16

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259
UNIT 1
DATE 2/1/84
COMPLETED BY M. Chapman
TELEPHONE 205/729-0834

MONTH January 1984

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-10	17	690
2	117	18	816
3	319	19	707
4	340	20	736
5	469	21	894
6	242	22	1055
7	-11	23	1023
8	564	24	1045
9	662	25	1042
10	776	26	1046
11	919	27	995
12	974	28	529
13	899	29	597
14	931	30	845
15	986	31	1022
16	909		

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.

(9/77)

8403020103 840131
PDR ADOCK 05000259
R PDR

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-260
UNIT 2
DATE 2/1/84
COMPLETED BY M. Chapman
TELEPHONE 205/729-0834

MONTH January 1984

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1070	17	1079
2	1073	18	1080
3	1074	19	1079
4	1077	20	1062
5	1072	21	251
6	1065	22	-14
7	1036	23	-12
8	747	24	-12
9	943	25	134
10	1072	26	765
11	1077	27	959
12	1071	28	988
13	1063	29	982
14	1046	30	984
15	848	31	1053
16	1040		

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.

(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-296
UNIT 3
DATE 2/1/84
COMPLETED BY Ted Thom
TELEPHONE 205/729-0834

MONTH January

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

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 2/1/84
COMPLETED BY M. Chapman
TELEPHONE 205/729-0834

OPERATING STATUS

1. Unit Name: Browns Ferry - 1
2. Reporting Period: January 1984
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	744	744	83,306
12. Number Of Hours Reactor Was Critical	727.68	727.68	50,533.80
13. Reactor Reserve Shutdown Hours	0	0	5,785.02
14. Hours Generator On-Line	687.23	687.23	49,404.87
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,625,642	1,625,642	140,183,321
17. Gross Electrical Energy Generated (MWH)	546,640	546,640	46,192,260
18. Net Electrical Energy Generated (MWH)	533,247	533,247	44,858,574
19. Unit Service Factor	92.4	92.4	59.3
20. Unit Availability Factor	92.4	92.4	59.3
21. Unit Capacity Factor (Using MDC Net)	67.3	67.3	50.6
22. Unit Capacity Factor (Using DER Net)	67.3	67.3	50.6
23. Unit Forced Outage Rate	3.5	3.5	23.6

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. 50-260
DATE 2/1/84
COMPLETED BY M. Chapman
TELEPHONE 205/729-0834

OPERATING STATUS

1. Unit Name: Browns Ferry - 2
2. Reporting Period: January 1984
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	744	78,247
12. Number Of Hours Reactor Was Critical	655.22	655.22	50,619.40
13. Reactor Reserve Shutdown Hours	88.78	88.78	13,989.14
14. Hours Generator On-Line	640.17	640.17	49,133.01
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,033,033	2,033,033	142,178,078
17. Gross Electrical Energy Generated (MWH)	660,300	660,300	47,257,588
18. Net Electrical Energy Generated (MWH)	642,048	642,048	45,900,651
19. Unit Service Factor	86.0	86.0	62.8
20. Unit Availability Factor	86.0	86.0	62.8
21. Unit Capacity Factor (Using MDC Net)	81.0	81.0	55.1
22. Unit Capacity Factor (Using DER Net)	81.0	81.0	55.1
23. Unit Forced Outage Rate	0.4	0.4	24.5

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
July 1984

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 2-1-84
COMPLETED BY Ted Thom
TELEPHONE 205/729-0834

OPERATING STATUS

1. Unit Name: Browns Ferry - 3
2. Reporting Period: January 1984
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	744	60,672
12. Number Of Hours Reactor Was Critical	0	0	43,087.80
13. Reactor Reserve Shutdown Hours	0	0	3,878.13
14. Hours Generator On-Line	0	0	42,193.71
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	0	126,307,711
17. Gross Electrical Energy Generated (MWH)	0	0	41,597,620
18. Net Electrical Energy Generated (MWH)	0	0	40,375,256
19. Unit Service Factor	0	0	69.5
20. Unit Availability Factor	0	0	69.5
21. Unit Capacity Factor (Using MDC Net)	0	0	62.5
22. Unit Capacity Factor (Using DER Net)	0	0	62.5
23. Unit Forced Outage Rate	0	0	16.4

