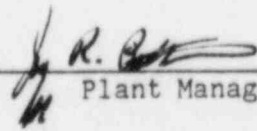


TENNESSEE VALLEY AUTHORITY  
DIVISION OF NUCLEAR POWER  
BROWNS FERRY NUCLEAR PLANT

MONTHLY OPERATING REPORT TO NRC  
April 1, 1985 - April 30, 1985

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

Submitted by:

  
Plant Manager

8507180023 850430  
PDR ADOCK 05000259  
R PDR

1824  
1/1

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Operations Summary

April 1985

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 six reportable occurrences and one revision to previous occurrences reported to the NRC during the month of April.

Unit 1

The unit was in cold shutdown the entire month as it undergoes several modifications including those necessary to bring it into compliance with environmental qualifications required under NUREG 0588.

Unit 2

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

Unit 3

The unit was in cold shutdown the entire month on an administrative hold to resolve various TVA and NRC concerns.

Prepared principally by B. L. Porter.

Operations Summary (Continued)

April 1985

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	0.00620	0.00492	0.00430
Feedwater nozzle	0.29782	0.21319	0.16133
Closure studs	0.23910	0.17629	0.14326

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

Common System

Approximately 2.21E+06 gallons of waste liquids were discharged containing approximately 1.09E-01 curies of activities.

Operations Summary (Continued)

April 1985

Refueling InformationUnit 1

Unit 1 is scheduled for its sixth refueling approximately June 1, 1985 with a scheduled restart date of March 31, 1986. This refueling will involve loading 8x8R (retrofit) fuel assemblies into the core, replacing recirculation piping, work on "A" and "B" low-pressure turbine, upgrade hangers and anchors, and environmentally qualify instrumentations. The unit was shut down on March 19, 1985, and will remain in cold shutdown until June 1, 1985, because of unfinished modifications to meet environmental concerns.

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

Unit 2

Unit 2 was shut down for its fifth refueling outage on September 15, 1984 with a scheduled restart date of August 1, 1985. This refueling outage will involve loading additional 8X8R (retrofit) assemblies into the core, finishing torus modification, turbine inspection, piping inspection, TMI-2 modifications; post-accident sampling facility tie-ins, core spray change-out, and feedwater sparger inspection.

There are no assemblies in the reactor vessel. At month end, there were 273 new assemblies, 764 EOC-5 assemblies, 248 EOC-4 assemblies, 352 EOC-3 assemblies, 156 EOC-2 assemblies, and 132 EOC-1 assemblies in the spent fuel storage pool. The present available capacity of the spent fuel pool is 77 locations. All old racks have been removed from the pool and new HDR's are being installed.

Operations Summary (Continued)

April 1985

Unit 3

Unit 3 is scheduled for its sixth refueling outage approximately November 30, 1985, with a scheduled restart date of November 10, 1986. This refueling involves loading 8X8R (retrofit) assemblies into the core, and complete reinspection of stainless steel piping. The unit was shutdown on March 9, 1985, and will remain in cold shutdown until June 4, 1985, on an administrative hold to resolve various TVA and NRC concerns.

There are 764 assemblies presently in the reactor vessel. There are 248 EOC-5 assemblies, 280 EOC-4 assemblies, 124 EOC-3 assemblies, 144 EOC-2 assemblies, and 208 EOC-1 assemblies in the spent fuel storage pool. The present available capacity of the spent fuel pool is 914 locations.

Significant Operational Events

<u>Date</u>	<u>Time</u>	<u>Event</u>
		Unit 1
4/01	0001	The unit remains in a shutdown condition until it undergoes several modifications including those necessary to bring it into compliance with environmental qualifications required under NUREG 0588.
4/30	2400	The unit remains in a shutdown condition until it undergoes several modifications including those necessary to bring it into compliance with environmental qualifications required under NUREG 0588.

Significant Operational Events

<u>Date</u>	<u>Time</u>	<u>Event</u>
		Unit 2
4/01	0001	End-of-cycle 5 refuel and modifications outage continues.
4/30	2400	End-of-cycle 5 refuel and modifications outage continues.



