

TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER PRODUCTION
BROWNS FERRY NUCLEAR PLANT

MONTHLY OPERATING REPORT

May 1, 1980 - May 31, 1980

DOCKET NUMBERS 50-259, 50-260, AND 50-296
LICENSE NUMBERS J PR-33, DPR-52, AND DPR-68

Submitted By:

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Plant Superintendent

8.006170507

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TABLE OF CONTENTS

Operations Summary	1
Refueling Information	4
Significant Operational Events	6
Average Daily Unit Power Level	13
Operating Data Reports	16
Unit Shutdowns and Power Reductions.	19
Plant Maintenance	22
Outage Summary	28



Operations SummaryMay 1980

The following summary describes the significant operational activities during the reporting period. In support of this summary, a chronological log of significant events is included in this report.

There were fourteen reportable occurrences (plus two supplemental reports) reported to the NRC during the month of May.

Unit 1

There were three scrams on the unit during the month. On May 6, the reactor scrambled due to turbine control valve fast closure from EHC pressure fluctuations. The reactor scrambled on May 7, after the main and RFP turbines tripped from a false high water level signal caused by a blown fuse in the "A" feedwater inverter. On May 27, the reactor scrambled after a generator load rejection caused by the operation of the main transformer differential relay due to personnel error.

Unit 2

There were three scrams on the unit during the month. On May 2, the reactor was manually scrambled to repair a leak on the main steam "B" control valve, second steam leak-off piping flange. The reactor was manually scrambled on May 3, to repair the EHC servo-valve to the "A" turbine control valve because the servo-valve had been installed incorrectly. On May 16, the reactor was manually scrambled to repair an EHC oil leak in the "C" control valve servo-motor.

Operations Summary (Continued)

May 1980

Unit 3

There were two scrams on the unit during the month. On May 15, the reactor scrambled due to a generator load rejection when a ground occurred on the generator field ground detector (possible personnel error). The reactor scrambled on May 21, due to high flux on APRM "D" and MSIV "B" and "C" not fully open. Investigation revealed that the AC pilot valve on the "C" outboard MSIV did not re-energize (defective relay) during tests on the MSL high flow switches.

Operations Summary (Continued)

May 1980

Fatigue Usage Evaluation

The cumulative usage factors for the reactor vessel are as follows:

<u>Location</u>	<u>Usage Factor</u>		
	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>
Shell at water line	0.00464	0.00343	0.00295
Feedwater nozzle	0.21997	0.14835	0.10950
Closure studs	0.19099	0.12106	0.08794

Note: This accumulated monthly information satisfies technical specification section 6.6.A.17.b(3) reporting requirements.

Common Systems

Approximately $9.99E+04$ gallons of waste liquid were discharged containing approximately $1.67E-01$ curies of activity.

Refueling Information

May 1980

Unit 1

Unit 1 is scheduled for its fourth refueling beginning on or about April 15, 1981, with a scheduled restart date of July 25, 1981. This refueling will involve loading additional 8 x 8 R (retrofit) fuel assemblies into the core, the final fix on the sparger modification, power supply on LPCI modification, and torus modifications if all approvals are received.

There are 764 fuel assemblies in the reactor vessel. The spent fuel storage pool presently contains 550 spent 7 x 7 fuel assemblies, five 8 x 8 fuel assemblies, one 8 x 8 R fuel assemblies, and 20 new P 8 x 8 R assemblies. Because of modification work to increase spent fuel pool capacity to 3471 assemblies, present capacity is limited to 1152 assemblies.

Unit 2

Unit 2 is scheduled for its third refueling beginning on or about September 1, 1980, with a scheduled restart date of October 11, 1980. Resumption of operation on that date will require a change in technical specifications pertaining to the core thermal limits. Licensing information in support of these changes will be submitted to the NRC before the outage. This refueling involves replacing some more 7 x 7 fuel assemblies with 8 x 8 R (retrofit) assemblies, and power supply on LPCI modification.

