NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NUMBER: 50-259/260/296

FILE NUMBER: MONTHLY REPORT

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PLANT NAME: Browns Ferry 1-3

9-14-77

ENCLOSURE

Monthly Report for August 1977
Plant & Component Operability & Availability.
This Report to be used in preparing Gray Book by Plans & Operations.

14p

1 CY ENCL Rec'd *

FOR ACTION/INFORMATION

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

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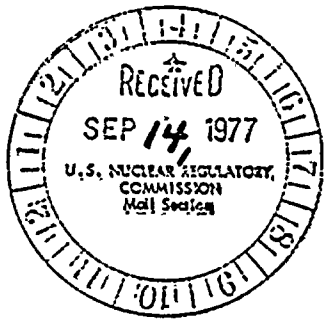
September 9, 1977

REGULATORY DOCKET FILE COPY



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. Dewease
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)

7709230236

UNIT NAME Browns Ferry I

DATE 9-7-77

COMPLETED BY: Don Green

TELEPHONE 205-729-8316

OPERATING STATUS:

1. Reporting Period: 0000770801 to 2400770831
   Gross Hours in Reporting Period: 744
2. Currently Authorized Power Level MWt 3293 MWe-net 1065
   Max. Depend. capacity (MWe-net) 1065
3. 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	744	5575.54	12670.05
6.	Reactor Reserve Shutdown Hours	0	255.46	4046.8
7.	Hours Generator On-Line	744	5507.26	12333.05
8.	Unit Reserve Shutdown Hours	0	0	0
9.	Gross Thermal Power Generated (MWH)	1,979,323	14,865,908	31,645,818
10.	Gross Electrical Power Generated (MWH)	659,920	4,959,830	10,567,780
11.	Net Electrical Power Generated (MWH)	635,824	4,803,518	10,248,603
12.	Reactor Service Factor	100	95.6	46.8
13.	Reactor Available Factor	100	100	61.8
14.	Unit Service Factor	100	94.4	45.6
15.	Unit Availability Factor	100	94.4	45.6
16.	Unit Capacity Factor (using MDC)	80.2	77.4	35.6
17.	Unit Capacity Factor (using Design MWe)	80.2	77.4	35.6
18.	Forced Outage Rate	0	4.9	50.9

19. Shutdowns scheduled to begin in next 6 months (state type, date and duration of each): Refueling Outage September 1977
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 827 MWe

UNIT NAME Browns Ferry I

DATE 9-7-77

COMPLETED BY Don Green

REPORT MONTH August 1977

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
26	770820	F				Derated for recirc. pump M-G set maintenance.

(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 9-3-77

COMPLETED BY Ted Thom

DAILY UNIT POWER OUTPUT

MONTH August 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	950	25	850
2	862	26	842
3	917	27	831
4	912	28	823
5	899	29	822
6	780	30	825
7	820	31	827
8	860		
9	866		
10	865		
11	863		
12	885		
13	867		
14	802		
15	865		
16	864		
17	862		
18	875		
19	856		
20	802		
21	855		
22	850		
23	851		
24	842		

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

UNIT NAME Browns Ferry I.

DATE 9-7-77

COMPLETED BY: Don Green

TELEPHONE 205-729-8316

OPERATING STATUS:

1. Reporting Period: 0000770801 to 2400770831
   Gross Hours in Reporting Period: 744
2. Currently Authorized Power Level MWt 3293 MWe-net 1065
   Max. Depend. capacity (MWe-net) 1065
3. 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	744	5575.54	12670.05
6. Reactor Reserve Shutdown Hours	0	255.46	4046.8
7. Hours Generator On-Line	744	5507.26	12333.05
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	1,979,323	14,865,908	31,645,818
10. Gross Electrical Power Generated (MWH)	659,920	4,959,830	10,567,780
11. Net Electrical Power Generated (MWH)	635,824	4,803,518	10,248,603
12. Reactor Service Factor	100	95.6	46.8
13. Reactor Available Factor	100	100	61.8
14. Unit Service Factor	100	94.4	45.6
15. Unit Availability Factor	100	94.4	45.6
16. Unit Capacity Factor (using MDC)	80.2	77.4	35.6
17. Unit Capacity Factor (using Design MWe)	80.2	77.4	35.6
18. Forced Outage Rate	0	4.9	50.9

19. Shutdowns scheduled to begin in next 6 months (state type, date and duration of each): Refueling Outage September 1977
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 827 MWe

UNIT NAME Browns Ferry I

DATE 9-7-77

COMPLETED BY Don Green

REPORT MONTH August 1977

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
26	770820	F				Derated for recirc. pump M-G set maintenance.