Significant Operational Events

<u>Date</u>	<u>Time</u>	<u>Event</u>
		Unit 3
4/01	0001	The unit has been placed on administrative hold until various TVA and NRC concerns are resolved.
4/30	2400	The unit has been placed on administrative hold until various TVA and NRC concerns are resolved.

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259  
 UNIT Browns Ferry One  
 DATE 5-1-85  
 COMPLETED BY R. W. Motter  
 TELEPHONE (205) 729-2508

MONTH April

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-7
2	-7
3	-7
4	-8
5	-7
6	-7
7	-8
8	-8
9	-7
10	-7
11	-6
12	-7
13	-6
14	-6
15	-6
16	-7

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	-6
18	-6
19	-8
20	-9
21	-8
22	-7
23	-8
24	-8
25	-8
26	-7
27	-7
28	-8
29	-7
30	-8
31	

## 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 Two  
 DATE 5-1-85  
 COMPLETED BY R. W. Motter  
 TELEPHONE (205) 729-2508

MONTH April

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>-6</u>	17	<u>-6</u>
2	<u>-6</u>	18	<u>-6</u>
3	<u>-7</u>	19	<u>-4</u>
4	<u>-6</u>	20	<u>-3</u>
5	<u>-6</u>	21	<u>-4</u>
6	<u>-6</u>	22	<u>-5</u>
7	<u>-6</u>	23	<u>-5</u>
8	<u>-6</u>	24	<u>-5</u>
9	<u>-6</u>	25	<u>-5</u>
10	<u>-6</u>	26	<u>-5</u>
11	<u>-6</u>	27	<u>-5</u>
12	<u>-6</u>	28	<u>-5</u>
13	<u>-6</u>	29	<u>-5</u>
14	<u>-6</u>	30	<u>-4</u>
15	<u>-5</u>	31	<u></u>
16	<u>-6</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. 50-296  
 UNIT Browns Ferry Three  
 DATE 5-1-85  
 COMPLETED BY R. W. Motter  
 TELEPHONE (205) 729-2508

MONTH April

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-16
2	-10
3	-11
4	-10
5	-11
6	-10
7	-11
8	-11
9	-10
10	-10
11	-10
12	-10
13	-10
14	-10
15	-11
16	-10

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	-11
18	-13
19	-10
20	-11
21	-11
22	-10
23	-10
24	-11
25	-11
26	-11
27	-11
28	-11
29	-10
30	-11
31	

## 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 5-1-85  
 COMPLETED BY R. Motter  
 TELEPHONE 729-2508

OPERATING STATUS

1. Unit Name: <u>Browns Ferry One</u>	Notes
2. Reporting Period: <u>April 1985</u>	
3. Licensed Thermal Power (MWt): <u>3293</u>	
4. Nameplate Rating (Gross MWe): <u>1152</u>	
5. Design Electrical Rating (Net MWe): <u>1065</u>	
6. Maximum Dependable Capacity (Gross MWe): <u>1098.4</u>	
7. Maximum Dependable Capacity (Net MWe): <u>1065</u>	
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: <u>N/A</u>	
9. Power Level To Which Restricted, If Any (Net MWe): <u>N/A</u>	
10. Reasons For Restrictions, If Any: <u>N/A</u>	

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	719	2,879	94,279
12. Number Of Hours Reactor Was Critical	0	1647.78	59,521.38
13. Reactor Reserve Shutdown Hours	0	512.22	6,997.44
14. Hours Generator On-Line	0	1,626.67	58,267.26
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	4,982,981	168,144,427
17. Gross Electrical Energy Generated (MWH)	0	1,652,650	55,398,130
18. Net Electrical Energy Generated (MWH)	-6,223	1,596,808	53,810,629
19. Unit Service Factor	0	56.5	61.8
20. Unit Availability Factor	0	56.5	61.8
21. Unit Capacity Factor (Using MDC Net)	0	52.1	53.6
22. Unit Capacity Factor (Using DER Net)	0	52.1	53.6
23. Unit Forced Outage Rate	100	43.5	22.9

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
June 1, 1985 - Refuel outage begins.