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
June 1984

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 January 1984

DOCKET NO. 50-259
UNIT NAME Browns Ferry-1
DATE 2/1/84
COMPLETED BY M. Chapman
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	1/1/84	S	31.75	C	4				EOC-5 refuel outage
265	1/16/84	F	20.65	H	1				Reactor scram due to a bad rod pattern.
266	1/13/84	F		A					"A", "B", and "C" string high-pressure heaters isolated
267	1/27/84	S		H					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)

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH January 1984

DOCKET NO. 50-260
UNIT NAME Browns Ferry-2
DATE 2/1/84
COMPLETED BY M. Chapman
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
284	1/7/84	S		B					Derated for turbine control valve test and SI's.
285	1/14/84	S		H					Derated for control rod pattern adjustment.
286	1/21/84	F	2.78	G	3				Reactor scram during performance of Main Steam Line High Radiation SI, on "B" channel when "C" channel was tested the MSIV's closed. Apparent cause of scram was failure to reset "B" channel PCIS.
287	1/21/84	S	101.05	H					Unit remains down for scheduled maintenance after scram.
288	1/30/84	S		H					Derated for control rod pattern adjustment.

23

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

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH January 1984

DOCKET NO. 50-296
UNIT NAME Browns Ferry-3
DATE 2/1/84
COMPLETED BY Ted Thom
TELEPHONE 2057729-0834

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
140	1/1/84	S	744	C	4				EOC-5 refuel outage continues (controlled shutdown)

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

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CSSC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of January 19 84

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
1-3	HPCI	Flow Element 1-FE-73-033	Torque flanges	None	Normal Use	Leak	MR 216605
1-4	CRD	Scram Pilot Valve 1-FSV-85-39A	Repair Valve	None	Assembly Error	CRD 18-03 would not SCRAM	Installed solenoid spring correctly MR 214352
1-4	Core Spray	1A PSC Pump	Adjust Impeller	None	Personnel Error	Insufficient pumping capability	Corrected impeller clearance MR 150699
1-4	Core Spray	1B PSC Pump	Adjust Impeller	None	Personnel Error	Insufficient pumping capability	Corrected impeller clearance MR 150698
1-5		Control Bay Elevator	Wire Rope Replacement	None	Normal Use	Damaged wire rope	Replaced wire rope MR 150742
1-10	RB Ventilation	1-FSV-64-021 Solenoid Valve	Install bolts	None	Unknown	Missing mounting bolts	Installed bolts MR 201520
1-11	Core Spray	1A PSC Pump	Seal Leak	None	Unknown	Leak	Replaced seal MR 214378

MISC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of January 19 84

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
1-25	CRD	Directional Control Valve EP 121	Valve Replacement	None	Unknown	CRD 42-31 would not withdraw	Replaced valve MR 201624

CSSC EQUIPMENT

MECHANICAL MAINTENANCE SUMMARY

For the Month of January 19 84

DATE	SYSTEM	COMPONENT	NATURE OF MAINTENANCE	EFFECT ON SAFE OPERATION OF THE REACTOR	CAUSE OF MALFUNCTION	RESULTS OF MALFUNCTION	ACTION TAKEN TO PRECLUDE RECURRENCE
1-4	Standby Diesel Generator	3D Diesel Generator Engine Cooler	Replace cooler head	None	Improper piping connection	Broken flange on cooler head	Reworked piping MR 150709
1-11	Door Interlock	Door 248	Adjust and lubricate	None	Normal use	Door not operating smoothly	Adjusted and Lubricated MR 220726
1-11	EECW	Metrix Valve 3-PCV-67-79	Disassembly	None	No malfunction found	Erratic pressure	None MR 215896
1-13	CRD	Directional Control Valves EP 120 and 122	Replace	None	Normal use	CRD 38-47 would not withdraw	Replaced valves MR 201572

