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

AUG 10 1983

Nuclear Regulatory Commission
Office of Management Information
and Program Control
Washington, DC 20555

Gentlemen:

Enclosed is the July 1983 Monthly Operating Report to NRC for Browns Ferry Nuclear Plant Units 1, 2, and 3.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. A. Coffey
Acting Power Plant Superintendent

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cc: Director, Region II
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TENNESSEE VALLEY AUTHORITY

DIVISION OF NUCLEAR POWER

BROWNS FERRY NUCLEAR PLANT

MONTHLY OPERATING REPORT TO NRC

July 1, 1983 - July 31, 1983

DOCKET NUMBERS 50-259, 50-260, AND 50-296

LICENSE NUMBERS DPR-33, DPR-52, AND DPR-68

Submitted by: J. A. Coffey

Plant Superintendent

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Operations Summary

July 1983

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

There were 21 reportable occurrences and no revisions to previous reportable occurrences reported to the NRC during the month of July.

Unit 1

The unit was in cold shutdown the entire month for the units' end-of-cycle 5 refueling outage.

Unit 2

There were no scrams on the unit during the month.

Unit 3

There was one scram on the unit during the month. On July 28, the reactor scrammed during changeout of a burned out relay.

Principally prepared by B. L. Porter.

Operations Summary (Continued)

July 1983

Refueling Information

Unit 1

Unit 1 began its fifth refueling outage on April 16, 1983. The scheduled restart date is October 7, 1983. This refueling will involve loading 8X8R (retrofit) fuel assemblies into the core, finishing the torus modification, turbine inspection, finishing TMI-2 modifications, post-accident sampling facility tie-ins, core spray changeout, and changeout of jet pump hold-down beams.

There are 0 fuel assemblies in the reactor vessel. The spent fuel storage pool presently contains 252 new fuel assemblies, 764 EOC-5 fuel assemblies, 260 EOC-4 fuel assemblies; 232 EOC-3 fuel assemblies; 156 EOC-2 fuel assemblies; and 168 EOC-1 fuel assemblies. The present capacity is 3,471 locations.

Unit 2

Unit 2 is scheduled for its fifth refueling beginning on or about June 8, 1984 with a scheduled restart date of November 8, 1984. This refueling outage will involve loading additional 8X8R (retrofit) fuel assemblies into the core, finishing the torus modification, turbine inspection, finishing inspection, finishing TMI-2 modifications; post-accident sampling facility tie-ins, core spray change-out, and feedwater sparger inspection.

There are 764 fuel assemblies in the reactor vessel. At the end of the month there were 248 EOC-4 fuel assemblies, 353 EOC-3 fuel assemblies, 156 EOC-2 fuel assemblies, and 132 EOC-1 fuel assemblies in the spent fuel storage pool. The present available capacity of the spent fuel pool is 861 locations.

Operations Summary (Continued)

July 1983

Unit 3

Unit 3 is scheduled for its fifth refueling on or about November 11, 1983, with a scheduled restart date of May 4, 1984. This refueling will involve loading 8X8R (retrofit) assemblies into the core, finishing the torus modifications, post-accident sampling facility tie-in, core spray change-out, finishing TMI-2 modifications, turbine inspection, and change-out of jet pump hold-down beams.

There are 764 fuel assemblies presently in the reactor vessel. There are 280 EOC-4 fuel assemblies, 124 EOC-3 fuel assemblies, 144 EOC-2 fuel assemblies, and 208 EOC-1 fuel assemblies in the spent fuel storage pool. The present available capacity of the spent fuel pool is 993 locations.

Operations Summary (Continued)

July 1983

Fatigue Usage Evaluation

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

Location	Usage Factor		
	Unit 1	Unit 2	Unit 3
Shell at water line	0.00583	0.00465	0.00401
Feedwater nozzle	0.28294	0.19836	0.15240
Closure studs	0.22349	0.16837	0.12905

NOTE: This accumulated monthly information satisfies Technical Specification Section 6.6.A.17.B(3) reporting requirements.

Common System

Approximately 1.00E+06 gallons of waste liquids were discharged containing approximately 2.88E-01 curies of activities.

Operations Summary (Continued)

July 1983

Refueling Information

Unit 1

Unit 1 began its fifth refueling outage on April 16, 1983. The scheduled restart date is October 7, 1983. This refueling will involve loading 8X8R (retrofit) fuel assemblies into the core, finishing the torus modification, turbine inspection, finishing TMI-2 modifications, post-accident sampling facility tie-ins, core spray changeout, and changeout of jet pump hold-down beams.

There are 0 fuel assemblies in the reactor vessel. The spent fuel storage pool presently contains 252 new fuel assemblies, 764 EOC-5 fuel assemblies, 260 EOC-4 fuel assemblies; 232 EOC-3 fuel assemblies; 156 EOC-2 fuel assemblies; and 168 EOC-1 fuel assemblies. The present capacity is 3,471 locations.

Unit 2

Unit 2 is scheduled for its fifth refueling beginning on or about June 8, 1984 with a scheduled restart date of November 8, 1984. This refueling outage will involve loading additional 8X8R (retrofit) fuel assemblies into the core, finishing the torus modification, turbine inspection, finishing inspection, finishing TMI-2 modifications; post-accident sampling facility tie-ins, core spray change-out, and feedwater sparger inspection.

There are 764 fuel assemblies in the reactor vessel. At the end of the month there were 248 EOC-4 fuel assemblies, 353 EOC-3 fuel assemblies, 156 EOC-2 fuel assemblies, and 132 EOC-1 fuel assemblies in the spent fuel storage pool. The present available capacity of the spent fuel pool is 861 locations.

