NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

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TO:	FROM:	DATE OF DOCUMENT
N. R. C.	Tennessee Valley Authority Decatur, Ala. H. J. Green	6/13/77
		DATE RECEIVED 6/20/77

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(1-P)

PLANT NAME:
Browns Ferry Units 1-2-3

RJL 6/20/77

ENCLOSURE

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

(18-P)

FOR ACTION/INFORMATION

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NRC FORM 195 (2-76)

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

June 13, 1977

50-259/260/296

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

REGULATORY DOCKET FILE COPY

Gentlemen:

Enclosed is the May 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

H. J. Green
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)

771710078

UNIT NAME Browns Ferry I

DATE 6/7/77

COMPLETED BY: Harold Walls

TELEPHONE 729-6846

OPERATING STATUS:

1. Reporting Period: 0000770501 to 2400770531

   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	3,380.39	10,474.9
6. Reactor Reserve Shutdown Hours	0	242.61	4,033.95
7. Hours Generator On-Line	744	3,322.31	10,148.1
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	2,174,578	9,107,962	25,887,872
10. Gross Electrical Power Generated (MWH)	726,960	3,054,280	8,662,230
11. Net Electrical Power Generated (MWH)	703,440	2,969,609	8,414,694
12. Reactor Service Factor	100	93.3	42.2
13. Reactor Available Factor	100	100	58.4
14. Unit Service Factor	100	91.7	40.9
15. Unit Availability Factor	100	91.7	40.9
16. Unit Capacity Factor (using MDC)	88.8	77.0	31.8
17. Unit Capacity Factor (using Design MWe)	88.8	77.0	31.8
18. Forced Outage Rate	0	7.2	55.7

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 977 MWe

UNIT NAME Browns Ferry I

DATE 6/7/77

COMPLETED BY Harold Walls

REPORT MONTH May

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
12	770514	F				Derated for recorc. pump 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 1

DATE 6/1/77

COMPLETED BY Ted Thom, J. Steele

DAILY UNIT POWER OUTPUT

MONTH May 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	879	25	1023
2	928	26	1019
3	1047	27	1024
4	1022	28	896
5	1029	29	1079
6	1069	30	936
7	1050(E)	31	1008
8	1062		
9	962		
10	1020		
11	-1029		
12	1058		
13	1040		
14	528		
15	542		
16	598		
17	714		
18	821		
19	950		
20	1002		
21	1035		
22	1028		
23	1038		
24	1024		

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

(E) = estimate

UNIT NAME Browns Ferry II

DATE 6/7/77

COMPLETED BY: Harold Walls

TELEPHONE 729-6846

OPERATING STATUS:

1. Reporting Period: 0000660501 to 2400770531
   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	728.43	3,409.39	6,763.21
6. Reactor Reserve Shutdown Hours	15.57	213.61	10,587.79
7. Hours Generator On-Line	700.48	3,329.62	6,395.35
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	1,959,701	9,538,757	16,179,218
10. Gross Electrical Power Generated (MWH)	642,880	3,140,680	5,319,070
11. Net Electrical Power Generated (MWH)	622,017	3,056,145	5,173,931
12. Reactor Service Factor	97.9	94.1	34.2
13. Reactor Available Factor	100	100	87.8
14. Unit Service Factor	94.2	91.9	32.4
15. Unit Availability Factor	94.2	91.9	32.4
16. Unit Capacity Factor (using MDC)	78.5	79.2	24.6
17. Unit Capacity Factor (using Design MWe)	78.5	79.2	24.6
18. Forced Outage Rate	5.8	8.1	64.9

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 918 MWe.

UNIT NAME Browns Ferry II

DATE 6/7/77

COMPLETED BY Harold Walls

REPORT MONTH May 1977

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
10.	770503	F	24.78	B	C	Scram during performance of SI.
11.	770522	F	18.73	A	C	Flux spike during recirc. pump start.

(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 II

DATE 6/7/77

COMPLETED BY Harold Walls

DAILY UNIT POWER OUTPUT

MONTH May 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	529	25	945
2	548	26	1024
3	272	27	1029
4	158	28	983
5	417	29	1095
6	569	30	928
7	708	31	1080
8	841		
9	875		
10	987		
11	1021		
12	1031		
13	1048		
14	1028		
15	1018		
16	1043		
17	1007		
18	1037		
19	1063		
20	1000		
21	982		
22	178		
23	585		
24	825		

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

UNIT NAME Brown Ferry III

DATE 6/7/77

COMPLETED BY: Harold Walls

TELEPHONE 729-6846

OPERATING STATUS:

1. Reporting Period: 0000770501 to 2400770531
   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): NA
4. Reasons for restrictions (if any):

	This Month	Yr-To-Date	Cumulative To Date
5. Hours Reactor Was Critical	698.38	2,020.18	2,020.18
6. Reactor Reserve Shutdown Hours	45.62	186.82	186.82
7. Hours Generator On-Line	674.72	1,964.15	1,964.15
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	1,880,784	5,638,584	5,638,584
10. Gross Electrical Power Generated (MWH)	606,560	1,854,340	1,854,340
11. Net Electrical Power Generated (MWH)	585,195	1,798,061	1,798,061
12. Reactor Service Factor	93.9	91.5	91.5
13. Reactor Available Factor	100	100	100
14. Unit Service Factor	90.7	89.0	89.0
15. Unit Availability Factor	90.7	89.0	89.0
16. Unit Capacity Factor (using MDC)	73.9	76.5	76.5
17. Unit Capacity Factor (using Design MWe)	73.9	76.5	76.5
18. Forced Outage Rate	9.3	11.0	11.0

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 899 MWe.