BROWNS FERRY NUCLEAR PLANT UNIT 0

CSSC EQUIPMENT

ELECTRICAL MAINTENANCE SUMMARY

For the Month of January 19 84

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
1983 10/29	Radiation monitoring	O-PMP-90-0152B B sample pump	Replace motor	None	Bad motor	Motor pulling high current	Replace bad pump motor. MR 218434
12/1	Diesel 125Volt DC	O-BDGG-254-000A	Replace nylon bolts, nuts and flatwashers with brass	None	Supplied by vendor	Broken bolt alerted EM of the problem	Replaced nylon hardware with brass. MR 202260

BROWNS FERRY NUCLEAR PLANT UNIT 1

CSSC EQUIPMENT

ELECTRICAL MAINTENANCE SUMMARY

For the Month of January 19 84

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
1983 12/13	Annunciator and Sequential Events Recorder	1-HS-55-4 Panel 9-4	Replace annunciator card	None	Bad annunciator card	Buzzer will sound but will not reset	Replace bad card. MR209032
1984 1/7	RB Heating and Ventilating System	1-FAN-064-0012B Exhaust 1A	Replace motor	None	Bad motor	Motor running noise	Replace bad motor MR 216187
1/9	Residual Heat Removal	1-PMP-74-39	Inadvertent start	None	Possibly laborers working in area bumped the start push button	LER-259/84001	Manually stopped the pump. MR 131979
1/21	High Pressure Fire Protection System	L-XA-39-26B	Replace smoke detector	None	Bad detector	Smoke detector alarming sporadically	Replaced smoke detector, performed SI4.1.1.C. and 4.1.1.C.5. MR 207406
1/26	RB Heating and Ventilation System	1-PDS-064-0062	None	None	Unknown	Relay R2B did not pick up	LER 259-84006. MR 256391

BROWNS FERRY NUCLEAR PLANT UNIT 2

ELECTRICAL MAINTENANCE SUMMARY

For the Month of January 19 84

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CSSC EQUIPMENT

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
983 11/21	Control Rod Drive	Panels 25-25 A through H	Replace fuses	None	MIN type fuses are no longer used at BFNP	None	Replaced old type fuses MIN-3 with new ATM-3. MR 130665
1984 1/8	Reactor Core Isolation Cooling	2-XS-71-000	Perform SI 4.5.F.1.D&E	None	Drift in set points	Failed SI 4.5.F.1. D&E	LER BFRO-50-260/ 84001. MR 216757
1/12	Annunciator & Sequential Events Recorder	2-XX-55-003	Replace relay	None	Bad relay	Equipment status display will not light up	Replace bad relay. MR 213827
1/21	250V DC RMOV	2-FSV-73-8	Replace coil on FSV73-8 and mercury bulb on LS-73-8	None	Water level above coil, unknown why bulb failed	Neg ground of -100V on Rx MOV 2A	Replaced bad coil and mercury bulb. MR 207102
1/21	High Pressure Fire Protection System	2XA-39-27E	Replace smoke detector	None	Bad detector	Smoke detector alarming	Replace smoke detector. MR 207099
1/21	High Pressure Fire Protection System	2XA-39-27C	Replaced smoke detector	None	Bad detector	Smoke detector alarming	Replace smoke detector. Performed SI 4.11.C.1&5. MR 207208
1/27	RB Heating & Ventilation System	2-RLY-064-16AK C	Replace coil	None	Bad coil	Rx LO-LO H_2O level not operating	Replaced bad coil. MR 256742

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BROWNS FERRY NUCLEAR PLANT UNIT 3