Operations Summary (Continued)

July 1983

Unit 3

Unit 3 is scheduled for its fifth refueling on or about November 11, 1983, with a scheduled restart date of May 4, 1984. This refueling will involve loading 8X8R (retrofit) assemblies into the core, finishing the torus modifications, post-accident sampling facility tie-in, core spray change-out, finishing TMI-2 modifications, turbine inspection, and change-out of jet pump hold-down beams.

There are 764 fuel assemblies presently in the reactor vessel. There are 280 EOC-4 fuel assemblies, 124 EOC-3 fuel assemblies, 144 EOC-2 fuel assemblies, and 208 EOC-1 fuel assemblies in the spent fuel storage pool. The present available capacity of the spent fuel pool is 993 locations.

Significant Operational Events

Date	Time	Event
		Unit 1
7/01	0001	End-of-cycle 5 refuel outage continues.
7/31	2400	End-of-cycle 5 refuel outage continues.

Significant Operational Events

Date	Time	Event
		Unit 2
7/01	0001	Reactor thermal power at 98%, maximum flow, rod limited.
	2156	Commenced reducing thermal pwoer for control rod pattern adjustment.
	2228	Reactor thermal power at 82% for control rod pattern adjustment.
7/02	0200	Control rod pattern adjustment complete, commenced power ascension.
	0230	Commenced PCIOMR from 86% thermal power.
	1500	Reactor thermal power at 98%, computer limited.
7/03	0700	Reactor thermal power at 99%, computer limited.
	1855	Computer in service, commenced power ascension.
	1900	Reactor thermal power at 100%, maximum flow, rod limited.
7/05	2100	Commenced reducing thermal power for No. 1 control valve maintenance (EHC leak).
	2140	Reactor thermal power at 83% for repair of EHC leak on No. 1 control valve.
	2240	No. 1 control valve repaired, commenced power ascension.
	2400	Reactor thermal power at 100%, maximum flow, rod limited.
7/07	0240	Commenced reducing thermal power at request of load dispatcher, load not needed.
	0255	Reactor thermal power at 91%, load not needed.
	0400	Reactor power at 90%, load not needed.
	0620	Commenced power ascension from 90%.
	0900	Reactor thermal power at 100%, maximum flow, rod limited.
7/08	2330	Commenced reducing thermal power for turbine control valve test and SI's.
	2400	Reactor thermal power at 95% for turbine control valve test and SI's.
7/09	0036	Turbine control valve test and SI's complete, commenced power ascension.
	0115	Reactor power at 100%, maximum flow, rod limited.

Significant Operational Events

Date	Time	Event
		Unit 2 (Continued)
7/10	0008	Commenced reducing thermal power for SI 4.3.A.2 CRD exercise.
	0200	Reactor power at 94% for SI 4.3.A.2.
	0300	Reactor power at 94% for SI 4.3.A.2 and SI 4.2.C-1A APRM functional.
	0415	SI 4.3.A.2 complete, holding at 94% power for SI 4.2.C-1A.
	0515	SI 4.2.C-1A complete, commenced power ascension.
	0830	Reactor thermal power at 100%, maximum flow, rod limited.
7/12	1555	Commenced reducing thermal power in order to reduce back pressure for placing unit on cooling towers.
	1610	Reactor thermal power at 93% to place unit on cooling towers.
	1630	Reactor power at 92%.
	1725	Commenced power ascension.
	1845	Commenced PCIOMR from 99% thermal power
	1930	Reactor thermal power at 100%, maximum flow, rod limited.
7/14	0052	Commenced reducing thermal power for repair of EHC leak on control valve No. 3.
	0058	Reactor thermal power at 90% for repair of EHC leak on control valve No. 3.
	0350	Control valve No. 3 repaired and opened, commenced power ascension.
	0520	Reactor thermal power at 100%, maximum flow, rod limited.
7/15	2130	Commenced reducing thermal power for turbine control valve test and SIs.
7/16	0100	Reactor power at 57% for turbine control valve test and SI's.
	0145	Turbine control valve test and SI's complete, reducing power for control rod sequence exchange from "B" to "A".
	0400	Reactor power at 53% for control rod sequence exchange, increasing reactor power.
	0545	Rod sequence exchange complete, reactor power at 55%, scram testing in progress, increasing reactor power.
	1000	Reactor power at 60%, decreasing power for control rod pattern adjustment and scram testing.
	1500	Control rod pattern adjustment and scram testing complete, commenced power ascension from 59% thermal power.

Significant Operational Events

Date	Time	Event
		Unit 2 (Continued)
7/17	0230	Commenced reducing thermal power from 86% for control rod sequence exchange from A to B.
	0300	Reactor power at 66% for control rod sequence exchange.
	0350	Control rod sequence exchange complete, increasing thermal power.
	0625	Reactor thermal power at 80%, control rod pattern adjustment in progress, increasing reactor power.
	0645	Control rod pattern adjustment complete, commenced power ascension from 82% thermal power.
	0700	Commenced PCIOMR from 84% thermal power.
	2200	Reactor thermal power at 96%, maximum flow, rod limited.
7/18	0400	Reactor thermal power at 95%, maximum flow, rod limited.
	0800	Reactor thermal power at 94%, maximum flow, rod limited.
	1035	Commenced PCIOMR from 94% power.
	1255	Reactor thermal power at 96%, maximum flow, rod limited.
7/19	2205	Commenced reducing thermal power for control rod pattern adjustment.
	2350	Reactor thermal power at 56% control rod pattern adjustment in progress, increasing thermal power.
7/20	0200	Control rod pattern adjustment complete, commenced power ascension from 59% thermal power.
	0900	Commenced PCIOMR from 79% thermal power.
7/21	0412	Stopped PCIOMR at 95% and reducing due to CMFCP limits.
	0655	Reactor thermal power at 94% (CMFCP) limited.
	0700	Commenced PCIOMR from 94% power.
	2220	Stopped PCIOMR at 99% (CMFLPD) limited.
	2330	Commenced reducing thermal power due to CMFLPD limits.
7/22	0300	Reactor thermal power at 95%, CMFLPD limited.
	0520	Commenced PCIOMR from 95% power.
	0700	Reactor thermal power at 97%, maximum flow, rod limited.
7/23	1945	Commenced reducing thermal power due to high water temperature at cooling tower outlet.
	2000	Reactor thermal power at 87% due to high water temperature at cooling tower outlet.
	2100	Reducing thermal power for control rod pattern adjustment.