(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 9-3-77

COMPLETED BY Ted Thom

DAILY UNIT POWER OUTPUT

MONTH August 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	950	25	850
2	862	26	842
3	917	27	831
4	912	28	823
5	899	29	822
6	780	30	825
7	820	31	827
8	860		
9	866		
10	865		
11	863		
12	885		
13	867		
14	802		
15	865		
16	864		
17	862		
18	875		
19	856		
20	802		
21	855		
22	850		
23	851		
24	842		

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

UNIT NAME Browns Ferry II

DATE 9-7-77

COMPLETED BY: Don Green

TELEPHONE 205-729-8316

OPERATING STATUS:

1. Reporting Period: 0000770801 to 2400770831

   Gross Hours in Reporting Period: 744

2. Currently Authorized Power Level MWt 3293 MWe-net 1065

   Max. Depend. capacity (MWe-net) 1065

3. 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	679.32	5546.54	8900.36
6.	Reactor Reserve Shutdown Hours	64.68	284.46	10658.64
7.	Hours Generator On-Line	663.87	5449.87	8515.60
8.	Unit Reserve Shutdown Hours	0	0	0
9.	Gross Thermal Power Generated (MWH)	1,810,718	15,326,769	21,967,230
10.	Gross Electrical Power Generated (MWH)	591,810	5,025,210	7,203,600
11.	Net Electrical Power Generated (MWH)	573,060	4,876,203	6,993,989
12.	Reactor Service Factor	91.3	95.1	40.5
13.	Reactor Available Factor	100	100	89.1
14.	Unit Service Factor	89.2	93.4	38.8
15.	Unit Availability Factor	89.2	93.4	38.8
16.	Unit Capacity Factor (using MDC)	72.3	78.5	29.9
17.	Unit Capacity Factor (using Design MWe)	72.3	78.5	29.9
18.	Forced Outage Rate	10.8	6.5	58.3

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 771 MWe

UNIT NAME Browns Ferry II

DATE 9-7-77

COMPLETED BY Don Green

REPORT MONTH August 1977

PLANT SHUTDOWNS

NO:	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
27	770803	F	7.07	A	C	MSIV Closure
28	770811	F	73.06	A	C	APRM High Flux.
29	770827	F				Derated for maintenance to recirc. M-G sets.

(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-AUTOMAT SCRAM

UNIT Browns Ferry #1

DATE 9-7-77

COMPLETED BY Don Green

DAILY UNIT POWER OUTPUT

MONTH August 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	1021	25	980
2	934	26	1000
3	929	27	900
4	290	28	898
5	768	29	975
6	811	30	998
7	924	31	999
8	979		
9	986		
10	985		
11	896		
12	-7		
13	-7		
14	-6		
15	396		
16	494		
17	599		
18	705		
19	785		
20	805		
21	907		
22	977		
23	987		
24	980		

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

UNIT NAME Browns Ferry II

DATE 9-7-77

COMPLETED BY: Don Green

TELEPHONE 205-729-8316

OPERATING STATUS:

1. Reporting Period: 0000770801 to 2400770831

   Gross Hours in Reporting Period: 744

2. Currently Authorized Power Level MWt 3293 MWe-net 1065

   Max. Depend. capacity (MWe-net) 1065

3. 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	679.32	5546.54	8900.36
6.	Reactor Reserve Shutdown Hours	64.68	284.46	10658.64
7.	Hours Generator On-Line	663.87	5449.87	8515.60
8.	Unit Reserve Shutdown Hours	0	0	0
9.	Gross Thermal Power Generated (MWH)	1,810,718	15,326,769	21,967,230
10.	Gross Electrical Power Generated (MWH)	591,810	5,025,210	7,203,600
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12.	Reactor Service Factor	91.3	95.1	40.5
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14.	Unit Service Factor	89.2	93.4	38.8
15.	Unit Availability Factor	89.2	93.4	38.8
16.	Unit Capacity Factor (using MDC)	72.3	78.5	29.9
17.	Unit Capacity Factor (using Design MWe)	72.3	78.5	29.9
18.	Forced Outage Rate	10.8	6.5	58.3

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 771 MWe

UNIT NAME Browns Ferry II

DATE 9-7-77

COMPLETED BY Don Green

REPORT MONTH August 1977

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
27	770803	F	7.07	A	C	MSIV Closure
28	770811	F	73.06	A	C	APRM High Flux.
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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-AUTOMAT SCRAM