CSSC EQUIPMENT

ELECTRICAL MAINTENANCE SUMMARY

For the Month of January 19 84

Date	System	Component	Nature of Maintenance	Effect on Safe Operation of The Reactor	Cause of Malfunction	Results of Malfunction	Action Taken To Preclude Recurrence
1983 12/8	Air Conditioning System	3-CHR-031-1976	Replace motor starter contacts	None	Bad contacts	Chiller motor would not start	Replace contacts. MR 216105
1984 1/4	CO_2 Storage Fire Protection	3-XS-39-36	Replaced smoke detector	None	Bad detector	Annunciator in control room will not clear	Replaced bad smoke detector. MR 214732
1/5	Diesel 125 Volt DC	3-CHG8-254-000AA	Replace relay	None	Bad relay	Abnormal alarm	Replaced bad relay MR 214819
1/15	CO_2 Storage & Fire Protection	3-XS-39-93JA	Replace smoke detector	None	Bad smoke detector	Failed SI 4.11.C.1 &C5	Replaced bad smoke detector. MR 214327
1/19	CO_2 Storage Fire Protection and Purging System	3-00-39-00 Panel 25-324	Replace reset switch and circuit breaker CB1	None	Worn reset switch and broken guide sleeve on breaker	Difficult to operate reset; defective breaker	Replace reset and circuit breaker. MR 212248
1/25	RB Heating and Ventilation System	3-RLY-64-16AK37	Replace coil	None	Bad coil	Relay fails to pick up	Replaced bad coil LER 296/84002 MR 207939
1/28	CO_2 Storage Fire Protection and Purging System	3-XA-39-71YA	Replace detector	None	Bad smoke detector	Detector intermittently alarming	Replaced bad detector. MR 207801
1/28	CO_2 Storage Fire Protection and Purging System	3-XA-39-71YL	Replace detector	None	Bad smoke detector	Detector intermittently alarming.	Replaced bad detector. MR 207941

FIELD SERVICES SUMMARY

January 1984

Work Synopsis

The unit 3 cycle 5 outage continued during January. The principle work performed during the January report period involved the Residual Heat Removal (RHR) heat exchanger work, refuel floor and torus attached piping. Furlough of temporary employees was begun on January 23, 1984 (completed 1/27) in an effort to reduce the work activity level to the minimum necessary to support contractor support commitments.

Major Work Areas

A. Refuel Floor - Blade guide removal work began on January 4, along with the arranging of the camera for vessel inspection on unit 3. Two shipments of blade guides to Peach Bottom were completed during the month with the preparation for a third shipment in progress. On January 9, the first shipment of new fuel for unit 3 was received. This work continued through the month. On January 19, work on the refuel floor was interrupted due to limit switch problems on the overhead crane. The crane was repaired and returned to service on January 26. The flushing of the unit 3 recirculation nozzles was completed during the month (ALARA work for drywell inspections).

B. Turbine - The unit 3 "C" low-pressure turbine work continued during January. The cover was set, horizontal joint bolts installed, and assembly completed by January 9, 1984. The "A" turbine lube oil cooler was assembled, placed in service, and checked for leaks on January 10, 1984. The rotor was received from the service shop on January 11 for the unit 3

FIELD SERVICES SUMMARY

January 1984

Major Work Areas (Continued)

B. Turbine (Continued)

feedpump turbine "A". Assembly of the front standard was completed on January 21 along with the checking of the coupling alignment.

C. Other Mechanical Work -

1. Turbine lube oil coolers were probologged. "A" cooler was completed on January 5, and 69 tubes were found to need plugging. "B" cooler was completed on January 9 and 49 tubes were found to need plugging.
2. The offgas precooler was probologged on January 18. No tubes were found to require plugging.
3. H_2 coolers were probologged on January 19. No tubes were found to require plugging.
4. Main Steam Relief Valve (MSRV) - The 13 relief valves had their flanges machined. Quotes were received from Target Rock on January 15 for MSRV cartridge rebuild. Other MSRV work continued.
5. Changeout of 63 Control Rod Drive (CRD) rods was completed along with rebuilding of spare rods.
6. 70245 Replacement of Hydraulic Snubbers was completed during the month.
7. RHR heat exchanger work continued during January. Probolog of "B" heat exchangers was completed by January 15. There were 62 tubes identified for possible plugging. Awaiting resolution of plugging, this number coupled with previously installed plugs may be excessive.

FIELD SERVICES SUMMARY

January 1984

Major Work Areas (Continued)

C. Other Mechanical Work (Continued)

7. (Continued)

Probolog of "D" heat exchanger was completed on January 24. Three tubes were found to need plugging. Floating head gaskets for RHR heat exchangers are urgently needed and currently on order.

8. Work continued on outboard and inboard [illegible].

9. Valve 3-75-50 was repaired satisfactorily.

10. Repair work was performed on 64-series valves during the month (disassembly).

D. Electrical/Instrumentation

1. Motor-generator (MG) set maintennace work continued during the month. MG set "3A" is 98-percent overall complete with "3B" is 85-percent overall complete.