Significant Operational Events

Date	Time	Event
		Unit 2 (Continued)
7/23	2130	Reactor thermal power at 64% for control rod pattern adjustment.
	2145	Control rod pattern adjustment in progress, reducing thermal power.
	2300	Reactor thermal power at 63% for control rod pattern adjustment.
	2322	Increasing thermal power for control rod pattern adjustment.
7/24	0530	Control rod pattern adjustment complete, commenced power ascension from 68% thermal power.
	0600	Commenced PCIOMR from 70% thermal power.
7/25	0800	Reactor thermal power at 96%, maximum flow, rod limited.
7/26	1500	Reactor thermal power at 95%, maximum flow, rod limited.
	2210	Commenced reducing thermal power to remove "C" string high-pressure heaters from service for maintenance.
	2330	"C" string heaters isolated for maintenance, reactor power at 92%.
7/27	0940	Commenced reducing thermal power for maintenance on condensate demineralizer.
	1200	Reactor power and 85% for maintenance of condensate demineralizers.
	1230	Commenced power ascension from 85% thermal power.
7/28	1045	Commenced reducing thermal power from 96% for core shaping.
	1300	Reducing thermal power from 94% to maintain core limits.
	1400	Reactor power at 81% to maintain core limits.
	1430	Commenced PCIOMR from 81% thermal power.
7/29	1700	Reactor thermal power at 97%, maximum flow, rod limited.
7/30	0800	Reactor thermal power at 96%, maximum flow, rod limited.
	2225	Commenced reducing thermal power for control rod pattern adjustment.
	2400	Reactor thermal power at 75% for control rod pattern adjustment, increasing thermal power.
7/31	0530	Control rod pattern adjustment complete, commenced PCIOMR from 78% thermal power.
	2200	Stopped PCIOMR at 96% and reducing thermal power to drop CMFLPD.
	2400	Reactor thermal power at 94%, CMFLPD limited.

Significant Operational Events

Date	Time	Event
		Unit 3
7/01	0001	Reactor thermal power at 98%, maximum flow, rod limited.
7/02	2325	Reducing thermal power for turbine control valve test and SI's.
	2330	Reactor thermal power at 93% for turbine control valve test and SI's.
7/03	0001	Turbine control valve test and SI's complete, commenced power ascension.
	0100	Reactor thermal power at 98%, maximum flow, rod limited.
7/04	0700	Reactor thermal power at 97%, maximum flow, rod limited.
7/06	2330	Commenced reducing thermal power for control rod pattern adjustment.
7/07	0100	Reactor power at 80% for control rod pattern adjustment, increasing power.
	0245	Control rod pattern adjustment complete, commenced reducing thermal power from 85% thermal power at request of load dispatcher, load not needed.
	0400	Reactor power at 76%, load not needed.
	0620	Commenced power ascension from 76% power.
	0630	Commenced PCIOMR from 78% thermal power.
	1300	Stopped PCIOMR at 87% for TIP run.
	1450	TIP run complete, reducing power to insert control rod 38-27 to "00."
	1500	Reactor thermal power at 85%, control rod inserted to "00".
	1501	Commenced PCIOMR from 85% thermal power.
7/08	0400	Reactor thermal power at 100%, maximum flow, rod limited.
	0730	Commenced reducing thermal power for SI 4.2.B-36 (Instrumentation That Initiates or Controls the CSCS HPCI Turbine Steam Line High Flow.)
	0900	Reactor power at 99% for SI 4.2.B-36.
	0915	SI 4.2.B-36 complete, holding at 99% power for SI 4.1.A-7 (Reactor Low Water Level One-Half Scrams.)
	1030	Commenced power ascension from 99%.
	1100	Reactor thermal power at 100%, maximum flow, rod limited.

Significant Operational Events

Date	Time	Event
		Unit 3 (Continued)
7/08	1200	Commenced reducing thermal power for SI 4.1.A-7 (Reactor Low Water Level One-Half Scrams.)
	1330	Reactor power at 99% for SI 4.1.A-7.
	1410	SI 4.1.A-7 complete, reactor power at 99%, maximum flow, rod limited.
7/09	0230	Commenced reducing thermal power for turbine control valve test and SI's.
	0245	Reactor power at 94% for turbine control valve test and SI's.
	0320	Turbine control valve test and SI's complete, commenced power ascension.
	0400	Reactor thermal power at 100%, maximum flow, rod limited.
7/11	1500	Reactor thermal power at 99%, maximum flow, rod limited.
	1700	Reduced thermal power to 98% due to problems with Baily limiter on "B" recirculation motor-generator set.
	1705	Commenced power ascension.
	1730	Reactor thermal power at 100%, maximum flow, rod limited.
7/13	2100	Reduced thermal power to 99% to place unit on cooling towers.
	2250	Unit on cooling towers, reactor power at 99%, high back-pressure limited.
7/15	0220	Reactor thermal power at 99%, maximum flow, rod limited.
7/16	2345	Commenced reducing thermal power for turbine control valve test and SI's.
7/17	0100	Reactor thermal power at 93% for turbine control valve test and SI's.
	0115	Turbine control valve test and SI's complete, commenced power ascension.
	0400	Reactor thermal power at 99%, maximum flow, rod limited.
7/18	0700	Reactor thermal power at 98%, maximum flow, rod limited.
7/19	2150	Reducing thermal power for SI 4.1.A-15 (Turbine Stop Valve Closure.)
	2200	Reactor thermal power at 94% for SI 4.1.A-15.
	2205	SI 4.1.A-15 complete, commenced power ascension.
	2300	Reactor thermal power at 98%, maximum flow, rod limited.