There are 764 fuel assemblies in the reactor vessel. At the end of the month, there were 132 discharged cycle 1 fuel assemblies and 268 discharged cycle 2 fuel assemblies in the spent fuel storage pool. The present storage capacity of the spent fuel pool is 1080 assemblies. With present capacity,

Refueling Information (Continued)

May 1980

Unit 2 (Continued)

the 1979 refueling would be the last refueling that could be discharged to the spent fuel pool without exceeding that capacity and maintaining full core discharge capability in the pool.

Unit 3

Unit 3 is scheduled for its third refueling beginning on or about October 17, 1980, with a scheduled restart date of November 25, 1980. This EOC-3 refueling, involves loading additional 8 x 8 R (retrofit) assemblies into the core, and power supply on LPCI modification.

There are 764 fuel assemblies presently in the reactor vessel. There are 144 discharged cycle 2 fuel assemblies and 208 discharged cycle 1 fuel assemblies in the spent fuel storage pool. The present storage capacity of the spent fuel pool is 1528 assemblies. With present capacity, the 1980 refueling would be the last refueling that could be discharged to the spent fuel pool without exceeding that capacity and maintaining full core discharge capability in the pool.

Significant Operational Events

Unit 1

Date	Time	Event
5/01/80	0001	Reactor thermal power at 99%, maximum flow (rod limited) sequence "A"
5/02/80	2045	Reduced thermal power from 99% to 95% due to EHC high vibration
	2359	Reduced thermal power from 95% to 80% for turbine C.V. test and SI's
5/03/80	0119	Turbine C.V. tests and SI's completed, commenced power ascension
	0230	Reactor thermal power at 95%, holding due to EHC high vibration
5/05/80	1016	Commenced power ascension from 95% thermal power
	1402	Reactor thermal power at 99%, maximum flow (rod limited)
5/06/80	0520	Reactor scram No. 124 ⁽²⁾ from 99% thermal power on generator load rejection, No. 6 intermediate valve closed while testing No. 5 intermediate valve
5/07/80	0009	Commenced rod withdrawal
	0345	Reactor critical No. 144 sequence "A"
	0522	Rolled T/G
	0546	Synchronized generator, commenced power ascension
	1239	Reactor scram No. 125 ⁽²⁾ from 41% thermal power, turbine trip when fuse blew in "A" feedwater inverter and "B" feedwater high level tripped turbine and the reactor scrammed
	1535	Commenced rod withdrawal
	1725	Reactor critical No. 145 sequence "A"
	2002	Rolled T/G
	2018	Synchronized generator, commenced power ascension
5/08/80	0300	Commenced PCIOMR from 55% thermal power
	0530	Reactor thermal power at 72%, holding remote "B" reactor feed pump for maintenance to flow indicator
5/09/80	0450	"B" reactor feed pump maintenance completed and pump placed in service, commenced power ascension
	2300	Reactor thermal power at 77%, holding for maintenance to "C" condensate booster pump
5/11/80	0133	"C" condensate booster pump maintenance completed
	0215	commenced power ascension Commenced PCIORM from 90% thermal power

Significant Operational Events

Unit 1

Date	Time	Event
5/11/80	2300	Reactor thermal power at 98% flow limited
5/13/80	1648	Commenced reducing thermal power from 98% due to high EHC vibration
	1930	Reactor thermal power at 90%, holding for high EHC vibration
5/15/80	0640	Commenced power ascension
	0700	Commenced PCIOMR from 95% thermal power
	1315	Reduced thermal power from 98% to 95% due to high EHC vibration
5/16/80	1445	Commenced power ascension
	1500	Reactor thermal power at 99%, holding due to high EHC vibration
5/17/80	0339	Reduced thermal power from 99% to 80% for turbine C. V. tests and SI's
	0415	Turbine C. V. tests and SI's completed, commenced power ascension
	1500	Reactor thermal power at 99%, holding due to high EHC vibration
5/19/80	1426	Reduced thermal power from 99% to 95% due to high EHC vibration
5/21/80	0730	Commenced power ascension from 95% thermal power
	0950	Reactor thermal power at 99%, holding due to high EHC vibration
5/22/80	1500	Reactor thermal power at 99%, holding due to high EHC vibration
5/23/80	2107	Reduced thermal power from 99% to 45% for control rod sequence exchange
	2152	Removed "A" recirculation pump M. G. set from service for brush replacement
	2209	Reactor thermal power at 45%, commenced control rod sequence exchange from "A" to "B"
	2319	"A" recirculation pump M. G. set brush replacement completed and pump placed in service
	2323	"B" recirculation pump M. G. set removed from service for brush replacement
5/24/80	0130	Control rod sequence exchange completed holding for brush replacement on "B" recirculation pump M. G. set
	0330	"B" recirculation pump M. G. set brush replacement completed and pump placed in service, commenced power ascension