2. Recirculation Motor Maintenance - Work continued during the month. Reassembly on recirculation pump motor "A" is 95-percent overall complete. "B" has had the thrust bearings, guide bearings and thrust collars cleaned and inspected. Work is 50-percent overall complete on "B".

3. P0533 Torus Temperature Monitoring work is continuing. Some holes for instrument work have been cut. Work is being delayed due to mounting details not being received for instrument installation.

FIELD SERVICES SUMMARY

January 1984

Major Work Areas (Continued)

D. Electrical/Instrumentation

4. PO415 Temperature Instrumentation - Work is continuing and was 47-percent complete through January 22 when crews were reassigned to support removal of welding leads from the torus.

5. IHSI - Preparation of temporary electrical service for IHSI work continued. On January 28, a plant perimeter outage was taken to install a 4 kV line.

6. PO422 Installation of Reactor Protection System (RPS) cabinets and conduit began on January 18. Circuit protection panels were prepared for conduit. Hangers were fabricated and installed.

7. PO392 Scram Discharge System modification - Prefabrication work continued while piping cuts were deferred. Work plans are still in review cycle for both mechanical and electrical portions of this work.

E. Planning and Scheduling: Emphasis has been placed on development of a restart schedule for unit 3 cycle 5 outage effort. With the exception of selected major work items, most of the productive outage work on unit 3 was stopped January 27, 1984 due to a work force reduction in the number of temporary Trades and Labor personnel. This was done as a management effort to concentrate on training and compliance activity for both supervisory personnel and craft.

F. Torus internal modification work was near completion at the end of the January report period. Sandblasting and coating work is scheduled to begin in February.

ADDENDA

The following are corrected Operating Data Reports for the month of December, Units 1 and 2.

Corrected

OPERATING DATA REPORT

DOCKET NO. 50-260
DATE 1/1/84
COMPLETED BY Ted Thom
TELEPHONE 205/729-0834

OPERATING STATUS

1. Unit Name: Browns Ferry - 2
2. Reporting Period: December 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	8,760	77,503	
12. Number Of Hours Reactor Was Critical	722.9	6,670.71	49,964.18	
13. Reactor Reserve Shutdown Hours	21.1	215.54	13,900.36	
14. Hours Generator On-Line	710.08	6,517.39	48,492.84	
15. Unit Reserve Shutdown Hours	0	0	0	
* 16. Gross Thermal Energy Generated (MWH)	2,221,550	19,735,198	140,145,045	*
17. Gross Electrical Energy Generated (MWH)	741,540	6,572.380	46,597,288	
18. Net Electrical Energy Generated (MWH)	721,370	6,385,528	45,258,603	
19. Unit Service Factor	95.4	74.4	62.6	
20. Unit Availability Factor	95.4	74.4	62.6	
21. Unit Capacity Factor (Using MDC Net)	91.0	68.4	54.8	
22. Unit Capacity Factor (Using DER Net)	91.0	68.4	54.8	
23. Unit Forced Outage Rate	4.6	5.3	24.8	

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:

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

(9/77)

Corrected

OPERATING DATA REPORT

DOCKET NO. 50-259
DATE 1-1-84
COMPLETED BY Ted Thom
TELEPHONE 205/729-0854

OPERATING STATUS

1. Unit Name: Browns Ferry - 1
2. Reporting Period: December 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

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	744	8,760	82,562	
12. Number Of Hours Reactor Was Critical	53.33	2,416.58	49,806.12	
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	26.5	59.0	
20. Unit Availability Factor	0	26.5	59.0	
21. Unit Capacity Factor (Using MDC Net)	0	23.3	50.4	
22. Unit Capacity Factor (Using DER Net)	0	23.3	50.4	
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:

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

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

(9/77)

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

FEB 10 1984

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

Gentlemen:

Enclosed is the January 1984 Monthly Operating Report to NRC for Browns Ferry Nuclear Plant Units 1, 2, and 3.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

G. T. Jones
Power Plant Superintendent

Enclosures
cc: Director, Region II
Nuclear Regulatory Commission
Office of Inspection and Enforcement
101 Marietta Street
Atlanta, GA 30303 (1 copy)

Director, Office of Inspection
and Enforcement
Nuclear Regulatory Commission
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TENNESSEE VALLEY AUTHORITY

DIVISION OF NUCLEAR POWER

BROWNS FERRY NUCLEAR PLANT

MONTHLY OPERATING REPORT TO NRC

January 1, 1984 - January 31, 1984

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

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

Submitted by: D. T. Jones

Plant Superintendent

TABLE OF CONTENTS

Operations Summary

January 1984

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 13 reportable occurrences and three revisions to previous reportable occurrences reported to the NRC during the month of January.