Significant Operational Events

Date	Time	Event
		Unit 3 (Continued)
7/21	1200	Reactor thermal power at 97%, maximum flow, rod limited.
7/22	0041	Commenced reducing thermal power for cooling tower operation.
	0102	Reactor thermal power at 86% for cooling tower operation.
	0122	Commenced power ascension from 86% thermal power.
	0330	Reactor thermal power at 97%, maximum flow, rod limited.
	0921	Reactor Scram No. 112 from 97% thermal power when electrical maintenance shorted relay 5AK13C (manual scram circuit.)
	2200	Commenced rod withdrawal for startup.
7/23	0100	Reactor Critical No. 126.
	0656	Rolled turbine/generator.
	0736	Synchronized generator, commenced power ascension.
	2300	Commenced PCIOMR from 81% thermal power.
7/24	1700	Commenced reducing thermal power from 91% for removal of "A" reactor feedwater pump from service for maintenance.
	1735	Reactor thermal power at 78% "A" reactor feedwater pump out-of-service for maintenance.
	2215	"A" reactor feedwater pump maintenance complete, commenced power ascension.
	2300	Commenced PCIOMR from 86% thermal power.
7/25	0200	Reactor thermal power at 89%, maximum flow, rod limited.
	0400	Reactor thermal power at 88%, maximum flow, rod limited.
	0900	Reactor thermal power at 87%, maximum flow, rod limited.
	1600	Reactor thermal power at 86%, maximum flow, rod limited.
	2205	Commenced reducing thermal power for control rod pattern adjustment.
	2300	Reactor thermal power at 66% for control rod pattern adjustment, increasing thermal power.
7/26	0415	Control rod pattern adjustment complete, commenced power ascension from 71% thermal power.
	0430	Commenced PCIOMR from 73% thermal power.
7/27	0800	Reactor thermal power at 99%, maximum flow, rod limited.
7/28	1900	Reactor thermal power at 98%, maximum flow, rod limited.

Significant Operational Events

Date	Time	Event
		Unit 3 (Continued)
7/30	0310	Reduced thermal power to 95% for turbine control valve test and SI's.
	0320	Turbine control valve test and SI's complete, commenced power ascension.
	0430	Reactor thermal power at 98%, maximum flow, rod limited.
7/31	0015	Reduced thermal power to 97% for SI 4.3.A.2 (control rod exercise.)
	0030	SI 4.3.A.2 complete, commenced power ascension.
	0200	Reactor thermal power at 98%, maximum flow, rod limited.
	0700	Reactor thermal power at 97%, maximum flow, end-of-cycle 5 coastdown.
	2400	Reactor thermal power at 97%, maximum flow, end-of-cycle 5 coastdown.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259
UNIT Browns Ferry-1
DATE 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

MONTH July

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-6	17	-2
2	-6	18	-2
3	-6	19	-2
4	-6	20	-2
5	-6	21	-2
6	-4	22	-2
7	-2	23	-2
8	-2	24	-2
9	-2	25	-2
10	-2	26	-2
11	-2	27	-2
12	-2	28	-2
13	-2	29	-2
14	-2	30	-2
15	-2	31	-2
16	-2		

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 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

MONTH July

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1050	17	932
2	1010	18	999
3	1057	19	975
4	1058	20	824
5	1056	21	1010
6	1070	22	1003
7	1057	23	964
8	1069	24	742
9	1069	25	1016
10	1055	26	969
11	1062	27	912
12	1065	28	922
13	1057	29	1000
14	1035	30	992
15	1020	31	887
16	626		

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 50-296
UNIT Browns Ferry-3
DATE 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

MONTH July

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1011	17	1032
2	1008	18	1009
3	1043	19	1006
4	1001	20	1015
5	1008	21	989
6	1001	22	387
7	890	23	397
8	1038	24	805
9	1035	25	881
10	1039	26	820
11	1037	27	1002
12	1038	28	1001
13	1032	29	1008
14	1023	30	996
15	1022	31	996
16	1016		

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 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

OPERATING STATUS

1. Unit Name: Browns Ferry -1
2. Reporting Period: July 1983
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
9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

Notes

	This Month	Yr. to-Date	Cumulative
11. Hours In Reporting Period	744	5,087	78,389
12. Number Of Hours Reactor Was Critical	0	2,363.25	49,725.79
13. Reactor Reserve Shutdown Hours	0	47.71	5,785.02
14. Hours Generator On-Line	0	2,317.52	48,717.64
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	6,784,675	138,557,679
17. Gross Electrical Energy Generated (MWH)	0	2,244,900	45,645,620
18. Net Electrical Energy Generated (MWH)	0	2,175,548	44,325,327
19. Unit Service Factor	0	45.6	61.9
20. Unit Availability Factor	0	45.6	61.9
21. Unit Capacity Factor (Using MDC Net)	0	40.2	52.8
22. Unit Capacity Factor (Using DER Net)	0	40.2	52.8
23. Unit Forced Outage Rate	0	8.1	23.8

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: Oct. 7, 1983
26. Units In Test Status (Prior to Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

(9/77)

OPERATING DATA REPORT

DOCKET NO. 50-260
DATE 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

OPERATING STATUS

1. Unit Name: Browns Ferry-2
2. Reporting Period: July 1983
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
9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

