

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

MAY 1 3 1994

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) - MONTHLY OPERATING REPORT FOR THE MONTH OF APRIL 1994

In accordance with the requirements of BFN Units 1, 2, and 3 Technical Specifications Section 6.9.1.3, TVA is submitting the Monthly Operating Report for the month of April 1994 in the enclosure.

If you have any questions, please telephone me at (205) 729-2636.

Sincerely,

Pedro Salas

Manager of Site Licensing

Enclosure

cc: See page 2

SE24 !

9406010286 940430 PDR ADDCK 05000259 PDR U.S. Nuclear Regulatory Commission Page 2 MAY 1 3 1994

Enclosure cc (Enclosure):

Mr. Mark S. Lesser, Section Chief U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323

Mr. Frederick J. Hebdon, Director Project Directorate II-4 Division of Reactor Projects I-II Office of Nuclear Reactor Regulation, Mail 13 H3 Washington, D.C. 20555

INPO Records Center Institute of Nuclear Power Operations 1100 Circle 75 Parkway, Suite 1500 Atlanta, Georgia 30389

Mr. Ted Martson, Director Electric Power Research Institute P. O. Box 10412 Palo Alto, California 94304

NRC Resident Inspector Browns Ferry Nuclear Plant Route 12, Box 637 Athens, Alabama 35611

Regional Administrator U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323

Mr. Fred Yost, Director of Research Utility Data Institute 1200 G Street, NW Washington, D.C. 20005-3802

ENCLOSURE

TENNESSEE VALLEY AUTHORITY BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2, AND 3

> MONTHLY OPERATING REPORT APRIL 1994

OPERATIONAL SUMMARY APRIL 1994

BROWNS FERRY 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 0 MWe. Accordingly, TVA does not consider cumulative reporting period hours for the period beginning June 1, 1985, when calculating the operating status variables.

BROWNS FERRY 2

During the month of April, Unit 2 operated at a capacity factor of 77.9 percent and generated 612,580 megawatt hours gross electrical power. Unit 2 operated continuously from April 1 to April 15, when Unit 2 automatically scrammed from approximately 100 percent power on low scram air header pressure. The automatic scram ended Unit 2's record continuous run at 315 days. During return to service following the scram, Unit 2 automatically scrammed a second time on April 18 when the main steam isolation valves closed due to low reactor pressure following the spurious opening of the turbine bypass valves. Unit 2 returned to service on April 20 and reached 100 percent power on April 22. Unit 2 operated continuously the remainder of the month.

BROWNS FERRY 3

Unit 3 remains shutdown on administrative hold to resolve various TVA and NRC concerns. Unit 3 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 0 MWe. Accordingly, TVA does not consider cumulative reporting period hours for the period beginning June 1, 1985, when calculating the operating status variables.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-259

UNIT: BROWNS FERRY 1

PREPARED BY: T. R. Smith

TELEPHONE: (205) 729-2955

MONTH	April 1994		
DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	16	0
2	0	17	0
3	0	18	<u> </u>
-4	0	19	0
5	0	20	0
6	0	21	0
7	0	22	0
8	0	23	0
9	0	24	0
10	0	25	0
11	0	26	0
12	0	27	0
13	0	28	0
14	0	29	0
15	0	30	0

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-260
UNIT: BROWNS FERRY 2

PREPARED BY: T. R. Smith

TELEPHONE: (205) 729-2955

MONTH	April 1994		
DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1085	16	0
2	1093	17	0
3	1045	18	0
4	1092	19	0
5	1083	20	0
6	1074	21	250
7	1091	22	832
8	1089	23	1001
9	1083	24	1083
10	1089	25	1085
11	1088	26	1084
12	1085	27	1084
13	1086	28	1084
14	1081	29	1081
15	98	30	1073