Significant Operational Events

Unit 1

<u>Date</u>	<u>Time</u>	<u>Event</u>
5/25/80	1405	Commenced PCIOMR from 70% thermal power
5/27/80	0845	Reactor thermal power at 98%, holding due to EHC high vibration
	2001	Reactor scram No. 126 ⁽¹⁾ from 98% thermal power on generator load reject while replacing a PR block in main transformer circuitry creating a differential and load rejection
5/28/80	0109	Commenced rod withdrawal
	0445	Reactor critical No. 146 sequence "A"
	0625	Rolled T/G
	0642	Synchronized generator, commenced power ascension
	1900	Commenced PCIOMR from 71% thermal power
5/30/80	0030	Reactor thermal power at 97%, EHC vibration limited
5/31/80	2400	Reactor thermal power at 97%, EHC vibration limited

Significant Operational Events

Unit 2

Date	Time	Event
5/01/80	0001 2206	Reactor thermal power at 98%, CPR limited sequence "A" Commenced reducing thermal power for shutdown due to steam leak in moisture separator room
5/02/80	0050 0605 1315 2036 2102	Reactor scram No. 98 (manual), from 35% thermal power to accommodate repairs to steam leak Steam leak fixed, commenced rod withdrawal Reactor critical No. 109 sequence "B" Rolled T/G Synchronized generator, commenced power ascension
5/03/80	0700 1830 1910	Reactor thermal power at 65% holding - No. 1 control valve not open Commenced reducing thermal power for shutdown to correct No. 1 control valve problems Reactor scram No. 99 (manual) from 35% thermal power to accommodate control valve repairs
5/04/80	0455 0624 0938 0957 1900	No. 1 control valve fixed, commenced rod withdrawal Reactor critical No. 110 sequence "A" Rolled T/G Synchronized generator, commenced power ascension Commenced PCIOMR from 70% thermal power
5/05/80	2330	Reactor thermal power at 97%, maximum flow
5/09/80	2225	Reduced thermal power from 97% to 60% for control rod pattern adjustment
5/10/80	0330	Control rod pattern adjustment completed commenced PCIOMR from 60% thermal power
5/12/80	0320	Reactor thermal power at 98%, maximum flow
5/16/80	1805 1840 2135 2330	Commenced decreasing thermal power for shutdown due to EHC leak (No. 3 servo valve) Reactor scram No. 100 (manual), from 35% thermal power to accommodate EHC maintenance EHC maintenance completed, commenced rod withdrawal Reactor critical No. 111 sequence "A"
5/17/80	0301 0327	Rolled T/G Synchronized generator, commenced power ascension
5/18/80	1440	Commenced PCIOMR from 92% thermal power
5/19/80	0700 1840	Reactor thermal power at 99%, maximum flow Reduced thermal power from 99% to 90% for removal of "C" string high pressure heaters from service, due to FCV 6-84 flange leak

