



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

April 14, 2000

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

Gentlemen:

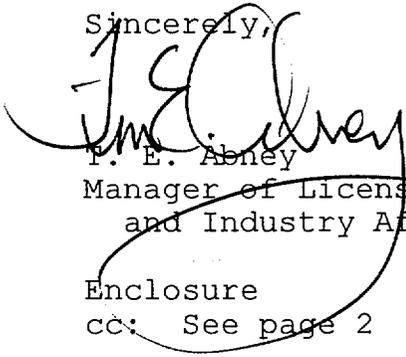
In the Matter of)	Docket Nos.	50-259
Tennessee Valley Authority)		50-260
			50-296

**BROWNS FERRY NUCLEAR PLANT (BFN) - MARCH 2000 MONTHLY
OPERATING REPORT**

The enclosure provides the March 2000 Monthly Operating Report as required by BFN Technical Specifications Section 5.6.4. Also included in this report, in accordance with TS 5.6.4, is a description of the BFN main steam safety relief valve challenges for calendar year 1999.

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

Sincerely,


P. E. Abney
Manager of Licensing
and Industry Affairs

Enclosure

cc: See page 2

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U.S. Nuclear Regulatory Commission
Page 2
April 14, 2000

Enclosure

cc (Enclosure):

Mr. Paul E. Fredrickson, Branch Chief
U.S. Nuclear Regulatory Commission
Region II
61 Forsyth Street, S.W.
Suite 23T85
Atlanta, Georgia 30303

Mr. Herbert N. Berkow, Project Director
Project Directorate II-4
Division of Licensing Project Management
Office of Nuclear Reactor Regulation
11555 Rockville Pike
Rockville, MD 20852-2738

INPO Records Center
Institute of Nuclear Power Operations
700 Galleria Parkway
Atlanta, Georgia 30339-5957

Mr. James Lang, Manager
Advanced Reactor Department
Electric Power Research Institute
3340 Hillview Avenue
Palo Alto, California 94304

NRC Resident Inspector
Browns Ferry Nuclear Plant
10833 Shaw Road
Athens, Alabama 35611

Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
61 Forsyth Street, S.W.
Suite 23T85
Atlanta, Georgia 30303

Ms. Barbara Lewis
McGraw-Hill Companies
1200 G Street, N.W.
Suite 1100
Washington, D.C. 20005-3802

ENCLOSURE

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)

MONTHLY OPERATING REPORT

MARCH 2000

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
MARCH 2000**

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 March, Unit 2 generated 857,480 megawatt hours gross electrical power and operated at a net capacity factor of 100.9 percent MDC. As of March 31, 2000, Unit 2 has operated continuously for 195 days.

BROWNS FERRY NUCLEAR PLANT UNIT 3

For the month of March, Unit 3 generated 841,250 megawatt hours gross electrical power with a net capacity factor of 98.8 percent MDC. As of March 31, 2000, Unit 3 has operated continuously for 533 days.

MAIN STEAM SAFETY RELIEF VALVE CHALLENGES

In accordance with BFN Technical Specifications 5.6.4, TVA is providing a description of the Main Steam Relief Valves (MSRVs) accuations in response to reaching their setpoint or due to operator action to control reactor pressure for calendar year 1999. The MSRV challenges for BFN Units 1, 2, and 3 in 1999, are described below:

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. Therefore, no challenges to the Unit 1 MSRVs occurred during the reporting period.

UNIT 2

In May 1999, all thirteen MSRVs were manually opened to demonstrate operability, as required by Technical Specification Surveillance Requirement 3.4.3.2. The test was conducted as part of the power ascension program following completion of the Unit 2, Cycle 10 refueling outage.

Five MSRVs mechanically opened during the Unit 2 reactor scram on May 15, 1999, in response to a pressure transient. The maximum reactor vessel pressure measured during the event was 1119.1 psig.

No other challenges to the Unit 2 MSRVs occurred.