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-296
UNIT: BROWNS FERRY 3

PREPARED BY: T. R. Smith

TELEPHONE: (205) 729-2955

DAY AVERAGE DAILY POWER LEVEL (MWe-Net) DAY AVERAGE DAILY POWER LEVEL (MWe-Net) 1 0 16 0 2 0 17 0 3 0 18 0 4 0 19 0 5 0 20 0 6 0 21 0 7 0 22 0 8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0 15 0 30 0	MONTH	April 1994		
2 0 17 0 3 0 18 0 4 0 19 0 5 0 20 0 6 0 21 0 7 0 22 0 8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	DAY		DAY	
3 0 18 0 4 0 19 0 5 0 20 0 6 0 21 0 7 0 22 0 8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	1	0	16	0
4 0 19 0 5 0 20 0 6 0 21 0 7 0 22 0 8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	2	0	17	0
5 0 20 0 6 0 21 0 7 0 22 0 8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	3	0	18	0
6 0 21 0 7 0 22 0 8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	4	0	19	0
7 0 22 0 8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	5	0	20	0
8 0 23 0 9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	6	0	21	0
9 0 24 0 10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	7	0	22	0
10 0 25 0 11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	8	0	23	0
11 0 26 0 12 0 27 0 13 0 28 0 14 0 29 0	9	0	24	0
12 0 27 0 13 0 28 0 14 0 29 0	10	0	25	0
13 0 28 0 14 0 29 0	11	0	26	0
14 0 29 0	12	0	27	0
	13	0	28	0
15 0 30 0	14	0	29	0
	15	0	30	0

UNIT SHUTDOWNS AND POWER REDUCTIONS REPORT MONTH: April 1994

DOCKET NO: 50-259

UNIT: BROWNS FERRY

PREPARED BY: T. R. Smith

TELEPHONE: (205) 729-2955

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	License Event Report No.	System Code ⁴	Component Code ⁴	Cause and Corrective Action to Prevent Recurrence
1	06/01/85	S	719	F	4				Administrative hold to resolve various TVA and NRC concerns.

1F-Forced S-Scheduled ²A-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

⁴Instructions for Preparation of Licensee Event Reports (NUREG-1022)

UNIT SHUTDOWNS AND POWER REDUCTIONS REPORT MONTH: April 1994

DOCKET NO: 50-260

UNIT: BROWNS FERRY 2 PREPARED BY: T. R. Smith

TELEPHONE: (205) 729-2955

No.	Date	Type	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	License Event Report No.	System Code ⁴	Component Code ⁴	Cause and Corrective Action to Prevent Recurrence
1	4/15/94	F	146	В	3	260/94004, and 260/94005			During planned maintenance activities on the scram pilot air header, Unit 2 automatically scrammed on low scram air header pressure following isolation of both primary and secondary scram pilot air header pressure regulators. Corrective actions include personnel corrective actions and additional controls for certain maintenance activities. During return to service, Unit 2 automatically scrammed a second time on 4/18/94 when the main steam isolation valve closed following spurious epening of the turbine bypass valves due to unknown cause. Corrective actions being developed for this latter event.

1F-Forced S-Scheduled 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)

Method:

1-Manual

2-Manual Scram

3-Automatic Scram

4-Continuation of Existing Outage

5-Reduction

9-Other

⁴Instructions for Preparation of Licensee Event Reports (NUREG-1022)

UNIT SHUTDOWNS AND POWER REDUCTIONS REPORT MONTH: April 1994

DOCKET NO: 50-296

UNIT: BROWNS FERRY 3

PREPARED BY: T. R. Smith

TELEPHONE: (205) 729-2955

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	License Event Report No.	System Code ⁴	Component Code ⁴	Cause and Corrective Action to Prevent Recurrence
1	06/01/85	S	719	f	4				Administrative hold to resolve various TVA and NRC concerns.

1F-Forced S-Scheduled ²A-Equipment Faiture (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)

Method:

1-Manual

2-Manual Scram

3-Automatic Sc am

4-Continuation of Existing Outage

5-Reduction

9-Other

⁴Instructions for Preparation of Licensee Event Reports (NUREG-1022)