UNIT NAME Browns Ferry III

DATE 6/7/77

COMPLETED BY Harold Walls

REPORT MONTH May 1977

PLANT SHUTDOWNS

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
10.	770501	F	1.75	A	B	Leaking relief valve
11.	770510	F	34.65	B	C	MSIV isolation during SI
12.	770515	F	21.43	A	C	Turbine Trip
13.	770524	F	11.45	B	C	Sensing line inadvertently bumped

(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 6/7/77

COMPLETED BY Harold Walls

DAILY UNIT POWER OUTPUT

MONTH May 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	400	25	519
2	750	26	864
3	747	27	926
4	970	28	954
5	1005	29	1011
6	1004	30	868
7	1056	31	1005
8	1045		
9	812		
10	396		
11	27		
12	470		
13	610		
14	743		
15	364		
16	348		
17	729		
18	857		
19	997		
20	949		
21	1000		
22	992		
23	1026		
24	579		

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

UNIT NAME Browns Ferry I

DATE 6/7/77

COMPLETED BY: Harold Walls

TELEPHONE 729-6846

OPERATING STATUS:

1. Reporting Period: 0000770501 to 2400770531
   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	3,380.39	10,474.9
6. Reactor Reserve Shutdown Hours	0	242.61	4,033.95
7. Hours Generator On-Line	744	3,322.31	10,148.1
8. Unit Reserve Shutdown Hours	0	0	0
9. Gross Thermal Power Generated (MWH)	2,174,578	9,107,962	25,887,872
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12. Reactor Service Factor	100	93.3	42.2
13. Reactor Available Factor	100	100	58.4
14. Unit Service Factor	100	91.7	40.9
15. Unit Availability Factor	100	91.7	40.9
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UNIT NAME Browns Ferry I

DATE 6/7/77

COMPLETED BY Harold Walls

REPORT MONTH May

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NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	COMMENTS
12	770514	F				Derated for recorc. pump maintenance.

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F-ADMINISTRATIVE
G-OPERATIONAL ERROR (EXPLAIN)

(2) METHOD:
A-MANUAL
B-MANUAL SCRAM
C-AUTOMATIC SCRAM

UNIT Browns Ferry 1

DATE 6/1/77

COMPLETED BY Ted Thom, J. Steele

DAILY UNIT POWER OUTPUT

MONTH May 1977

DAY	AVERAGE DAILY MWe-net	DAY	AVERAGE DAILY MWe-net
1	879	25	1023
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4	1022	28	896
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8	1062		
9	962		
10	1020		
11	-1029		
12	1058		
13	1040		
14	528		
15	542		
16	598		
17	714		
18	821		
19	950		
20	1002		
21	1035		
22	1028		
23	1038		
24	1024		

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

(E) = estimate

UNIT NAME Browns Ferry II

DATE 6/7/77

COMPLETED BY: Harold Walls

TELEPHONE 729-6846

OPERATING STATUS:

1. Reporting Period: 0000660501 to 2400770531

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UNIT NAME Browns Ferry II

DATE 6/7/77

COMPLETED BY Harold Walls

REPORT MONTH May 1977

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(2) METHOD:
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C-AUTOMATIC SCRAM

UNIT Browns Ferry II

DATE 6/7/77

COMPLETED BY Harold Walls

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17	1007		
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20	1000		
21	982		
22	178		
23	585		
24	825		

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

UNIT NAME Brown Ferry III

DATE 6/7/77

COMPLETED BY: Harold Walls

TELEPHONE 729-6846

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11.	Net Electrical Power Generated (MWH)	585,195	1,798,061	1,798,061
12.	Reactor Service Factor	93.9	91.5	91.5
13.	Reactor Available Factor	100	100	100
14.	Unit Service Factor	90.7	89.0	89.0
15.	Unit Availability Factor	90.7	89.0	89.0
16.	Unit Capacity Factor (using MDC)	73.9	76.5	76.5
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Commercial Operation		

SUMMARY:

Unit operated at an average load of 899 MWe.

UNIT NAME Browns Ferry III

DATE 6/7/77

COMPLETED BY Harold Walls

REPORT MONTH May 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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(1) REASON:
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F-ADMINISTRATIVE
G-OPERATIONAL ERROR (EXPLAIN)

(2) METHOD:
A-MANUAL
B-MANUAL SCRAM
C-AUTOMATIC SCRAM

UNIT Browns Ferry III

DATE 6/7/77

COMPLETED BY Harold Walls

DAILY UNIT POWER OUTPUT

MONTH May 1977

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8	1045		
9	812		
10	396		
11	27		
12	470		
13	610		
14	743		
15	364		
16	348		
17	729		
18	857		
19	997		
20	949		
21	1000		
22	992		
23	1026		
24	579		

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