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 5-1-85  
 COMPLETED BY R. W. Motter  
 TELEPHONE (205) 729-2508

OPERATING STATUS

1. Unit Name: Browns Ferry Unit Two  
 2. Reporting Period: April 1985  
 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	<u>719</u>	<u>2879</u>	<u>89,166</u>
12. Number Of Hours Reactor Was Critical	<u>0</u>	<u>0</u>	<u>55,860.03</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>14,200.44</u>
14. Hours Generator On-Line	<u>0</u>	<u>0</u>	<u>54,338.36</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>0</u>	<u>0</u>	<u>153,245,167</u>
17. Gross Electrical Energy Generated (MWH)	<u>0</u>	<u>0</u>	<u>50,771,798</u>
18. Net Electrical Energy Generated (MWH)	<u>-3,880</u>	<u>-12,112</u>	<u>49,290,861</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>60.9</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>60.9</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>0</u>	<u>51.9</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>0</u>	<u>51.9</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>0</u>	<u>23.0</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: September 1985

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

Forecast

Achieved

INITIAL CRITICALITY  
 INITIAL ELECTRICITY  
 COMMERCIAL OPERATION

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## OPERATING DATA REPORT

DOCKET NO. 50-296  
 DATE 5-1-85  
 COMPLETED BY R. W. Motter  
 TELEPHONE (205) 729-2508

OPERATING STATUS

1. Unit Name: <u>Browns Ferry Unit Three</u> 2. Reporting Period: <u>April 1985</u> 3. Licensed Thermal Power (MWt): <u>3293</u> 4. Nameplate Rating (Gross MWe): <u>1152</u> 5. Design Electrical Rating (Net MWe): <u>1065</u> 6. Maximum Dependable Capacity (Gross MWe): <u>1098.4</u> 7. Maximum Dependable Capacity (Net MWe): <u>1065</u> 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: <u>N/A</u> 9. Power Level To Which Restricted, If Any (Net MWe): <u>N/A</u> 10. Reasons For Restrictions, If Any: <u>N/A</u>	Notes     
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	719	2879	71591
12. Number Of Hours Reactor Was Critical	0	1517.65	45,306.08
13. Reactor Reserve Shutdown Hours	0	508.05	5,149.55
14. Hours Generator On-Line	0	1,496.96	44,194.76
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	4,649,840	131,868,267
17. Gross Electrical Energy Generated (MWH)	0	1,572,770	43,473,760
18. Net Electrical Energy Generated (MWH)	-7,638	1,518,837	42,184,598
19. Unit Service Factor	0	52.0	61.7
20. Unit Availability Factor	0	52.0	61.7
21. Unit Capacity Factor (Using MDC Net)	0	49.5	55.3
22. Unit Capacity Factor (Using DER Net)	0	49.5	55.3
23. Unit Forced Outage Rate	100	48.0	19.5
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:	<u>May 10, 1985</u>	
26. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____



# UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-296  
 UNIT NAME Browns Ferry Three  
 DATE 5-1-85  
 COMPLETED BY Ted Thom  
 TELEPHONE (205) 729-2171

REPORT MONTH April

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
156 Cont	4-1-85	F	719	F					The unit remains on administrative hold until various TVA and NRC concerns are resolved.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

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

<sup>5</sup>  
 Exhibit I - Same Source



# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April

DOCKET NO. 50-260  
 UNIT NAME Browns Ferry Two  
 DATE 5-1-85  
 COMPLETED BY Ted Thom  
 TELEPHONE (205) 729-2171

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
305 Cont	4/1/85	S	719	C	4				EOC-5 Refuel Outage (Controlled Shutdown 9/15/84)

<sup>1</sup>  
 F- Forced  
 S- Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

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

<sup>5</sup>  
 Exhibit I - Same Source

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-259  
 UNIT NAME Browns Ferry 1  
 DATE 5-1-85  
 COMPLETED BY Ted Thom  
 TELEPHONE (205) 729-2171

REPORT MONTH April

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
314 Cont	4/1/85	F	719	D					The unit remains in a shutdown condition until it undergoes several modifications, including those necessary to bring it into compliance with environmental qualifications required under NUREG 0588.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