Unit 1

The unit ended its end-of-cycle outage on January 2, 1984 when it tied back on the system.

There was one scram on the unit during the month. On January 6, during startup, the turbine was tripped because of high vibration. Nuclear engineer and operators bypassed the rod worth minimizer to reduce power more quickly; the control rod group was not maintained, so the reactor was manually scrammed.

Unit 2

There was one scram on the unit during the month. On January 21, during main steam isolation valve (MSIV) testing, "B" channel was still isolated when "C" channel was isolated, causing the MSIV's tc close and scrammed the reactor.

Unit 3

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

Prepared principally by B. L. Porter.

Operations Summary (Continued)

January 1984

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	0.00592	0.00483	0.00403
Feedwater nozzle	0.28446	0.20956	0.15429
Closure studs	0.23343	0.17169	0.13233

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

Common System

Approximately 1.52E+06 gallons of waste liquids were discharged containing approximately 9.40E-01 curies of activities.

Operations Summary (Continued)

January 1984

Refueling Information

Unit 1

Unit 1 ended its fifth refueling outage on January 2, 1984. Unit 1 is scheduled for its sixth refueling beginning on or about February 8, 1985 with a scheduled restart date of August 25, 1985. 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.

There are 764 fuel assemblies in the reactor vessel. The spent fuel storage pool presently contains 252 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 fuel pool 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 piping 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)

January 1984

Unit 3

Unit 3 shutdown for its fifth refueling outage on September 7, 1983, with a scheduled restart date of May 4, 1984. This refueling involves 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, piping inspections for cracks, and change-out of jet pump hold-down beams.

There are 0 fuel assemblies presently in the reactor vessel. There are 91 new fuel assemblies, 764 EOC-5 fuel assemblies, 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 307 locations.

Significant Operational Events

Date	Time	Event
		Unit 1
1/1	0001	Reactor thermal power at 7-percent (%) and holding for startup (water quality out-of-limits). EOC-5 refuel outage continues.
	0145	Commenced rod withdrawal for starup.
	0445	Rolled main turbine to 100 rpm vibration trip.
	0505	Rolled main turbine to 100 rpm.
	0515	Manual trip main turbine.
	0518	Rolled main turbine to 1800 rpm.
	0631	Main turbine tripped, high-vibration #4 bearing. Reactor thermal power at 22%, holding due to turbine vibrations.
	1010	Commenced reducing thermal power to obtain three bypass valves.
	1500	Rolled main turbine.
	1600	Reactor thermal power at 12%.
	1629	Reactor mode switch to startup, inserting control rods.
	1630	Tripped turbine (vibration).
	1820	Commenced rod withdrawal from 6% power to obtain three bypass valves.
	2000	Reactor power at 15%, holding startup due to turbine vibration.
1/2	0630	Rolled turbine to 1800 rpm.
	0745	Synchronized generator, commenced power ascension.
	1125	Unit offline for overspeed test on main turbine.
	1130	Turbine overspeed test - trip at 1943 rpm.
	1134	Main turbine tripped on high vibration off #7 bearing.
	1147	Synchronized generator, commenced power ascension from 21% thermal power.
	1215	Stopped power ascension at 24% and reducing power. Startup testing in progress.
	2400	Reactor power at 21%.
1/3	0100	Commenced rod withdrawal for startup.
	0410	Holding power at 29% for condensate demineralizer problems.
	0505	Commenced power ascension from 29% power.
	0520	Stopped power ascension at 38% for scram timing control rods (RTI 5).
	1215	RTI 5 in progress, reducing thermal power from 38%.
	2330	Reactor power at 34% for RTI 5.