OPERATING DATA REPORT

DOCKET: 50-259

UNIT: BROWNS FERRY 1

PREPARED BY: T. R. SMITH
TELEPHONE: (205) 729-2955

OPERATING STATUS

1. Unit Name: BROWNS FERRY UNIT 1

2. Reporting Period: APRIL 1994

3. Licensed Thermal Power (MWt): 3293

4. Nameplate Rating (Gross MWe): 1152

5. Design Electrical Rating (Net MWe): 1005

6. Maximum Dependable Capacity (Gross MWe): 0

7. Maximum Dependable Capacity (Net MWe): 0

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reason: N/A

9. Power Level To Which Restricted, If Any (Net MWe): 0

10. Reason For Restrictions, If Any: Administrative Hold

THIS MONTH YEAR TO DATE CUMULATIVE*

11.	Hours in Reporting Period	0	0	95743
12.	Hours Reactor Was Critical	0	0	59521
13.	Reactor Reserve Shutdown Hours	0	0	6997
14.	Hours Generator On Line	0	0	58267
15.	Unit Reserve Shutdown Hours	0	0	0
16.	Gross Thermal Generation (MWh)	0	0	168066787
17.	Gross Electrical Generation (MWh)	0	0	55398130
18.	Net Electrical Generation (MWh)	0	0	53796427
19.	Unit Service Factor	0	0	60.9
20.	Unit Availability Factor	0	0	60.9
21.	Unit Capacity Factor (MDC Net)	0	0	52.8
	Unit Capacity Factor (DER net)	0	0	52.8
	Unit Forced Outage Rate	0	0	25.6

- 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): N/A
- 25. If Shut Down At End Of Reporting Period, Estimated Date of Startup: To be determined

^{*} Excludes hours under administrative hold (June 1, 1985 to present)

OPERATING DATA REPORT

DOCKET: 50-260

UNIT: BROWNS FERRY 2
PREPARED BY: T. R. SMITH

TELEPHONE: (205) 729-2955

OPERATING STATUS

- 1. Unit Name: BROWNS FERRY UNIT 2
- 2. Reporting Period: APRIL 1994
- 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 Ratings (Items Number 3 Through 7) Since Last Report, Give Reason: N/A
- 9. Power Level To Which Restricted, If Any (Net MWe): N/A
- 10. Reason For Restrictions, If Any: N/A

		THIS MONTH	YEAR TO DATE	CUMULATIVE*
11.	Hours in Reporting Period	719	2879	116190
12.	Hours Reactor Was Critical	584	2744	77561
13.	Reactor Reserve Shutdown Hours	0	0	14200
14.	Hours Generator On Line	573	2733	75358
15.	Unit Reserve Shutdown Hours	0	0	0
16.	Gross Thermal Generation (MWh)	1820291	8818575	217366175
17.	Gross Electrical Generation (MWh)	612580	2983360	72191278
18.	Net Electrical Generation (MWh)	596521	2913079	70157741
19.	Unit Service Factor	79.7	94.9	64.9
20.	Unit Availability Factor	79.7	94.9	64.9
21.	Unit Capacity Factor (MDC Net)	77.9	95.0	56.7
	Unit Capacity Factor (DER net)	77.9	95.0	56.7
23.	Unit Forced Outage Rate	20.3	5.1	18.1

- 24. Shutdowns Scheduled Over Next 6 Months
 (Type, Date, and Duration of Each): Cycle 7 refueling outage schedu'ed to
 begin October 1, 1994, and currently scheduled for a 37 to 44-day duration.
- 25. If Shut Down At End Of Reporting Period, Estimated Date of Startup: N/A
- * Excludes hours under administrative hold (June 1, 1985 to May 24, 1991)

OPERATING DATA REPORT

DOCKET: 50-296

UNIT: BROWNS FERRY 3

PREPARED BY: T. R. SMITH
TILEPHONE: (205) 729-2955

OPERATING STATUS

- 1. Unit Name: BROWNS FERRY UNIT 3
- 2. Reporting Period: APRIL 1994
- 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 Ratings (Items Number 3 Through 7) Since Last Report, Give Reason: N/A
- 9. Power Level To Which Restricted, If Any (Net MWe): 0
- 10. Reason For Restrictions, If Any: Administrative Hold

THIS MONTH YEAR TO DATE CUMULATIVE* 0 0 73055 11. Hours in Reporting Period 0 45306 12. Hours Reactor Was Critical 0 13. Reactor Reserve Shutdown Hours 0 14. Hours Generator On Line 0 0 5150 0 0 0 44195 15. Unit Reserve Shutdown Hours 16. Gross Thermal Generation (MWh) 0 0 131868267 16. Gross Thermal Generation (MWh) 0 0 17. Gross Electrical Generation (MWh) 0 0 18. Net Electrical Generation (MWh) 0 0 19. Unit Service Factor 0 0 43473760 42114009 60.5 0 0 20. Unit Availability Factor 0 60.5 0 54.2 21. Unit Capacity Factor (MDC Net) 0 22. Unit Capacity Factor (DER net) 54.2

0

0

21.6

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

23. Unit Forced Outage Rate

- 25. If Shut Down At End Of Reporting Period, Estimated Date of Startup: To be determined
- * Excludes hours under administrative hold (June 1, 1985 to present)