

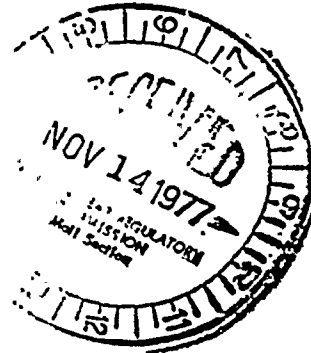


**REGULATORY DOCKET FILE COPY**

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Browns Ferry Nuclear Plant  
P. O. Box 2000  
Decatur, Alabama 35602

NOV 10 1977



Nuclear Regulatory Commission  
Office of Management Information  
and Program Control  
Washington, D. C. 20555

Gentlemen:

Enclosed is the August 1977 report on plant and component operability and availability for Browns Ferry Nuclear Plant units 1, 2, and 3.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. G. Denease  
Plant Superintendent

**Enclosures:**

CC: Director, Region II  
Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
230 Peachtree Street, NW  
Suite 818  
Atlanta, GA 30303  
(1 copy)

Director, Office of Inspection & Enforcement  
Nuclear Regulatory Commission  
Washington, D. C. 20555  
(10 copies)

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UNIT NAME Browns Ferry IDATE 11-7-77COMPLETED BY: Don GreenTELEPHONE 205-729-8316OPERATING STATUS:1. Reporting Period: 0000771001 to 2400771031Gross Hours in Reporting Period: 7452. Currently Authorized Power Level MWt 3293 MWe-net 1065Max. Depend. capacity (MWe-net) 10653. Power Level to which restricted (if any): N/A

4. Reasons for restrictions (if any):

	<u>This Month</u>	<u>Yr-To-Date</u>	<u>Cumulative To Date</u>
5. Hours Reactor Was Critical	<u>0</u>	<u>5885.37</u>	<u>12979.88</u>
6. Reactor Reserve Shutdown Hours	<u>0</u>	<u>255.46</u>	<u>4046.8</u>
7. Hours Generator On-Line	<u>0</u>	<u>5820.34</u>	<u>12646.13</u>
8. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
9. Gross Thermal Power Generated (MWH)	<u>0</u>	<u>15,593,319</u>	<u>32,373,229</u>
10. Gross Electrical Power Generated (MWH)	<u>0</u>	<u>5,210,070</u>	<u>10,818,020</u>
11. Net Electrical Power Generated (MWH)	<u>0</u>	<u>5,043,262</u>	<u>10,488,347</u>
12. Reactor Service Factor	<u>0</u>	<u>76.6</u>	<u>45.5</u>
13. Reactor Available Factor	<u>0</u>	<u>84.2</u>	<u>59.7</u>
14. Unit Service Factor	<u>0</u>	<u>79.8</u>	<u>44.4</u>
15. Unit Availability Factor	<u>0</u>	<u>79.8</u>	<u>44.4</u>
16. Unit Capacity Factor (using MDC)	<u>0</u>	<u>64.9</u>	<u>34.5</u>
17. Unit Capacity Factor (using Design MWe)	<u>0</u>	<u>64.9</u>	<u>34.5</u>
18. Forced Outage Rate	<u>0</u>	<u>4.6</u>	<u>50.3</u>
19. Shutdowns scheduled to begin in next 6 months. (state type, date and duration of each):			

20. If shutdown at end of report period, estimated date of startup: December, 1977

21. Plants in Test Status (prior to commercial operation) Report the Following:

	<u>Forecast</u>	<u>Achieved</u>
Initial Criticality		
Initial Electrical Power Generation		
Commercial Operation		

## SUMMARY:

Refuel Outage

UNIT NAME Browns Ferry 1DATE 11-7-77COMPLETED BY Don GreenREPORT MONTH October

## PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
27	771001	S	745	C	B	

(1) REASON:

A-EQUIPMENT FAILURE (EXPLAIN)

B-MAINT, OR TEST

C-REFUELING

D-REGULATORY RESTRICTION

E-OPERATOR TRAINING AND  
LICENSING EXAMINATION

F-ADMINISTRATIVE

G-OPERATIONAL ERROR  
(EXPLAIN)

(2) METHOD:

