. Maximum Dependable Capacity (Gross MWe): 1155
 7. Maximum Dependable Capacity (Net MWe): 1118

8. If changes Occur in Capacity Rating (Item Numbers 3 Through 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

	<u>This Month</u>	<u>Yr-To-Date</u>	<u>Cumulative*</u>
11. Hours in Reporting Period	744.0	8760.0	165895
12. Number of Hours Reactor was Critical	744.0	8035.0	123577
13. Reactor Reserve Shutdown Hours	0.0	0.0	14200
14. Hours Generator On-Line	744.0	7985.0	121128
15. Unit Reserve Shutdown Hours	0.0	0.0	0
16. Gross Thermal Energy Generated (MWh)	2534165.0	26521824	365098168
17. Gross Electric Energy Generated (MWh)	853320.0	8794230	121317188
18. Net Electrical Energy Generated (MWh)	834554.0	8586317	118093446
19. Unit Service Factor	100.0	91.2	73.0
20. Unit Availability Factor	100.0	91.2	73.0
21. Unit Capacity Factor (Using MDC Net)	100.3	89.1	66.7
22. Unit Capacity Factor (Using DER Net)	100.2	87.5	66.7
23. Unit Forced Outage Rate	0.0	1.2	12.5

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): **In accordance with Generic letter 97-02, this information is no longer required by NRC.**

25. If Shutdown at End of Report Period, Estimate Date of Startup: N/A

* Excludes hours under Administrative Hold (June 1, 1985 to May 24, 1991)

OPERATING DATA REPORT

Docket No. 50-296
 Date: January 7, 2000
 Completed By: J. E. Wallace
 Telephone: (256) 729-7874

1. Unit Name: **BFN Unit 3**
 2. Reporting Period: **December 1999**
 3. Licensed Thermal Power (MWt): **3458**
 4. Nameplate Rating (Gross Mwe): **1190**
 5. Design Electrical Rating (Net Mwe): **1120**
 6. Maximum Dependable Capacity (Gross MWe): **1155**
 7. Maximum Dependable Capacity (Net MWe): **1118**

8. If changes Occur in Capacity Rating (Item Numbers 3 Through 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

	<u>This Month</u>	<u>Yr-To-Date</u>	<u>Cumulative*</u>
11. Hours in Reporting Period	744.0	8760.0	109117
12. Number of Hours Reactor was Critical	744.0	8760.0	79741
13. Reactor Reserve Shutdown Hours	0.0	0.0	7999
14. Hours Generator On-Line	744.0	8760.0	78345
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWh)	2557699	29912793	241825460
17. Gross Electric Energy Generated (MWh)	857200.0	9952780	80808050
18. Net Electrical Energy Generated (MWh)	838227.0	9730588	77822062
19. Unit Service Factor	100.0	100.0	71.8
20. Unit Availability Factor	100.0	100.0	71.8
21. Unit Capacity Factor (Using MDC Net)	100.8	99.4	67.1
22. Unit Capacity Factor (Using DER Net)	100.6	99.2	67.1
23. Unit Forced Outage Rate	0.0	0.0	13.6

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): **In accordance with Generic letter 97-02, this information is no longer required by NRC.**

25. If Shutdown at End of Report Period, Estimate Date of Startup: N/A

* Excludes hours under Administrative Hold (June 1, 1985 to November 19, 1995)

**UNIT SHUTDOWNS AND POWER REDUCTIONS
REPORT MONTH: DECEMBER 1999**

DOCKET NO: 50-259
UNIT NAME: BFN-1
DATE: January 7, 2000
COMPLETED BY: J. E. Wallace
TELEPHONE: (256) 729-7874

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁴	Cause and Corrective Action to Prevent Recurrence
1	06/01/85	S	744	F	4	N/A	N/A	N/A	Administrative hold to resolve various TVA and NRC concerns.

¹ **F: Forced**
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 **Instructions for Preparation of Data Entry sheets for Licensee Event Report (LER) (NUREG - 1022)**

**UNIT SHUTDOWNS AND POWER REDUCTIONS
REPORT MONTH: DECEMBER 1999**

DOCKET NO: 50-260
UNIT NAME: BFN-2
DATE: January 7, 2000
COMPLETED BY: J. E. Wallace
TELEPHONE: (256) 729-7874

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁴	Cause and Corrective Action to Prevent Recurrence
7	12/17/99	F	0	A	5	N/A	N/A	N/A	Power was reduced when the 2B recirculation pump tripped. Troubleshooting occurred. A 2B Recirc M-G set Silicon Control Rectifier (SCR) was replaced and tested. Plant was returned to a dual loop operation.

¹ F: Forced
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
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9-Other

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

**UNIT SHUTDOWNS AND POWER REDUCTIONS
REPORT MONTH: DECEMBER 1999**

DOCKET NO: 50-296
UNIT NAME: BFN-3
DATE: January 7, 2000
COMPLETED BY: J. E. Wallace
TELEPHONE: (256) 729-7874

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁴	Cause and Corrective Action to Prevent Recurrence
N/A									

¹ **F: Forced**
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 **Instructions for Preparation of Data Entry sheets for Licensee Event Report (LER) (NUREG - 1022)**