Notes

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744	5087	73,830
12. Number Of Hours Reactor Was Critical	744	3,110.57	46,404.04
13. Reactor Reserve Shutdown Hours	0	102.68	13,787.50
14. Hours Generator On-Line	744	2,992.78	44,968.23
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,291,782	8,719,860	129,129,707
17. Gross Electrical Energy Generated (MWH)	755,870	2,910,130	42,935,038
18. Net Electrical Energy Generated (MWH)	732,450	2,826,194	41,699,269
19. Unit Service Factor	100.0	58.9	60.9
20. Unit Availability Factor	100.0	58.9	60.9
21. Unit Capacity Factor (Using MDC Net)	92.6	52.2	53.0
22. Unit Capacity Factor (Using DER Net)	92.6	52.2	53.0
23. Unit Forced Outage Rate	0	6.8	26.0

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):

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

(9/77)

OPERATING DATA REPORT

DOCKET NO. 50-296
DATE 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

OPERATING STATUS

1. Unit Name: Browns Ferry-3
2. Reporting Period: July 1983
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

Notes

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: 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	744	5,087	56,255
12. Number Of Hours Reactor Was Critical	728.35	4,581.02	42,193.30
13. Reactor Reserve Shutdown Hours	15.65	505.98	3,878.13
14. Hours Generator On-Line	721.75	4,529.03	41,303.09
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,274,468	14,308,812	123,644,916
17. Gross Electrical Energy Generated (MWH)	732,900	4,704,660	40,744,450
18. Net Electrical Energy Generated (MWH)	710,125	4,575,925	39,556,829
19. Unit Service Factor	97.0	89.0	73.4
20. Unit Availability Factor	97.0	89.0	73.4
21. Unit Capacity Factor (Using MDC Net)	89.6	84.5	66.0
22. Unit Capacity Factor (Using DER Net)	89.6	84.5	66.0
23. Unit Forced Outage Rate	3.0	11.0	16.7

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each)
Refuel Outage Nov. 1983 6 months

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	_____	_____

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH July

DOCKET NO. 50-259
UNIT NAME Browns Ferry-1
DATE 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

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
264	7/1/83	S	744	C	4				EOC-5 Refuel Outage Continues

1 F - Forced
S - Scheduled

2 Reason:
A-Equipment Failure (Explain)
B-Maintenance or 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

REPORT MONTH July

DOCKET NO. 50-260
UNIT NAME Browns Ferry-2
DATE 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

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
263	7/15/83	S		B					Derated for Turbine Control Valve Tests & SI's and Control Rod Sequence Exchange
264	7/19/83	S		H					Derated for Control Rod Pattern Adjustment
265	7/23/83	S		H					Derated for Control Rod Pattern Adjustment
266	7/30/83	S		H					Derated for Control Rod Pattern Adjustment

1
F: Forced
S: Scheduled

2
Reason:
A-Equipment Failure (Explain)
B-Maintenance or 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)

Exhibit I - Same Source

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH July

DOCKET NO. 50-296
UNIT NAME Browns Ferry-3
DATE 8-1-83
COMPLETED BY T. Thom
TELEPHONE 205/729-0834

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
137	7/6/83	S		H					Derated for Control Rod Pattern Adjustment, and Load not needed.
138	7/22/83	F	22.25	H					Rx Scrammed when Electrical maintance shorted relay 5AK13C (Manual Scram Circuit)
139	7/25/83	S		H					Derated for Control Rod Pattern Adjustment

1
F: Forced
S: Scheduled

2
Reason:
A-Equipment Failure (Explain)
B-Maintenance or 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	STATION	EQUIPMENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PREVENT RECURRENCE
U-0							
-14	26	P1-26-77C	Replace	None	Age	Loss of indication	None
-14	26	P1-26-78K	Replace	None	Age	Loss of indication	None
U-1							
-30	74	PT-74-65	Replace	None	Age	Loss of indication	None
-08	90	RM-90-250	Repair	None	Age	Loss of record	None
-08	63	XM-63-8A	Replace	None	End of Life	Loss of indication	None
-08	90	RM-90-249	Repair	None	Age	Loss of record	None
-27	3	PX-3-206	Repair	None	Age	None	None
-27	3	PX-3-61	Repair	None	Age	None	None
-27	3	PX-3-53A	Repair	None	Age	None	None
-29	77	LIS 77-14A&B	Replace	None	End of Life	Loss of indication	None
-2							
30	92	APRM A, K-13 Relay	Replace	None	Age	Alarm light	None
09	1	TR-1-1	Repair	None	Age	Loss of Record	None
10	85	TR-85-7C	Repair	None	Age	Loss of Record	None
-3							
30	90	RR-90-251	Repair	None	Age	Loss of Record	None
23	85	XI-85-0000 (4 rod display)	Repair	None	Age	Loss of indication	None

CSSC EQUIPMENT

BROWNS FERRY NUCLEAR PLANT UNIT 1 and Common

ELECTRICAL MAINTENANCE SUMMARY

For the Month of July 1983

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
/5/83	Reactor Building Heating and Ventilation	Relay 16AK24 located in panel 9-5 and relay 16AK62B located in panel 9-43.	Refuel zone isolated.	Instrument channel B was inoperable for the reactor building ventilation reactor zone. However, instrument channel A was still operable and primary containment was maintained at all times.	Relays 16AK24 and 16AK62B both failed due to bad relay coils.	Refuel zone isolation.	The relay coils were replaced and the B instrument channel returned to service. MR#147551 MR#147194
/6/83	Fire Protection	Cable tray heat detector panel 1-25-281A order of occurance logic board.	Order of occurance logic board inoperable.	None	Bad logic board.	Order of occurance logic board inoperable.	Replaced the logic board and performed SI 4.11.C.3 & 4. MR#A-141927
/15/83	Standby Liquid Control (SLC)	SLC pump motor "A".	Smoke was observed coming from pump motor.	None	Motor lead arced to ground.	Insulation breakdown.	The motor leads were cleaned and re-insulated. MR#A-154198