Significant Operational Events

Unit 2

<u>Date</u>	<u>Time</u>	<u>Event</u>
5/20/80	0450	"C" string high pressure heaters (leak) maintenance completed, commenced power ascension
	0530	Commenced PCIOMR from 95% thermal power
	2055	Reactor thermal power at 99%, maximum flow
5/24/80	0015	Reduced thermal power from 99% to 80% for turbine C. V. tests and SI's
	0220	Turbine C. V. tests and SI's completed
	1245	Commenced PCIOMR from 95% thermal power
	1500	Reactor thermal power at 99%, maximum flow
5/27/80	0736	Reduced thermal power from 99% to 90% for removal of "C" string high pressure heaters from service for maintenance (leaks)
	1443	Maintenance to "C" string high pressures completed and heaters placed in service
	1525	Commenced power ascension from 90% thermal power
	1630	Commenced PCIOMR from 95% thermal power
	1930	Reactor thermal power at 99%, maximum flow
5/31/80	2400	Reactor thermal power at 99%, maximum flow

Significant Operational Events

Unit 3

Date	Time	Event
5/01/80	0001	Reactor thermal power at 99%, maximum flow (rod limited) Sequence "A"
5/02/80	0700	Reactor thermal power at 99%, maximum flow (rod limited)
5/03/80	0725	Reduced thermal power from 98% to 50%, tachometer main- tenance on "B" recirculation pump
	1440	"B" recirculation pump tachometer maintenance completed and pump placed in service, commenced power ascension
	1600	Commenced PCIOMR from 62% thermal power
5/06/80	0030	Reactor thermal power at 99%, maximum flow (rod limited)
5/09/80	2330	Reduced thermal power from 99% to 85% for turbine C. V. tests and SI's
5/10/80	0200	Turbine C. V. tests and SI's completed, commenced PCIOMR from 85% thermal power
	0700	Reactor thermal power at 99%, maximum flow
5/15/80	0700	Reduced thermal power from 99% to 70% to perform SI 4.2.A-3 (reactor low water level)
	0815	Reactor scram No. 82 ⁽¹⁾ , load reject due to generator field ground
	1800	Commenced rod withdrawal
	2027	Reactor critical No. 92 sequence "A"
	2229	Rolled T/G
	2245	Synchronized generator, commenced power ascension
5/16/80	0930	Commenced PCIOMR from 65% thermal power
5/18/80	1500	Reactor thermal power at 98%, (rod limited)
	2150	Reduced thermal power from 98% to 55% for control rod pattern adjustment
5/19/80	0005	Control rod pattern adjustment completed, commenced power ascension
	1800	Commenced PCIOMR from 85% thermal power
5/20/80	2300	Reactor thermal power at 99%, (rod limited)
5/21/80	1348	Reactor scram No. 83 ⁽²⁾ from 99% thermal power while testing of main steam line high flow switches per instruction 4.2.A.7
	1944	Commenced rod withdrawal
	2205	Reactor critical No. 93 sequence "A"
5/22/80	0031	Rolled T/G
	0051	Synchronized generator, commenced power ascension
	1630	Commenced PCIOMR from 75% thermal power

Significant Operational Events

Unit 3

Date	Time	Event
5/23/80	2300	Reactor thermal power at 99%, (rod limited)
5/24/80	2125	Commenced reducing thermal power for control rod pattern adjustment
	2235	Reactor thermal power at 55%, holding for control rod pattern adjustment
	2335	Removed "A" recirculation pump M.G. set from service for brush replacement
5/25/80	0245	"A" recirculation pump M.G. set brush replacement completed and pump placed in service
	0252	Removed "B" recirculation pump M.G. set from service for brush replacement
	0310	Control rod pattern adjustment completed holding for brush replacement on "B" recirculation pump M.G. set
	0415	"B" recirculation pump M.G. set brush replacement and pump placed in service, commenced power ascension
	0430	Reactor thermal power at 68%, holding due to "C" main steam line isolation
	1315	Commenced power ascension
	1830	Commenced PCIOMR from 70% thermal power
5/27/80	0030	Reactor thermal power at 99%, (rod limited)
5/30/80	2200	Reduced thermal power from 99% to 50% for control rod sequence exchange from "A" to "B"
5/31/80	0815	Control rod sequence exchange completed, commenced power ascension
	2400	Reactor thermal power at 84%, power ascension in progress