Significant Operational Events

Date	Time	Event
		Unit 1 , ontinued)
1/4	1410	RTI 5 complete, commenced power ascension from 34% power.
1/5	0300	Reactor thermal power at 54% for startup testing.
	0450	"A" recirculation pump motor/generator (M/G) set out-of-service for maintenance, reducing thermal power.
	0500	Reactor power at 45% for "A" recirculation pump M/G set maintenance. (Brush check)
	0530	Increasing thermal power from 42%, "A" recirculation pump out for maintenance.
	0600	Reactor thermal power at 45% for "A" recirculation pump M/G set maintenance.
	0905	Reducing thermal power to place "A" recirculation pump in service.
	1000	Reactor thermal power at 36% to place "A" recirculation pump in service.
	1010	"A" recirculation pump in service, commenced power ascension.
	1052	"B" recirculation pump M/G set out for brush check, increasing thermal power from 37%.
	1300	Reactor thermal power at 44% for "B" recirculation pump M/G set brush check.
	1340	Commenced reducing thermal power to place "B" recirculation pump in service.
	1400	Reactor power at 38% for placing "B" recirculation pump in service.
	1415	"B" recirculation pump in service, commenced power ascension.
	1500	Reactor power at 54% for startup tests.
	2300	Reactor power at 47% due to turbine vibration problems.
1/6	0945	Commenced reducing thermal power for a controlled shutdown for turbine balancing (vibration problems).
	1425	Unit offline from 14% thermal power.
	1500	Reactor thermal power at 13% holding for turbine balancing.
	2130	Rolling main turbine.
	2330	Tripped turbine due to high vibrations.
	2333	Commenced reducing thermal power from 13% to go on bypass valves.
	2341	Reactor Scram (manual) No. 168 from 13% power due to a bad rod pattern.

Significant Operational Events

Date	Time	Event
		Unit 1 (Continued)
1/7	0925	Commenced rod withdrawal for startup.
	1155	Reactor Critical No. 190.
	1300	Brought reactor to subcritical for maintenance on control rod 10-5..
	1700	Maintenance complete on control rod 10-51, commenced rod withdrawal for startup.
	1705	Reactor Critical No. 191, holding up to time control rod 10-51.
	2335	Rolled turbine/generator.
1/8	0020	Synchronized generator, commenced power ascension.
	0254	Stopped power ascension at 38% for turbine vibration checks.
	0600	Commenced power ascension from 38% thermal power.
1/9	0700	Reactor power at 70%, startup test in progress.
	1700	Reactor power at 66%, startup test in progress.
	1730	Commenced power ascension for SI 4.3.B.1.a (Control Rod Coupling Integrity Check).
	1830	SI 4.3.B.1.a complete, reactor power at 71% for startup tests.
1/10	0700	Reactor power at 69% for startup test.
	0850	Commenced power ascension from 59% power.
	1000	Commenced PCIOMR from 71% thermal power.
	1800	"B" and "C" string high-pressure heaters isolated, reduced thermal power from 91% to 76%.
	1830	High-pressure heaters back in service, commenced power ascension.
	1900	Commenced PCIOMR from 84% thermal power.
	2055	Removed "C1" and "C2" high-pressure heaters from service for maintenance - at 85% thermal power.
1/11	2200	"C1" and "C2" high-pressure heaters back in service, commenced PCIOMR from 84% thermal power.
1/12	1710	"A" and "C" string high-pressure heaters isolated at 97% thermal power, reduced thermal power to 87%.
	1715	"C" string high-pressure heaters back in service but "A" string continues to isolate.
	1745	"B" string high-pressure heaters isolated.
	1750	"B" string high-pressure heaters back in service.