A-MANUAL

B-MANUAL  
SCRAM

C-AUTOMATIC  
SCRAM

UNIT

Browns Ferry I

DATE

11-7-77

COMPLETED BY

Don Green

DAILY UNIT POWER OUTPUTMONTH October

<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>	<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>
1	<u>-4</u>	25	<u>-9</u>
2	<u>-7</u>	26	<u>-10</u>
3	<u>-7</u>	27	<u>-10</u>
4	<u>-7</u>	28	<u>-8</u>
5	<u>-7</u>	29	<u>-8</u>
6	<u>-7</u>	30	<u>-9</u>
7	<u>-7</u>	31	<u>-10</u>
8	<u>-7</u>		
9	<u>-7</u>		
10	<u>-7</u>		
11	<u>-7</u>		
12	<u>-5</u>		
13	<u>-3</u>		
14	<u>-7</u>		
15	<u>-7</u>		
16	<u>-7</u>		
17	<u>-7</u>		
18	<u>-7</u>		
19	<u>-8</u>		
20	<u>-9</u>		
21	<u>-9</u>		
22	<u>-9</u>		
23	<u>-9</u>		
24	<u>-9</u>		

Note: Negative values indicate station use when unit is off line.

UNIT NAME Bons Ferry IIDATE 11-7-77COMPLETED BY: Don GreenTELEPHONE 205-729-8316OPERATING STATUS:1. Reporting Period: 0000771001 to 2400771031Gross Hours in Reporting Period: 7452. Currently Authorized Power Level MWe 3293 MWe-net 1065Max. Depend. capacity (MWe-net) 10653. Power Level to which restricted (if any): N/A

4. Reasons for restrictions (if any):

	<u>This Month</u>	<u>Yr-To-Date</u>	<u>Cumulative To Date</u>
5. Hours Reactor Was Critical	<u>435.55</u>	<u>6,702.09</u>	<u>10,055.91</u>
6. Reactor Reserve Shutdown Hours	<u>309.45</u>	<u>593.91</u>	<u>10,968.09</u>
7. Hours Generator On-Line	<u>415.63</u>	<u>6,585.50</u>	<u>9651.23</u>
8. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
9. Gross Thermal Power Generated (MWH)	<u>1,149,845</u>	<u>18,650,239</u>	<u>25,290,700</u>
10. Gross Electrical Power Generated (MWH)	<u>371,190</u>	<u>6,118,360</u>	<u>8,296,750</u>
11. Net Electrical Power Generated (MWH)	<u>359,341</u>	<u>5,936,200</u>	<u>8,053,986</u>
12. Reactor Service Factor	<u>58.5</u>	<u>91.9</u>	<u>42.9</u>
13. Reactor Available Factor	<u>100</u>	<u>100</u>	<u>89.8</u>
14. Unit Service Factor	<u>55.8</u>	<u>90.3</u>	<u>41.2</u>
15. Unit Availability Factor	<u>55.8</u>	<u>90.3</u>	<u>41.2</u>
16. Unit Capacity Factor (using MDC)	<u>45.3</u>	<u>76.4</u>	<u>32.3</u>
17. Unit Capacity Factor (using Design MWe)	<u>45.3</u>	<u>76.4</u>	<u>32.3</u>
18. Forced Outage Rate	<u>44.2</u>	<u>9.7</u>	<u>55.9</u>
19. Shutdowns scheduled to begin in next 6 months (state type, date and duration of each): <u>Refuel Outage March, 1978.</u>			
20. If shutdown at end of report period, estimated date of startup: <u>December, 1977</u>			
21. Plants in Test Status (prior to commercial operation) Report the Following:			

Initial Criticality

Initial Electrical  
Power Generation

Commercial Operation

ForecastAchieved

## SUMMARY:

Unit operated at an average of  
836 MWe before being shutdown  
for maintenance to main turbine.

UNIT NAME Browns Ferry IIDATE 11-7-77COMPLETED BY Don GreenREPORT MONTH October

## PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
32	771017	F	8.20	A	C	(Low Rx water level) All 3 feedpumps tripped due to false vibration signal caused by "B" Instrument and Control Buss.
33	771017	F	.25	A	No shutdown	Turbine tripped on loss of 24 V DC power supply.
34	771018	F	8.58	A	B	Main turbine high vibration.
35	771019	F	15.37	A	No shutdown	Tripped turb/gen due to main turbine high vibration
36	771019	F	296.97	A	B	Maintenance to main turbine.
						<p>(1) REASON:</p> <p>A-EQUIPMENT FAILURE (EXPLAIN)</p> <p>B-MAINT, OR TEST</p> <p>C-REFUELING</p> <p>D-REGULATORY RESTRICTION</p> <p>E-OPERATOR TRAINING AND LICENSING EXAMINATION</p> <p>F-ADMINISTRATIVE</p> <p>G-OPERATIONAL ERROR (EXPLAIN)</p>
						<p>(2) METHOD:</p> <p>A-MANUAL</p> <p>B-MANUAL SCRAM</p> <p>C-AUTOMATIC SCRAM</p>

UNIT

Browns Ferry II

DATE

11-7-77

COMPLETED BY

Don Green

DAILY UNIT POWER OUTPUTMONTH October

<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>	<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>
1	499	25	-6
2	632	26	-5
3	727	27	-2
4	792	28	-3
5	929	29	-7
6	912	30	-7
7	951	31	-6
8	953		
9	953		
10	994		
11	991		
12	997		
13	977		
14	985		
15	989		
16	981		
17	387		
18	402		
19	-11		
20	-7		
21	-7		
22	-7		
23	-6		
24	-6		

Note: Negative values indicate station  
use when unit is off line.