- (1) Personnel Error
 (2) Equipment malfunction

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-296UNIT Browns Ferry - 3DATE 5-1-80COMPLETED BY Don GreenTELEPHONE 205-729-6846MONTH May

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1064</u>	17	<u>924</u>
2	<u>1063</u>	18	<u>999</u>
3	<u>750</u>	19	<u>832</u>
4	<u>835</u>	20	<u>1033</u>
5	<u>1014</u>	21	<u>607</u>
6	<u>1071</u>	22	<u>666</u>
7	<u>1076</u>	23	<u>974</u>
8	<u>1078</u>	24	<u>1023</u>
9	<u>1077</u>	25	<u>685</u>
10	<u>1070</u>	26	<u>957</u>
11	<u>1071</u>	27	<u>1071</u>
12	<u>1083</u>	28	<u>1064</u>
13	<u>1072</u>	29	<u>1082</u>
14	<u>1072</u>	30	<u>1027</u>
15	<u>358</u>	31	<u>780</u>
16	<u>703</u>		

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259
 UNIT Browns Ferry-1
 DATE 5-1-80
 COMPLETED BY Don Green
 TELEPHONE 205-729-6846

MONTH May 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1070</u>	17	<u>1060</u>
2	<u>1054</u>	18	<u>1026</u>
3	<u>1014</u>	19	<u>1042</u>
4	<u>1026</u>	20	<u>1023</u>
5	<u>1037</u>	21	<u>1040</u>
6	<u>228</u>	22	<u>1067</u>
7	<u>189</u>	23	<u>988</u>
8	<u>713</u>	24	<u>558</u>
9	<u>799</u>	25	<u>679</u>
10	<u>790</u>	26	<u>879</u>
11	<u>1008</u>	27	<u>859</u>
12	<u>1042</u>	28	<u>434</u>
13	<u>1012</u>	29	<u>908</u>
14	<u>968</u>	30	<u>1052</u>
15	<u>1005</u>	31	<u>1031</u>
16	<u>1047</u>		

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-260
 UNIT Browns Ferry-2
 DATE 5-1-80
 COMPLETED BY Don Green
 TELEPHONE 205-729-6846

MONTH May 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1030</u>	17	<u>560</u>
2	<u>38</u>	18	<u>913</u>
3	<u>503</u>	19	<u>1043</u>
4	<u>384</u>	20	<u>1038</u>
5	<u>954</u>	21	<u>1060</u>
6	<u>1043</u>	22	<u>1086</u>
7	<u>1047</u>	23	<u>1059</u>
8	<u>1043</u>	24	<u>1027</u>
9	<u>1027</u>	25	<u>1070</u>
10	<u>732</u>	26	<u>1058</u>
11	<u>923</u>	27	<u>1023</u>
12	<u>1064</u>	28	<u>1055</u>
13	<u>1066</u>	29	<u>1044</u>
14	<u>1061</u>	30	<u>1039</u>
15	<u>1068</u>	31	<u>1034</u>
16	<u>828</u>		

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

OPERATING DATA REPORT

DOCKET NO. 50-259
 DATE 6-1-80
 COMPLETED BY Don Green
 TELEPHONE 205-729-6846

OPERATING STATUS

1. Unit Name: Browns Ferry - Unit 1
2. Reporting Period: May, 1980
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 Reasons:
N/A