BROWNS FERRY NUCLEAR PLANT UNIT 1 and Common

CSSC EQUIPMENT

ELECTRICAL MAINTENANCE SUMMARY

For the Month of July 19 83

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
/19/83	Standby Liquid Control (SLC)	SLC squib 1-FCV-63-8A.	FCV lights inoperable.	None, unit 1 in refueling outage.	Blown fuses F1, F2, and F3.	1-FCV-63-8A inoperable.	Replaced the blown fuses. MR#A-147974
/22/83	Air Conditioning (Cooling-Heating)	Emergency control bay chiller expansion valve.	Emergency control bay chiller inoperable.	None	Bad expansion valve.	Chiller inoperable.	Replaced the bad expansion valve and performed EMI 60. The chiller operated properly. MR#A-141003
/31/83	Radwaste	Drywell equipment drain sump pump timers (IS-77-14A&B)	Timers inoperable.	None	Bad micro switches in timers.	Timers (IS-77-14A&B) inoperable.	Replaced and calibrated the timers per SI 4.2.E-4. MR#A-154160 MR#A-154161

BROWNS FERRY NUCLEAR PLANT UNIT 2

CSSC EQUIPMENT

ELECTRICAL MAINTENANCE SUMMARY

For the Month of July 19 83

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
/29/83	Main Steam Reactor Feedwater Sampling & Water Quality Control Rod Drive	Fuses 16A-F67, 16A-F69, 16A-F66, and 5A-F27 located in backup control panel 2-25-32.	The component fuses were found to be installed incorrectly.	The consequences of installing these fuses was such that an alarm would not have been received should the fuse have blown.	Improper fuse installation.	Fuses installed improperly.	Control panel fuses of this type were inspected and corrected for units 1, 2, and 3. Unit 1 MR#A-130694 Unit 2 MR#A-130695 Unit 3 MR#A-130696
/29/83	Main Steam	Relay 16AK7A	Group I isolation logic (Main Steam Line high radiation) initiated a half isolation.	None, there was one operable trip system and one tripped trip system.	Burned relay coil.	This relay initiated a half isolation.	The relay was replaced and returned to service. MR#A-154358
/4/83	Fire Protection	Heat detector TE-39-46B.	An alarm came in for reactor building elevation 593 fire protection panel 2-25-311, zone 2B, heat detector TE-39-46B.	This alarm could have masked signals from other detectors which are required to be operable.	The continuous strip heat detector had apparently been stepped on and bent.	A false alarm was received which could have masked signals from other detectors.	The detector was straightened in the cable tray and the alarm cleared. The detector was functionally tested and returned to service. MR#A-154383 LER#BFRO-50-260/83036

CSSC EQUIPMENT

BROWNS FERRY NUCLEAR PLANT UNIT 2

ELECTRICAL MAINTENANCE SUMMARY

For the Month of July 1983

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
/5/83	Residual Heat Removal (RHR)	LPCI motor generator set 2EA motor.	The MG set motor was noticed to have excessive vibration and noise.	LPCI MG set 2EA was taken out of service.	The inboard and outboard motor bearings are believed to have failed due to a lack of grease in the bearing housing.	Required motor generator to be taken out of service.	The inboard and outboard bearings were replaced and the motor generator set returned to service. All LPCI MG sets motors for units 1, 2, and 3 were greased and placed on the maintenance schedule for periodic lubrication. MR#A-062166 LER#BFRO-50-260/ 83037
/25/83	Core Spray Cooling	Core spray NE room cooler fan.	During the performance of SI 4.2.B-60 the core spray NE room cooler fan failed to operate.	None	Bad overload heater.	Fan inoperable.	The overload heater was replaced and the fan was returned to service. MR#A-060421

BROWNS FERRY NUCLEAR PLANT UNIT 2

CSSC EQUIPMENT

ELECTRICAL MAINTENANCE SUMMARY

For the Month of July 1983

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
/30/83	Diesel Generators	Annunciator inverter and relay 831X.	Control room annunciator panel for D/G B would not test.	None	Bad inverter and interposing relay 381X.	Control room annunciator panel for D/G B inoperable.	Replaced inverter and relay and returned the annunciator panel to service. MR#A-141026 MR#A-153381

CSSC EQUIPMENT

BROWNS FERRY NUCLEAR PLANT UNIT 3

ELECTRICAL MAINTENANCE SUMMARY

For the Month of July 1983

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
/23/83	Reactor Building Closed Cooling Water (RBCCW)	3A RBCCW pump motor.	Motor was noticed to have excessive noise.	None	Bad motor bearing.	Motor was making excessive noise.	The motor bearings were replaced and the pump was returned to service. MR#A-153792
/30/83 to /5/83	4KV Shutdown Boards and Buses	Undervoltage relays 27-211-1A3 on shutdown board 3EA, 27-211-2B3 and 27-211-2C3 on shutdown board 3EB relay 27-211-3C3 on shutdown board 3EC, and 27-211-4A3 on shutdown board 3ED.	During the performance of SI 4.9.A.4.C the component relays were found to operate between 3942 and 3943 volts. The maximum allowable setpoint is 3940 volts.	None, loss-of-voltage relay channels were available and operable on all four 4KV shutdown boards.	Increases in ambient board room temperature.	The undervoltage relay's setpoints had drifted up slightly above the maximum allowable setpoint.	The relays were recalibrated and returned to service. MR#A-062716 LER#BFRO-50-296/83040
/30/83	Reactor Building Closed Cooling Water (RBCCW)	3B RBCCW pump motor.	Pump motor tripped off.	None	Bad pump motor.	3B RBCCW pump inoperable.	The pump motor was replaced and the pump returned to service. MR#A-147367