UNIT 3

No challenges to the Unit 3 MSRVs occurred during this reporting period.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259 UNIT NO. ONE DATE: APRIL 6, 2000

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

MONTH MARCH 2000

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: APRIL 6, 2000

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

MONTH MARCH 2000

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
DAY	(MWe-Net)	DAY	(MWe-Net)
1.	1131	17.	1133
2.	1133	18.	1134
3.	1135	19.	1134
4.	1136	20.	1133
5.	1133	21.	1136
6.	1135	22.	1132
7.	1135	23.	1130
8.	1129	24.	1133
9.	1129	25.	1132
10.	1129	26.	1131
11.	1130	27.	1131
12.	1017	28.	1129
13.	1132	29.	1134
14.	1132	30.	1131
15.	1132	31.	1121
16.	1134		

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-296 UNIT NO. THREE DATE: APRIL 6, 2000

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

MONTH MARCH 2000

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
DAY	(MWe-Net)	DAY	(MWe-Net)
1.	1129	17.	1093
2.	1127	18.	1092
3.	1126	19.	1086
4.	1129	20.	1083
5.	1128	21.	1080
6.	1146	22.	1074
7.	1144	23.	1070
8.	1123	24.	1058
9.	1120	25.	953
10.	1130	26.	1116
11.	1119	27.	1128
12.	1117	28.	1127
13.	1139	29.	1127
14.	1079	30.	1092
15.	1105	31.	1099
16.	1095		

OPERATING DATA REPORT

Docket No. 50-259
 Date: April 6, 2000
 Completed By: J. E. Wallace
 Telephone: (256) 729-7874

- 1. Unit Name: **BFN Unit 1**
- 2. Reporting Period: **MARCH 2000**
- 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: April 6, 2000
 Completed By: J. E. Wallace
 Telephone: (256) 729-7874

- 1. Unit Name: **BFN Unit 2**
- 2. Reporting Period: **MARCH 2000**
- 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	<u>744.0</u>	<u>2184.0</u>	<u>168079</u>
12. Number of Hours Reactor was Critical	<u>744.0</u>	<u>2184.0</u>	<u>125761</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>14200</u>
14. Hours Generator On-Line	<u>744.0</u>	<u>2184.0</u>	<u>123312</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWh)	<u>2563210</u>	<u>7527120</u>	<u>372625288</u>
17. Gross Electric Energy Generated (MWh)	<u>857480</u>	<u>2531480</u>	<u>123848668</u>
18. Net Electrical Energy Generated (MWh)	<u>839373</u>	<u>2477264</u>	<u>120570709</u>
19. Unit Service Factor	<u>100.0</u>	<u>100.0</u>	<u>73.4</u>
20. Unit Availability Factor	<u>100.0</u>	<u>100.0</u>	<u>73.4</u>
21. Unit Capacity Factor (Using MDC Net)	<u>100.9</u>	<u>101.5</u>	<u>67.2</u>
22. Unit Capacity Factor (Using DER Net)	<u>100.7</u>	<u>101.3</u>	<u>67.2</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.0</u>	<u>12.3</u>

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: April 6, 2000
 Completed By: J. E. Wallace
 Telephone: (256) 729-7874

1. Unit Name: **BFN Unit 3**
2. Reporting Period: **MARCH 2000**
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	<u>744.0</u>	<u>2184.0</u>	<u>111301</u>
12. Number of Hours Reactor was Critical	<u>744.0</u>	<u>2184.0</u>	<u>81925</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>8202</u>
14. Hours Generator On-Line	<u>744.0</u>	<u>2184.0</u>	<u>80529</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>2522254</u>	<u>7425110</u>	<u>249250571</u>
17. Gross Electric Energy Generated (MWh)	<u>841250</u>	<u>2475950</u>	<u>83284000</u>
18. Net Electrical Energy Generated (MWh)	<u>821574</u>	<u>2420379</u>	<u>80242441</u>
19. Unit Service Factor	<u>100.0</u>	<u>100.0</u>	<u>72.4</u>
20. Unit Availability Factor	<u>100.0</u>	<u>100.0</u>	<u>72.4</u>
21. Unit Capacity Factor (Using MDC Net)	<u>98.8</u>	<u>99.1</u>	<u>67.8</u>
22. Unit Capacity Factor (Using DER Net)	<u>98.6</u>	<u>98.9</u>	<u>67.8</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.0</u>	<u>13.3</u>

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: MARCH 2000**

DOCKET NO: 50-259
UNIT NAME: BFN-1
DATE: April 6, 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: MARCH 2000**

DOCKET NO: 50-260
UNIT NAME: BFN-2
DATE: April 6, 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)

**UNIT SHUTDOWNS AND POWER REDUCTIONS
REPORT MONTH: MARCH 2000**

DOCKET NO: 50-296
UNIT NAME: BFN-3
DATE: April 6, 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)**