Notes

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744</u>	<u>3,647</u>	<u>51,145</u>
12. Number Of Hours Reactor Was Critical	<u>708.08</u>	<u>1531.68</u>	<u>29808.96</u>
13. Reactor Reserve Shutdown Hours	<u>35.92</u>	<u>283.85</u>	<u>4973.46</u>
14. Hours Generator On-Line	<u>701.23</u>	<u>1428.60</u>	<u>29,041.33</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>2,075,263</u>	<u>3,816,795</u>	<u>77,953,288</u>
17. Gross Electrical Energy Generated (MWH)	<u>680,430</u>	<u>1,253,390</u>	<u>25,771,850</u>
18. Net Electrical Energy Generated (MWH)	<u>663,602</u>	<u>1,213,207</u>	<u>25,015,175</u>
19. Unit Service Factor	<u>94.3</u>	<u>39.2</u>	<u>56.8</u>
20. Unit Availability Factor	<u>94.3</u>	<u>39.2</u>	<u>56.8</u>
21. Unit Capacity Factor (Using MDC Net)	<u>83.8</u>	<u>31.2</u>	<u>45.9</u>
22. Unit Capacity Factor (Using DER Net)	<u>83.8</u>	<u>31.2</u>	<u>45.9</u>
23. Unit Forced Outage Rate	<u>5.7</u>	<u>18.8</u>	<u>32.4</u>

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

25. If Shut Down At End Of Report Period, Estimated Date of Startup:

26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

Forecast	Achieved
_____	_____
_____	_____
_____	_____

OPERATING DATA REPORT

DOCKET NO. 50-260
 DATE 6-1-80
 COMPLETED BY Don Green
 TELEPHONE 205 729 6846

OPERATING STATUS

1. Unit Name: Browns Ferry - Unit 2
2. Reporting Period: May 1980
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 Reasons:

Notes

- N/A
-
9. Power Level To Which Restricted, If Any (Net MWe): N/A
 10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744</u>	<u>3,647</u>	<u>46,056</u>
12. Number Of Hours Reactor Was Critical	<u>715.52</u>	<u>3,146.60</u>	<u>27,631.08</u>
13. Reactor Reserve Shutdown Hours	<u>28.48</u>	<u>500.40</u>	<u>12,275.34</u>
14. Hours Generator On-Line	<u>700.23</u>	<u>3067.67</u>	<u>26,731.98</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>2,120,551</u>	<u>8,781,400</u>	<u>74,936,400</u>
17. Gross Electrical Energy Generated (MWH)	<u>711,810</u>	<u>2,936,690</u>	<u>24,886,758</u>
18. Net Electrical Energy Generated (MWH)	<u>694,101</u>	<u>2,858,057</u>	<u>24,189,526</u>
19. Unit Service Factor	<u>94.1</u>	<u>84.1</u>	<u>58.0</u>
20. Unit Availability Factor	<u>94.1</u>	<u>84.1</u>	<u>58.0</u>
21. Unit Capacity Factor (Using MDC Net)	<u>87.6</u>	<u>73.6</u>	<u>49.3</u>
22. Unit Capacity Factor (Using DER Net)	<u>87.6</u>	<u>73.6</u>	<u>49.3</u>
23. Unit Forced Outage Rate	<u>5.9</u>	<u>15.9</u>	<u>35.0</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refuel Outage September, 1980

25. If Shut Down At End Of Report Period, Estimated Date of Startup: _____
 26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

OPERATING DATA REPORT

DOCKET NO. 50-296
 DATE 6-1-80
 COMPLETED BY Don Green
 TELEPHONE 205-729-6846

OPERATING STATUS

1. Unit Name: Browns Ferry - Unit 3
2. Reporting Period: May 1980
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 Reasons:
N/A

Notes

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744</u>	<u>3,647</u>	<u>28,511</u>
12. Number Of Hours Reactor Was Critical	<u>723.52</u>	<u>3214.95</u>	<u>22122.50</u>
13. Reactor Reserve Shutdown Hours	<u>20.48</u>	<u>20.48</u>	<u>1678.79</u>
14. Hours Generator On-Line	<u>718.45</u>	<u>3186.38</u>	<u>21624.19</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>2,139,984</u>	<u>9,947,427</u>	<u>63,055,293</u>
17. Gross Electrical Energy Generated (MWH)	<u>718,180</u>	<u>3,356,390</u>	<u>20,758,970</u>
18. Net Electrical Energy Generated (MWH)	<u>700,399</u>	<u>3,272,840</u>	<u>20,160,613</u>
19. Unit Service Factor	<u>96.6</u>	<u>87.4</u>	<u>75.8</u>
20. Unit Availability Factor	<u>96.6</u>	<u>87.4</u>	<u>75.8</u>
21. Unit Capacity Factor (Using MDC Net)	<u>88.4</u>	<u>84.3</u>	<u>66.4</u>
22. Unit Capacity Factor (Using DER Net)	<u>88.4</u>	<u>84.3</u>	<u>66.4</u>
23. Unit Forced Outage Rate	<u>3.4</u>	<u>12.6</u>	<u>9.6</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refuel Outage October, 1980