CSSC EQUIPMENT

BROWNS FERRY NUCLEAR PLANT UNIT 3

ELECTRICAL MAINTENANCE SUMMARY

For the Month of July 1983

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
/5/83	Diesel Generators	Transfer relay TRB2 located in 3EB 4KV shutdown board.	While performing SI4.9.A.1.a (D/G monthly test) an open coil was found in relay TRB2.	None, this failure prevented the performance of all required testing but would not have prevented D/G operation from an accident signal.	The relay coil failed with an open circuit.	See "Effect on Safe Operation".	The relay coil was replaced and the diesel generator returned to service. MR#A-147385 LER#BFRO-50-296/83039
/22/83	Neutron Monitoring	Relay 5A-K13C (SRM non-coincident scram)	Relay was observed to be burned.	None, this relay is required for unit refueling and startup only.	Relay burned up.	None, during normal operation (run mode) the contacts of relay 5A-K13C are jumpered across thus removing them from the circuit.	The relay was replaced per EMI 23. MR#A-153438
/23/83	Control Rod Drive	Hand switch HS-85-48 located on panel 9-5.	Broken switch handle.	None	Bad switch.	Hand switch inoperable.	The hand switch was replaced per EMI 23. MR#A-153446
/27/83	Radiation Monitoring	3-RM-90-251	Excessive motor noise.	None	Bad motor bearings.	Excessive noise and heating of motor.	The radiation monitor motor was replaced and the monitor returned to service. MR#A-130447

'-11	RBCCW	heat exchanger B	clean heads and tubes	none	unknown	none	cleaned heads and tubes MR# A151948
'-14	RHR	lifting eye for FCV 74-66	test lifting eye	none	unknown	none	tested lifting eye MR# A133764
'-02	RHRSW	pump C-1	packing leak	none	packing worn	none	replaced packing MR# A129133
'-04	FPC	pump B	packing leak	none	packing worn	none	adjusted packing MR# A147920
'-04	FPC	pump A	packing leak	none	packing worn	none	adjusted packing MR# A147919
'-02	RHRSW	pump C-3	packing leak	none	packing worn	none	adjusted packing MR# A153817
'-27	Diesel Generator	pilot valve on "A" air compressor on "C" diesel generator	replace valve	none	normal use	none	replaced pilot valve MR# A210777
'-27	RHRSW	air release valve 23-541	repair valve	none	float collapsed	none	replaced float MR# A210654

BROWNS FERRY NUCLEAR PLANT UNIT 2

MECHANICAL MAINTENANCE SUMMARY

For the Month of July 1983

			NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PREVENT RECURRENCE
7-11	Core Spray	2A PSC pump	adjust impeller	none	unknown	none	adjusted impeller MR# A133729
7-02	RCIC	FCV 71-6B	packing leak	none	packing worn	none	adjusted packing gland MR# A154354
7-19	HPCI	FCV 73-35	repair limitorque	none	motor wired backwards	broke coverplate and bolts on housing	Belzona repair MR# A133772

for the Month of July 19 83

7-12	HPCI	Hotwell pump	packing leak	none	packing loose	none	tighten packing MR# A147772
9-29	CRD	pump A	bearing low on oil	none	unknown	none	add STO-1 oil MR# A147715
7-09	Control Air	check valve 32-310B	inspect valve	none	trash between disc and seat	none	disassembled and cleaned valve MR# A133903
9-30	Cardox	FCV 39-35	packing leak	none	packing worn	none	replaced packing MR# A134931
7-01	RBCCW	pump 3B	replace coupling	none	unknown	none	pulled and replaced motor coupling and realigned MR# A141223

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

A. Refuel Floor - Received a small shipment of fuel during the first week of the month and completed fuel inspection by end of second week. Other activities included ultrasonic test (UT) of reactor pressure vessel (RPV) flange, cladding, RPV stud-inspection, removal of service platform and track, mapping of spent fuel pool, fuel movement in support of high density fuel storage rack (HDFSR) -shimming, and preparations for boral test of unit 3 racks and maintenance on cranes. Many activities took longer to complete because senior reactor operator (SRO) coverage was available only on first shift.

B. Turbine - The bucket repairs on the low-pressure "B" turbine, which was started in June, was halted when tendons cracked during installation of the bucket covers. A decision was made to perform a penetrant test (PT) examination on all 13th stage turbine end tendons, which identified eight defective tendons. Unit 3 buckets for the 13th stage were available as spares and it was decided to use these buckets on unit 1. Currently, these repairs are in progress.

The unit 1 buckets will be repaired by General Electric and will be available for installation in unit 3.

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

B. (Continued)

The low-pressure "A" buckets, being repaired by General Electric will be available for shipment from Schenectady, New York on August 12. TVA will provide its own truck and driver for shipment back to Browns Ferry.

The "B" control valve was reassembled in July.

The bull gear and turbine oil pump gear, which was scheduled to be repaired and shipped to Browns Ferry July 25, 1983, has been rescheduled for shipment to Browns Ferry on August 15. This later delivery does not impact the turbine schedule.

C. Drywell - On July 7 contracts were awarded for overlay weld repair of recirculation and residual heat removal (RHR) system. NUTECH, with subcontractor GAPCO, moved onsite on July 11. After initial setup and training the first of 26 overlay welds was started on July 18; by the end of the month nine welds were welded out with three additional in progress. During the last week of July the total number of weld repairs for NUTECH increased from 26 to 29. Weld repair of four sweep-o-lets will be performed by welding services, starting in August. All weld overlays are scheduled to be complete in early September, if specially designed welding heads can be fabricated in time and equipment-trained welders and fitters can be replaced when maximum allowable exposure is reached. Presently weld repair work is running close to schedule, except no final UT of weld repair

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

C. (Continued)

can be performed until calibration blocks and procedures are received. In addition, there is a strong possibility that weld repair cannot be worked in parallel with final UT and/or core reload because high-frequency welding machines in use will upset instrumentation. This problem could cause the core reload date to slip if weld repair work falls behind schedule.

Main steam isolation valve (MSIV) work continued throughout the month of July and now bonnets are reinstalled on all inboards and operators on "B" and "D" inboards. Backseat lapping, guide rib grinding, and measuring continued on all outboards. All poppets have been welded and machined.