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

<sup>5</sup>  
 Exhibit I - Same Source

(9/77)

9/29/82

CSSC EQUIPMENT

## ELECTRICAL MAINTENANCE SUMMARY

For the Month of April 19 85

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
1984 11/20	480V Diesel Aux Bds	OXF-219-TDA d/g transformer TDA exhaust fan	Troubleshoot exhaust fan motor	None	Bad fan motor	Fan tripped after short running time	Replaced fan motor MR 321021
1985 4/2	Standby gas treatment	FS-065-042B SGT fan B disch flow	Troubleshoot flow switch; correct wiring	None	Bad flow switch	Flow switch inop. Also, wires found terminated on wiring panel & components found labeled incorrectly	Corrected wiring- DR 85-0206; Replaced flow switch MR 555502
4/6	EECW	ZS-067-0088 limit switch on EECW pump A supply valve	SI 4.2.B-67 step 3.1.1.f	None	Actuator not striking limit switch (out of adjustment)	A-1 RHRSW pump failed to start during SI	Adjusted actuator to strike limit switch MR 179150
4/6	EECW	ZS-067-0089 limit switch on EECW pump B supply valve	SI 4.2.B-67 step 3.1.1.g	None	Actuator was not striking limit switch (out of adjustment)	B-1 RHRSW pump failed to start during SI	Adjusted actuator to strike limit switch MR 180456
4/24	RHRSW 4160 logic controls	Time delay relay TD2C auto starts pmp B3 28 seconds after accident signal	SI 4.2.B-14	None	Relay TD2C did not pick up as required in 28 ± 1 second	RHRSW pump B3 was declared inop	Replaced relay MR 566564

CSSC EQUIPMENT

## ELECTRICAL MAINTENANCE SUMMARY

For the Month of April 19 85

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
1985 4/19	Annunciator & sequential events recording	XA-55-4A annunciator panel 9-4	Performing SI 4.1.A.9	None	Personnel error when jumpering relay 5AK3C	Resulted in loss of annunciation panel 9-4	Replaced 35 "4000" cards. Repaired power supply cards. Relamped panel. Verified proper operation MR 557624

CSSC EQUIPMENT

## ELECTRICAL MAINTENANCE SUMMARY

For the Month of April 19 85

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
1985 3/28	Control rod drive	HCU-85-58-23 hydraulic control unit	EMI 50	None	Bad level switch	Found during pre-ventative maintenance	Replaced level switch MR 556103
4/2	Neutron monitoring	RLY-92-7CK9K IRM channel F	Replace relay or coil. Found bad on MR55753	None	Relay coil burned out	Rod block would not clear	Replaced relay coil MR 558123
4/3	Neutron monitoring	RLY-92-7CK7B	Troubleshoot relay	None	Relay coil burned out		Replaced relay coil MR 555761
4/8	Neutron monitoring	RLY-92-7CK7J	Replate coil on relay	None	Relay coil burned out		Replaced relay coil MR 554134
4/11	Rx bldg ventilation	RLY-64-16AK72 drywell diff press intlk & control rm isolation	Relay found smoking. Repair	None	Relay coil burned out	#6 fuse in pnl 9-43 blown	Replaced relay MR 180469 LER 259-85011