25. If Shut Down At End Of Report Period, Estimated Date of Startup: _____

26. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH May

DOCKET NO. 50-259
 UNIT NAME Browns Ferry - 1
 DATE 5-1-80
 COMPLETED BY Don Green
 TELEPHONE 205-729-6846

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
122	800506	F	24.44	B	3				Generator load rejection (No. 6 intermediate valve closed while testing No. 5 intermediate valve.
123	800507	F	7.65	A	3				Turbine trip due to a blown fuse in "A" feedwater inverter and "B" feedwater high level signal.
124	800523	S		H					Derated for control rod sequence exchange.
125	800527	F	10.68	G	3				Generator load rejection while replacing a PK block in main transformer creating a differential and load rejection (personnel error).

¹ F: Forced
S: Scheduled

² Reason:
A-Equipment Failure (Explain)
B-Maintenance of Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

³ Method:
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Other (Explain)

⁴ Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

⁵ Exhibit I - Same Source

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-260
 UNIT NAME Browns Ferry - 2
 DATE 5-1-80
 COMPLETED BY Don Green
 TELEPHONE 205-729-6846

REPORT MONTH May

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
136	800502	F	20.21	A	2				To accommodate repairs to steam leak in steam tunnel.
137	800503	F	14.78	A	2				To accommodate repairs to No. 1 control valve.
138	800509	S							Derated for control rod pattern adjustment.
139	800516	F	8.78	A	2				To accommodate repairs to EHC leak (No. 3 servo valve).

¹
 F: Forced
 S: Scheduled

²
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance of Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

³
 Method:
 1-Manual
 2-Manual Scram.
 3-Automatic Scram.
 4-Other (Explain)

⁴
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

⁵
 Exhibit I - Same Source

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-296
 UNIT NAME Browns Ferry - 3
 DATE 5-1-80
 COMPLETED BY Don Green
 TELEPHONE 205-729-6846

REPORT MONTH May

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
123	800503	F		B					Derated for maintenance on "B" recirculation pump.
124	800515	F	14.50	G	3				Apparent generator field ground. (personnel error).
125	800518	S		H					Derated for control rod pattern adjustment.
126	800521	F	11.05	B	3				Reactor scrammed while performing reactor low water level SI.
127	800524	S		H					Derated for control rod pattern adjustment.
128	800530	S		H					Derated for control rod sequence exchange.

1
 F: Forced
 S: Scheduled

2
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance of Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

3
 Method:
 1-Manual
 2-Manual Scram.
 3-Automatic Scram.
 4-Other (Explain)

4
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

5
 Exhibit I - Same Source

(9/77)

BROWNS FERRY NUCLEAR PLANT UNIT 2

CSSC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of May 19 80

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
5/15/80	HPCI	Instrument line FE 73-33	Instrument line sags and clamps missing	None	Clamps missing	Inoperable instrument line	Replaced and tightened clamps TR 103607

BROWNS FERRY NUCLEAR PLANT UNIT 3

CSSC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of May 19 80

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
5/15/80	FPC	3A pump	Packing leak	None	Packing leak	Packing leak	Tightened packing TR 182948

BROWNS FERRY NUCLEAR PLANT UNIT 1

CSSC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of May 1980

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
5/20/80	HPCI	Steam supply drain trap	Steam blowing	None	Gasket leak	Bonnet gasket leak	Replaced bonnet gasket TR 103606
5/6/80	HPCI	PCV 73-43	Bonnet leak	None	Bonnet leak	Bonnet leak	Tightened bonnet bolts TR 165401