D. Electrical/Instrumentation - During the month of July the prime emphasis was placed on the major modifications, recirculation motor maintenance, and EMI-7/71 testing to support systems required to be in service during fuel load.

A brief status of the modifications and maintenance work is listed below.

1. Modifications

   a. P0399 Long-Term Solution to Instrument and Control Bus Problems - Completed all tie-ins and functional testing. This modification is complete.

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

D. (Continued)

1. Modifications (Continued)

b. P0422 Provide Redundant Class IE Protection at Interface of Non-class IE Power Supplies and the Reactor Protection System - Completed all tie-ins and functional testing. This modification is complete.

c. P0533 Torus Temperature Monitoring System - Work was started on El. 519 outside the torus this month. Sixteen junction boxes were installed (El. 519) and associated conduit was run to junction boxes. Continued installation on conduit on El. 593. This modification is currently 65-percent complete.

d. P0322/P0323 Drywell Wide-range Pressure Monitors and P0323 Torus Wide-range Level Transmitters - Conduit installation continued during July. The P0322 modification requires the relocation of instruments on El. 593. Currently awaiting ENDES ECN revision. P0322/P0323 are 90-percent complete.

e. P0324 Containment Wide-range Radiation Monitors - Work continued on the modification during July with mounting of brackets in drywell for radiation monitor installation. Pulled cables from drywell penetrations and control room to the auxiliary instrument room. Mounted recorders in control room. This modification is 75-percent complete.

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

D. (Continued)

f. Electrical Maintenance

Completed all maintenance work on the recirculation motor-generator sets (M-G) "A" and "B." Will run M-G sets when TACF form is approved.

Continued the outside electrical work required for the three new buildings. Continued the electrical support of torus and supported NUTECH, weld repair contractor.

Continued to perform the EMI-7 and 71 testing and continued to work the recirculation "A" and "B" motors. 80% complete on maintenance.

E. Mechanical - P0664 ducting for diesel generators was completed for units 3B, 3C, and 3D by July 5, and by July 18 the last of unit 1 and 2 diesel generators was completed.

Probolog contractor completed remaining feedwater heaters 1A3, 1A4, 1A5, 1C1, 1C2, 1C3, and 1C4 and reactor building closed cooling water (RBCCW) heat exchangers 1A and 1B. Residual heat removal (RHR) heat exchanger 1C after partial probolog and evaluation became suspect of chlorine pitting in one tube. Preparations were made in July for tube removal and tube plugging and further evaluation.

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

E. (Continued)

Power Service Shop completed retubing and reinstallation of "A" stator cooler, diffuser box was installed in "B" condenser, and work started with replacement of reactor vent valves 3-98/99.

ANI Requirements - P0392 scram discharge header work required ANI involvement, P0613 MSIV guide ribs and P0361 attached piping. Hold points have been established in workplans. Maintenance items under Section X during the month of July did not require any welding work.

ALARA - During July the primary ALARA concerns were as follows: support of the recirculation system overlay repair, removal of sparger platform from the refuel floor and shipment offsite, torus cleaning upon completion of sandblasting, deconning of TIP indexers, "B" feedwater check valve repair (HP support), and overall unit 1 housekeeping reports and followup.

F. Planning and Scheduling - Considerable time and effort were spent on monitoring and planning of the RHR and recirculation system weld repairs and its increasing scope of work; also developed a schedule for MSIV work, attached piping, and torus modifications for unit 3 cycle 5.

G. Torus - While Williams Paint Contractor was sandblasting in bays 8 thru 11, modification work continued in the remaining bays of the torus. On July 5 released bays 6, 7, 12, 13, 14, and on July 12 bays 1, 2, 3, 15, and 16 were released. The last two bays, 4 and 5, were released on July 16.

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

G. (Continued)

Williams work progressed as follows: completed painting in bays 8-11 on July 6 and started setup of heatcure. Heatcure started on July 12 at 0800 hours in bay 10. At this point sandblasting and painting were approximately 30-percent complete. Temperatures started rising inside the torus and by the time bay 9 heatcure was complete, average temperature was 119°F, prohibiting painting. Twelve cases of heat exhaustion were reported during this period. Heatcure operations were shut down on July 20 at 0230 hours to complete sandblasting and painting. Heatcuring resumed on July 28 at 1200 hours and bays 8, 9, and 10, only, were completed in July. The new projected torus fill date had become day 142 (September 4, 1983), instead of day 132 (August 25, 1983) in the outage.

Attached piping support efforts continued throughout the month and a total of 71 supports were completed, boosting the total to 290 of 385, which includes spring cannister mods and ECCS supports. By system the following progress was made: HPCI - 100-percent, RCIC - 89-percent, RHR Loop I - 78-percent, RHR Loop 2 - 99-percent, CS Loop 1 - 89-percent, CS Loop 2 - 51-percent, drywell and torus purge - 38-percent, PSC ringheader - 33-percent complete. The total attached piping program is 70-percent complete.

FIELD SERVICES SUMMARY

July 1983

Major Work Areas

H. Administrative - The overtime percentage for the month of June was 28-percent with 148,609 straight-time hours and 58,387 overtime hours. As of June 30, 1983, year-to-date overtime percentage was 21-percent, 1,255,795 straight-time hours and 334,971 overtime hours. The overall goal of the overtime percentage is 17-percent.

The O&M budget for June was $2,802,872 and the expenditures were $4,203,274 with year-to-date budget being $24,959,334, and actual year-to-date expenditures being $25,657,360. The capital budget was $3,410,351 and the expenditures were $3,543,941 with year-to-date budget being $32,921,720, and actual year-to-date expenditures being $19,487,848. Overall budget was $6,213,223 and the overall expenditures were $7,749,985 with year-to-date budget being $57,881,054, and actual year-to-date expenditures being $45,162,118.