



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

October 13, 1998

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) - SEPTEMBER 1998 MONTHLY OPERATING REPORT**

The enclosure provides the September 1998 Monthly Operating Report as required by BFN Technical Specifications Section 5.6.4.

If you have any questions concerning this matter, 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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U.S. Nuclear Regulatory Commission

Page 2

October 13, 1998

Enclosure

cc (Enclosure):

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ENCLOSURE

TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT (BFN)

MONTHLY OPERATING REPORT

SEPTEMBER 1998

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  
SEPTEMBER 1998

**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 of zero MWe. Accordingly, TVA does not consider reporting 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 September, Unit 2 generated 779,590 megawatt hours gross electrical power and operated at a net capacity factor of 99.3 percent. As of September 30, 1998, Unit 2 has operated continuously for 335 days.

**BROWNS FERRY NUCLEAR PLANT UNIT 3**

For the month of September, Unit 3 generated 357,660 megawatt hours gross electrical power with a net capacity factor of 45.1 percent. On July 21, 1998, at 2359 hours, the unit began coastdown for the Cycle 8 refueling outage. On September 20, 1998, at 0900 hours, Unit 3 started its scheduled Cycle 8 refueling outage. At the time when Unit 3 started its refueling outage, it had run continuously for 153 days.

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259 UNIT NO. ONE DATE: Oct. 5, 1998

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

MONTH September 1998

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		
16.	0		

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-260 UNIT NO. TWO DATE: Oct. 5, 1998

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

MONTH September 1998

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
DAY	(MWe-Net)	DAY	(MWe-Net)
1.	1058	17.	1045
2.	1053	18.	1059
3.	1062	19.	1055
4.	1057	20.	1057
5.	1059	21.	1060
6.	1058	22.	1061
7.	1053	23.	1061
8.	1058	24.	1061
9.	1065	25.	1062
10.	1061	26.	1063
11.	1054	27.	1063
12.	1025	28.	1060
13.	1067	29.	1058
14.	1054	30.	1063
15.	1070		
16.	1054		

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-296 UNIT NO. THREE DATE: Oct. 5, 1998

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

MONTH September 1998

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
DAY	(MWe-Net)	DAY	(MWe-Net)
1.	780	17.	706
2.	776	18.	713
3.	778	19.	705
4.	774	20.	221
5.	773	21.	0
6.	773	22.	0
7.	769	23.	0
8.	768	24.	0
9.	765	25.	0
10.	749	26.	0
11.	751	27.	0
12.	725	28.	0
13.	718	29.	0
14.	729	30.	0
15.	736		
16.	718		

## OPERATING DATA REPORT

Docket No. 50-259  
 Date: Oct. 5, 1998  
 Completed By: J. E. Wallace  
 Telephone: (256)-729-7874

1. Unit Name: **BFN Unit 1**
2. Reporting Period: **September 1998**
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>60.86</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>60.86</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>0</u>	<u>52.76</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>0</u>	<u>52.76</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>0</u>	<u>25.57</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: Oct. 5, 1998  
 Completed By: J. E. Wallace  
 Telephone: (256)-729-7874

1. Unit Name: **BFN Unit 2**
2. Reporting Period: **September 1998**
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): **1098.4**
7. Maximum Dependable Capacity (Net MWe): **1065**
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><b>This Month</b></u>	<u><b>Yr-To-Date</b></u>	<u><b>Cumulative*</b></u>
11. Hours in Reporting Period	<u>720.0</u>	<u>6551.0</u>	<u>154926</u>
12. Number of Hours Reactor was Critical	<u>720.0</u>	<u>6551.0</u>	<u>113357</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>14200</u>
14. Hours Generator On-Line	<u>720.0</u>	<u>6551.0</u>	<u>110964</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWh)	<u>2368303.0</u>	<u>21479840</u>	<u>331515324</u>
17. Gross Electric Energy Generated (MWh)	<u>779590.0</u>	<u>7151490</u>	<u>110153968</u>
18. Net Electrical Energy Generated (MWh)	<u>761639.0</u>	<u>6988805</u>	<u>107194897</u>
19. Unit Service Factor	<u>100.0</u>	<u>100.0</u>	<u>71.6</u>
20. Unit Availability Factor	<u>100.0</u>	<u>100.0</u>	<u>71.6</u>
21. Unit Capacity Factor (Using MDC Net)	<u>99.3</u>	<u>100.2</u>	<u>65.0</u>
22. Unit Capacity Factor (Using DER Net)	<u>99.3</u>	<u>100.2</u>	<u>65.0</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.0</u>	<u>13.4</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: **N/A**