CSSC EQUIPMENT

## ELECTRICAL MAINTENANCE SUMMARY

For the Month of April 19 85

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
1985 3/1	Rx bldg ventilation	Penetration Rx bldg, el 593 north wall at cable tray UAJ	Repair penetration	None	Marinite board pushed back, leaving penetration open to Rx side	Degradation of primary containment isolation	Repaired penetration. QA smoke tested repaired area MR 182735
3/27	Diesel generator	Diesel gen alarm pnl 9-23D	Troubleshoot invalid alarm "D/G 3D control circuit ground"	None	Relay contacts stuck closed	False annunciation	Replace relay MR 176680
4/2	RHR	MVDP-74-46 RHR sys I-II crosstie vlv	Troubleshoot valve	None	Motor leads were pulled out of stak-on lugs	Valve would not operate after post-maint test step 10.3 of SMMI 15.0-B	Relugged motor leads per EMI 58.2 MR 558122
4/13	Control rod drive	RLY-85-3AK8 rod control relay	Troubleshoot relay 3AK8	None	Bad coil in relay	Blowing fuses	Replaced relay MR 556601
4/21	Diesel generator	RLY-82-SSP2 diesel gen 3B speed sensing relay	Replace speed sensing relay SSP2	None	Relay had defective circuit	Found during SI 4.9.A.1.d	Replaced relay MR 554116
4/22	Diesel generator	RLY-82-SFD2 diesel gen 3B time delay relay	Replace time delay relay SFD2	None	Set point drift	Relay had erratic timing during EMI 3	Replaced relay MR 554118
4/25	Door interlock & alarm	Door 260-249 personnel airlock door el 565	Troubleshoot cause of door malfunction	None	Door did not latch when closed. Bad electric strip	Both doors (249 & 248) open at same time - causes breach of secondary containment	Replaced electric strip MR 556486 LER 296/85012

BROWNS FERRY NUCLEAR PLANT UNIT 1CSSC EQUIPMENT

## MECHANICAL MAINTENANCE SUMMARY

For the Month of April 19 85

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
4-8-85	268	1DN LPCI MG set	Change bearing between motor and flywheel	None	None		Replace bearing
4-8-85	67	FCV-67-50	Replace broken nipple to control water strainer to FCV-1-67-50		Normal use		Replaced nipple



BROWNS FERRY NUCLEAR PLANT UNIT 2

CSSC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of April 19 85

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
3-14-85	74	2B RHR Pump	Remove Pump and make repairs	None	Broken wear ring	Pump was inoperable	None



BROWNS FERRY NUCLEAR PLANT UNIT 3

CSSC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of April 19 85

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
4-8-85	69	3-A RWCU Pump	Remove piping and pull pump for repair	None	Use	Pump was inoperable	Rebuilt pump install new wear ring

OUTAGE MAINTENANCE & MAJOR MODIFICATION MANAGEMENT  
April 1985

MAJOR WORK COMPLETED

A. Refuel Floor

1. Westinghouse fuel was received (4 rods, 1 dummy) on April 3, and was transferred to the refuel floor on April 23.
2. Fuel shuffle started on April 15; reported complete on April 30, 1985.
3. The reactor building crane was released for lifting on April 23.
4. Vessel drain preparations included portable pumps installed April 23, moisture separator set April 25, cavity drained, vessel head and HEPA filter installed, and drywell shield plugs set on April 28.

B. Turbine

No major work completed; awaiting release of turbine building cranes.

C. Drywell

1. Post-IHSI in-service penetrant tests were completed on April 8, 1985.
2. Temporary instrument lines were installed and vessel drain in preparation for nozzle replacements was in progress on April 30.

D. Major Valves

Valve 23-580 was disassembled, cleaned, and reassembled in preparation for Residual Heat Removal Service Water (RHSW) 10-year hydro.

E. Balance-of-Plant

1. Repair work in "C" condenser was completed on April 8 with the exception of one 8" elbow, which will require a modification.
2. "2B" RHR heat exchanger work was completed on April 16.

OUTAGE MAINTENANCE & MAJOR MODIFICATION MANAGEMENT  
April 1985

MAJOR WORK COMPLETED (Continued)

F. Modifications

1. ECN P0392 (SCRAM Discharge Header Modifications) - removed old scram discharge instrument volumes on April 2.
2. ECN P0555 (Torus Sandblast, Paint and Heat Cure) - sandblasting, painting of 12 bays, and heat cure of 11 of 16 bays were completed as of April 30.
3. ECNs/Work Plans reported field complete as of April 30, 1985.