CSSC EQUIPMENT

ELECTRICAL MAINTENANCE SUMMARY

For the Month of May 1980

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
4/30/80	RHRSW	D-3 RHRSW motor	Pull D-3 RHRSW motor for repair	NONE	Motor out of balance.	Rendered D-3 RHRSW pump inoperable.	Sent D-3 RHRSW motor to service shop for repair. After repair re-installed motor. Checked ok. TR# 146733, 166926
5/12/80	RCIC	EGM Box	RCIC operation indicated loss of speed control	Unit placed in limiting condition for operation.	VR9 Diode shorted in EGM box.	Loss of speed control.	Replaced EGM box. Checked ok per EMI 37. TR# 156718 LER 296/8014.
5/25/80	Main Steam	Relay 16-AK16	Repair relay 16-AK16 panel 9-43.	NONE	Contacts arcing and coil heating up.	Caused relay 16-AK16 to malfunction.	Replaced relay. Checked ok. TR# 143573

BROWNS FERRY NUCLEAR PLANT UNIT 1, 2 & 3

INSTRUMENT MAINTENANCE SUMMARY

CSSC EQUIPMENTFOR THE MONTH OF May 19 80

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
<u>Unit 1</u>							
5-9	Corespray	FT-75-49	Calibrate	None	Instrument Drift	Indicated Flow with System Off	None
<u>Unit 2</u>							
5-8	RCIC	FT-71-1A	Calibrate	None	Loss of Water Leg	Indicated Flow with System Off	None
5-13	Primary Containment	PT-64-138 PDI-64-137 PDI-64-138 Pds-64-137A & B	Calibrate	None	Instrument Drift	Disagreement Between Indicators	None
<u>Unit 3</u>							
5-12	Radiation Monitor	RM-90-249	Repair	None	Faulty Ratemeter Card	Failed to Calibrate	None
5-15	Feedwater	LIS-3-56A & B	Repair	None	Faulty Switches	Failed Surveillance Test	None
5-20	Standby Liquid Control	LI-53-1B	Maintenance	None	Partial Clog of Sensing Line	Indication did not Agree with Measure Probe	None
5-28	Radwaste	FT-77-16	Replace	None	Faulty Transmitter	Transmitter Zero Shift with Pressure	None

OUTAGE SUMMARY

May 1980

The major emphasis during this reporting period has been on completion of reactor building overhead crane repair, completion of the Unit 3 condenser pull out area radwaste storage zone and work required to effect completion of the security modifications in order to meet the June 30, 1980, NRC commitment deadline. The final overhead crane wheel bearing inspections are now in progress and should be complete in sufficient time to allow fuel receipt around the middle of June. All work associated with the Unit 3 condenser pull out area radwaste storage zone has been completed, with the exception of painting of floor grating and sump coating. Both of these activities are in progress and will be completed the early part of June. Work on the security modifications is continuing with door multiplexers now being placed in service. The commitment work associated with security should finish on or near June 30.

Several other non-outage modifications are in varying stages of completion. Included in these modifications are installation of safety rails on the condensate storage tanks; installation of guard rails on top of the reactor building elevators; installation of cages around the ladders on the microwave towers; modifications to the RHRSW check valves; installation of H₂ and O₂ panels and piping for the new Hayes Republic analyzers; installation of snubbers and check valves on plant air compressors; construction of an ambulance storage building; sewage treatment facility modifications; east portal modifications; hypochlorite modifications; condensate storage tank modifications and construction of an outage fabrication shop.

OUTAGE SUMMARY (Continued)

May 1980

Work is progressing on schedule on NRC Bulletin 79-14 (hanger inspections) with an estimated 60 percent overall completion. Anchor repairs associated with NRC Bulletin 79-02 stands at 26 percent complete with 1000 of the identified 3916 anchor repairs being completed. Research associated with NRC Bulletin 80-08 (fluted head penetration inspection) is essentially complete with a memorandum being prepared stating results of this inspection.