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

## OPERATING DATA REPORT

Docket No            50-296  
 Date:                    Oct. 5, 1998  
 Completed By:        J. E. Wallace  
 Telephone:            (256)-729-7874

1.     Unit Name:                    **BFN Unit 3**  
 2.     Reporting Period:         **September 1998**  
 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): **1098.4**  
 7.     Maximum Dependable Capacity (Net MWe): **1065**

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><b>This Month</b></u>	<u><b>Yr-To-Date</b></u>	<u><b>Cumulative*</b></u>
11.    Hours in Reporting Period	720.0	6551.0	98148
12.    Number of Hours Reactor was Critical	465.0	6028.0	69102
13.    Reactor Reserve Shutdown Hours	0.0	0.0	5150
14.    Hours Generator On-Line	465.0	6001.6	67723
15.    Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.    Gross Thermal Energy Generated (MWh)	1131137.0	18276192	205711105
17.    Gross Electric Energy Generated (MWh)	357660.0	6006620	68770030
18.    Net Electrical Energy Generated (MWh)	345474.0	5848825	66054323
19.    Unit Service Factor	64.6	91.6	69.0
20.    Unit Availability Factor	64.6	91.6	69.0
21.    Unit Capacity Factor (Using MDC Net)	45.1	83.8	63.2
22.    Unit Capacity Factor (Using DER Net)	45.1	83.8	63.2
23.    Unit Forced Outage Rate	0.0	0.1	15.4

24.    Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): **Unit 3 Cycle 8 Refueling Outage, began September 20, 1998, with a scheduled Duration of 22 days**

25.    If Shutdown at End of Report Period, Estimate Date of Startup: **October 14, 1998**

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

**UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT MONTH: SEPTEMBER 1998**

**DOCKET NO:** 50-259  
**UNIT NAME:** BFN-1  
**DATE:** October 5, 1998  
**COMPLETED BY:** J. E. Wallace  
**TELEPHONE:** (256) 729-7874

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report No.	System Code <sup>4</sup>	Component Code <sup>4</sup>	Cause and Corrective Action to Prevent Recurrence
1	06/01/85	S	720	F	4	N/A	N/A	N/A	Administrative hold to resolve various TVA and NRC concerns.

<sup>1</sup> **F: Forced**  
**S: Scheduled**

<sup>2</sup> **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)

<sup>3</sup> **Method**  
1-Manual  
2-Manual Scram  
3-Automatic Scram  
4-Continuation of Existing Outage  
5-Reduction  
9-Other

<sup>4</sup> **Instructions for Preparation of Data Entry sheets for Licensee Event Report (LER) (NUREG - 1022)**

**UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT MONTH: SEPTEMBER 1998**

**DOCKET NO:** 50-260  
**UNIT NAME:** BFN-2  
**DATE:** October 5, 1998  
**COMPLETED BY:** J. E. Wallace  
**TELEPHONE:** (256) 729-7874

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

<sup>1</sup> **F: Forced**  
**S: Scheduled**

<sup>2</sup> **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)

<sup>3</sup> **Method**  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram  
 4-Continuation of Existing Outage  
 5-Reduction  
 9-Other

<sup>4</sup> **Instructions for Preparation of Data Entry sheets for Licensee Event Report (LER) (NUREG - 1022)**

**UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT MONTH: SEPTEMBER 1998**

**DOCKET NO:** 50-296  
**UNIT NAME:** BFN-3  
**DATE:** October 5, 1998  
**COMPLETED BY:** J. E. Wallace  
**TELEPHONE:** (256) 729-7874

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report No.	System Code <sup>4</sup>	Component Code <sup>4</sup>	Cause and Corrective Action to Prevent Recurrence
10	09/20/98	S	255	C	2	N/A	N/A	N/A	The Unit 3, Cycle 8 refueling outage began at 0900 hours on September 20, 1998. The unit is schedule for breaker closure for Cycle 9 on October 14, 1998.

<sup>1</sup> **F: Forced**  
**S: Scheduled**

<sup>2</sup> **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)

<sup>3</sup> **Method**  
1-Manual  
2-Manual Scram  
3-Automatic Scram  
4-Continuation of Existing Outage  
5-Reduction  
9-Other

<sup>4</sup> **Instructions for Preparation of Data Entry sheets for Licensee Event Report (LER) (NUREG - 1622)**