UNIT NAME Brown's Ferry IIIDATE 11-7-77COMPLETED BY: Don GreenTELEPHONE 205-729-8316OPERATING STATUS:1. Reporting Period: 0000771001 to 2400771031Gross Hours in Reporting Period: 7452. Currently Authorized Power Level MWe 3293 MWe-net 1065Max. Depend. capacity (MWe-net) 10653. Power Level to which restricted (if any): N/A

4. Reasons for restrictions (if any):

	This Month	Yr-To-Date	Cumulative To Date
5. Hours Reactor Was Critical	685.08	5315.11	5315.11
6. Reactor Reserve Shutdown Hours	59.92	564.89	564.89
7. Hours Generator On-Line	617.90	5134.13	5134.13
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	1,990,310	14,725,275	14,725,275
10. Gross Electrical Power Generated (MWH)	656,380	4,752,790	4,752,790
11. Net Electrical Power Generated (MWH)	638,789	4,603,474	4,603,474
12. Reactor Service Factor	92.0	90.4	90.4
13. Reactor Available Factor	100	100	100
14. Unit Service Factor	90.2	87.3	87.3
15. Unit Availability Factor	90.2	87.3	87.3
16. Unit Capacity Factor (using MDC)	80.5	73.5	73.5
17. Unit Capacity Factor (using Design MWe)	80.5	73.5	73.5
18. Forced Outage Rate	1.4	10.7	10.7

19. Shutdowns scheduled to begin in next 6 months: (state type, date and duration of each):

20. If shutdown at end of report period, estimated date of startup:

21. Plants in Test Status (prior to commercial operation) Report the Following:

	Forecast	Achieved
Initial Criticality		
Initial Electrical Power Generation		
Commercial Operation		

**SUMMARY:**

Unit operated at an average load of 858 MWe.

**SUMMARY:**

Unit operated at an average load of 858 MWe.

UNIT NAME Browns Ferry III

DATE 11-7-77

COMPLETED BY Don Green

REPORT MONTH October

## PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
40	771014	S	63.80	B	B	Maintenance on Tip's and Oxygen Sensor.
41	771017	F	9.30	A	C	EHC low oil pressure.
						<p>(1) REASON:</p> <p>A-EQUIPMENT FAILURE (EXPLAIN)</p> <p>B-MAINT, OR TEST</p> <p>C-REFUELING</p> <p>D-REGULATORY RESTRICTION</p> <p>E-OPERATOR TRAINING AND LICENSING EXAMINATION</p> <p>F-ADMINISTRATIVE</p> <p>G-OPERATIONAL ERROR (EXPLAIN)</p>
						<p>(2) METHOD:</p> <p>A-MANUAL</p> <p>B-MANUAL SCRAM</p> <p>C-AUTOMATIC SCRAM</p>

UNIT Browns Ferry IIIDATE 11-7-77COMPLETED BY Don GreenDAILY UNIT POWER OUTPUTMONTH October

<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>	<u>DAY</u>	<u>AVERAGE DAILY MWe-net</u>
1	<u>1001</u>	25	<u>1014</u>
2	<u>1029</u>	26	<u>1015</u>
3	<u>1035</u>	27	<u>1013</u>
4	<u>1029</u>	28	<u>1000</u>
5	<u>1032</u>	29	<u>771</u>
6	<u>1029</u>	30	<u>931</u>
7	<u>1025</u>	31	<u>979</u>
8	<u>1010</u>		
9	<u>1031</u>		
10	<u>1027</u>		
11	<u>1028</u>		
12	<u>1032</u>		
13	<u>1027</u>		
14	<u>999</u>		
15	<u>-12</u>		
16	<u>-13</u>		
17	<u>-12</u>		
18	<u>347</u>		
19	<u>654</u>		
20	<u>766</u>		
21	<u>879</u>		
22	<u>951</u>		
23	<u>1011</u>		
24	<u>984</u>		

Note: Negative values indicate station  
use when unit is off line.