UNIT Browns Ferry #1

DATE 9-7-77

COMPLETED BY Don Green

DAILY UNIT POWER OUTPUT

MONTH August 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	1021	25	980
2	934	26	1000
3	929	27	900
4	290	28	898
5	768	29	975
6	811	30	998
7	924	31	999
8	979		
9	986		
10	985		
11	896		
12	-7		
13	-7		
14	-6		
15	396		
16	494		
17	599		
18	705		
19	785		
20	805		
21	907		
22	977		
23	987		
24	980		

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

UNIT NAME Browns Ferry III

DATE 9-7-77

COMPLETED BY: Don Green

TELEPHONE 205-729-8316

OPERATING STATUS:

1. Reporting Period: 0000770801 to 2400770831

   Gross Hours in Reporting Period: 744

2. Currently Authorized Power Level MWt 3293 MWe-net 1065

   Max. Depend. capacity (MWe-net) 1065

3. 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	744	3976.28	3976.28
6.	Reactor Reserve Shutdown Hours	0	438.72	438.72
7.	Hours Generator On-Line	740.98	3827.71	3827.71
8.	Unit Reserve Shutdown Hours	0	0	0
9.	Gross Thermal Power Generated (MWH)	2,258,455	10,903,275	10,903,275
10.	Gross Electrical Power Generated (MWH)	727,790	3,508,710	3,508,710
11.	Net Electrical Power Generated (MWH)	705,412	3,393,572	3,393,572
12.	Reactor Service Factor	100	90.1	90.1
13.	Reactor Available Factor	100	100	100
14.	Unit Service Factor	99.6	86.7	86.7
15.	Unit Availability Factor	99.6	86.7	86.7
16.	Unit Capacity Factor (using MDC)	89.0	72.2	72.2
17.	Unit Capacity Factor (using Design MWe)	89.0	72.2	72.2
18.	Forced Outage Rate	0.4	13.3	13.3

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 948 MWe

UNIT NAME Browns Ferry III

DATE 9-7-77

COMPLETED BY Don Green

REPORT MONTH August 1977

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
34	770801	F	3.02	B	B	Maintenance to recirc. valve FCV-68-23
35	770803					Derated due to high condenser back pressure

(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 III

DATE 9-7-77

COMPLETED BY Don Green

DAILY UNIT POWER OUTPUT

MONTH August 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	464	25	1007
2	850	26	998
3	798	27	955
4	922	28	945
5	994	29	960
6	979	30	919
7	961	31	917
8	971		
9	976		
10	986		
11	988		
12	1013		
13	997		
14	908		
15	992		
16	987		
17	970		
18	1005		
19	992		
20	956		
21	985		
22	992		
23	1002		
24	992		

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

UNIT Browns Ferry III

DATE 9-7-77

COMPLETED BY Don Green

DAILY UNIT POWER OUTPUT

MONTH August 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
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3	798	27	955
4	922	28	945
5	994	29	960
6	979	30	919
7	961	31	917
8	971		
9	976		
10	986		
11	988		
12	1013		
13	997		
14	908		
15	992		
16	987		
17	970		
18	1005		
19	992		
20	956		
21	985		
22	992		
23	1002		
24	992		

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

UNIT NAME Browns Ferry III

DATE 9-7-77

COMPLETED BY: Don Green

TELEPHONE 205-729-8316

OPERATING STATUS:

1. Reporting Period: 0000770801 to 2400770831

   Gross Hours in Reporting Period: 744

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11.	Net Electrical Power Generated (MWH)	705,412	3,393,572	3,393,572
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13.	Reactor Available Factor	100	100	100
14.	Unit Service Factor	99.6	86.7	86.7
15.	Unit Availability Factor	99.6	86.7	86.7
16.	Unit Capacity Factor (using MDC)	89.0	72.2	72.2
17.	Unit Capacity Factor (using Design MWe)	89.0	72.2	72.2
18.	Forced Outage Rate	0.4	13.3	13.3

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

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	Forecast	Achieved
Initial Criticality		
Initial Electrical Power Generation		
Commercial Operation		

SUMMARY:

Unit operated at an average load of 948 MWe

UNIT NAME Browns Ferry III

DATE 9-7-77

COMPLETED BY Don Green

REPORT MONTH August 1977

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
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35	770803					Derated due to high condenser back pressure

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B-MAINT, OR TEST
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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 III

DATE 9-7-77

COMPLETED BY Don Green

DAILY UNIT POWER OUTPUT

MONTH August 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	464	25	1007
2	850	26	998
3	798	27	955
4	922	28	945
5	994	29	960
6	979	30	919
7	961	31	917
8	971		
9	976		
10	986		
11	988		
12	1013		
13	997		
14	908		
15	992		
16	987		
17	970		
18	1005		
19	992		
20	956		
21	985		
22	992		
23	1002		
24	992		

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