<u>ECN</u>	<u>Work Plan</u>	<u>Description</u>
P0083	2219-84	Replace RHR Pump Seal Heat Exchanger "B" and "D"
P0093	6847-84	Remove and Modify Torus ECCS Strainer Baskets
P0126	2163-84	Set Panels 25-5&6 C/D
P0126	2167-84	Install conduit in ceiling of Elev. 565'
P0126	2152-84	Core Drills
P0126	2165-84	Conduit in Turbine Building
P0157	2018-84	Cap & Remove 1" EECW Piping in Core Spray Room
P0192	2005-84	Relocate RHRSW Vent Valves
P0334	-	Changeout Refuel Platform Air Compressor
P0361	2063-84	T.A.P. : RHR LP.2
P0361	2062-84	T.A.P. : RHR LP.1
P0361	2056-84	T.A.P. : C.S. LP.2
P0361	2074-84	T.A.P. : C.S. LP.2
P0361	2080-84	T.A.P. : HPCI
P0361	2064-84	T.A.P. : RHR LP.2

OUTAGE MAINTENANCE & MAJOR MODIFICATION MANAGEMENT  
April 1985

MAJOR WORK COMPLETED (Continued)

F. Modifications (Continued)

<u>ECN</u>	<u>Work Plan</u>	<u>Description</u>
P0392	2199-84	Remove Existing SDIV Instrumentation
P0533	2175-84	Torus Temperature Monitor Conduit Installation-on Elev. 519' Pedestal
P0555	2130-84	Remove Torus Baffle Supports
P0585	-	Replace Diesel Generator Speed Sensing Switches
P0597	2159-84	Increase Range of Reactor Feed Pump Flow Instrumentation
P0612/13	2238-84	Weld and Machine MSIV Poppets
P0646	10387	Add/Replace Diesel Air Start Valves
P0672	2191-84	Remove PS-3-57 A-D & Associated Wiring
P0688	2116-84	Modify FCV 76-xx/84-xx To Make Flange Testable
P0690	2116-84	Modify FCV 76-xx/84-xx To Make Flange Testable
P0695	2116-84	Modify FCV 76-xx/84-xx To Make Flange Testable
P0697	2113-84	Drill Ventilation Penetrations
P0697	2102-84	Drill HVAC (Control Bay) Platform Holes
P0720	2060-85	Prefabricate Jet Pump Instrument Piping
P0738, etc	Various	Physical Security Plan Modifications
P3085	2066-84	Replace PS-73-1A/B
P3134	2004-84	Modify Mounting Bracket FM-84-19B/-20B
P3138	2001-85	Replace B&D RHR Pump Room Cooler

OUTAGE MAINTENANCE & MAJOR MODIFICATION MANAGEMENT  
April 1985

CRITICAL PATH

A. Work Plan Approvals; Modifications Group

	<u>April 1</u>	<u>May 1</u>	<u>Change</u>
Total Workplans	280	269	-11
Approved Workplans	61	100	+39
Outstanding Workplans	219	169	-50
Workplans in Approval Cycle	69	78	N/A

B. ECN P0126; Replace Transmitters with Analog/Trip System

<u>Conduit Installation Location</u>	<u>April 1</u>	<u>May 1</u>
Auxiliary Instrument Room	20%	60%
Elev. 565'	75%	99%
Turbine Building	90%	99%
Spreader Room	10%	90%
Elev. 593'	-	20%

C. ECN P0361; Torus Attached Piping Hanger Modifications

Hangers Installed: April 1 - 83  
May 1 - 161

<u>Hanger Status by System:</u>	<u>April 1</u>	<u>May 1</u>
HPCI	17%	41%
RCIC	41%	44%
RHR I	43%	66%
RHR II	62%	64%
CS I	4%	79%
CS II	27%	49%
Drywell Torus Purge	36%	59%

RETURN TO SERVICE DATE: May 1: September 20, 1985  
April 1: September 21, 1985

TENNESSEE VALLEY AUTHORITY

Browns Ferry Nuclear Plant

P. O. Box 2000

Decatur, Alabama 35602

MAY 10 1985

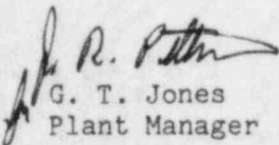
Nuclear Regulatory Commission  
Office of Management Information  
and Program Control  
Washington, DC 20555

Gentlemen:

Enclosed is the April 1985 Monthly Operating Report to NRC for Browns Ferry Nuclear Plant Units 1, 2, and 3.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
G. T. Jones  
Plant Manager

Enclosures

cc: Director, Region II  
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