Significant Operational Events

Date	Time	Event
		Unit 1 (Continued)
1/12 (Cont.)	1800	Reactor power at 90% due to problems with high-pressure heaters.
	1910	"A" and "B" string high-pressure heaters again isolated, reduced reactor power to 72%.
	1945	All high-pressure heaters back in service, commenced power ascension.
	2000	Commenced PCIOMR from 89% thermal power.
1/13	0010	"B" and "C" string high-pressure heaters isolated, reduced thermal power from 93% to 85%.
	0200	"B" and "C" string high-pressure heaters back in service commenced PCIOMR from 85% power.
	0340	"A," "B," and "C" string high-pressure heaters isolated, commenced reducing thermal power from 87%.
	0400	Reactor thermal power at 60% due to isolation of high-pressure heaters.
	0455	All high-pressure heaters in service, commenced power ascension.
	0600	Commenced PCIOMR from 83% thermal power.
	1040	Stopped PCIOMR at 87% power to remove "A1" and "A2" heaters from service for maintenance.
1/14	0425	"A1" and "A2" high-pressure heaters back in service, holding at 87% power for turbine control valve test and SI's.
	0614	Turbine control valve test and SI's complete, holding at 87% power due to high-pressure heater problems.
	1000	"B1" and "B2" high-pressure heaters out-of-service for maintaining, holding thermal power at 87%.
	2000	Increased thermal power to 90%, high-pressure heater limited.
	2230	Reduced thermal power to 87%, high-pressure heater limited.
	2400	Reactor power at 88%, high-pressure heater limited.
1/15	0001	Commenced PCIOMR from 88% thermal power.
	0900	Reactor power at 93% high-pressure heater limited.
	1100	Reactor power at 92%, high-pressure heater limited.
	1620	"B" and "C" string high-pressure heaters isolated, reduced thermal power to 72%.
	1710	"B" and "C" string high-pressure heaters in service, commenced power ascension.
	1730	Commenced PCIOMR from 90% thermal power.

Significant Operational Events

Date	Time	Event
		Unit 1 (Continued)
1/16	0019	"B" and "C" string high-pressure heaters and "C" string low-pressure heaters isolated. Reduced reactor power from 96% to 88%.
	0030	"B" and "C" string low-pressure heaters back in service, reactor power at 87%.
	0430	Isolated "C" string high-pressure heaters for maintenance.
	0435	"B" string high-pressure heaters isolated, reduced thermal power to 80%.
	0515	"B" and "C" string high-pressure heaters back in service, commenced power ascension.
	1430	Commenced PCIOMR from 84% thermal power.
	1500	Stopped PCIOMR at 85% thermal power ("B1" high-pressure heater alarm in).
	2230	Commenced PCIOMR from 85% power.
1/17	0245	"B" high-pressure heaters isolated.
	0246	"C" high-pressure heaters isolated.
	0248	"A" high-pressure heaters isolated.
	0250	Reduced thermal power from 89% to 72%.
	0317	All high-pressure heaters back in service, reactor power at 75% and holding.
	1600	Reactor power at 76%, high-pressure heaters limited.
	2200	Reactor power at 77%, high-pressure heaters limited.
1/18	0947	Commenced reducing thermal power due to high-pressure heater problems.
	1000	Reactor power at 73%, high-pressure heaters limited.
	1625	Commenced reducing thermal power due to problems with "B" high-pressure heaters.
	2100	Reactor power at 67%, "B" high-pressure heaters limited.
1/19	0800	Reactor power at 69%, "A" high-pressure heaters limited.
	0927	Commenced reducing thermal power to remove "A" high-pressure heaters from service.
	1100	Reactor power at 61%, "A" string high-pressure heaters out-of-service.
	1345	"A" string high-pressure heaters in service, commenced power ascension.
	2015	Commenced reducing thermal power from 78% due to problems with "C" high-pressure heaters.
	2100	Reactor power at 73%, "C" high-pressure heaters limited.

Significant Operational Events

Date	Time	Event
		Unit 1 (Continued)
1/19 (Cont)	2238	"C" high-pressure heaters isolated, reducing thermal power.
	2400	Reactor thermal power at 71%, "C" high-pressure heaters limited.
1/20	1000	Reactor power at 70%, "C" high-pressure heaters limited.
	2200	Commenced power ascension from 70% power.
	2300	Reactor power at 72%, "C" high-pressure heaters limited.
1/21	0535	"C" high-pressure heaters in service, commenced power ascension.
	1500	Commenced PCIOMR from 88% thermal power.
1/22	1100	Reactor thermal power at 100%, maximum flow, rod limited.
	1200	Reactor thermal power at 99%, maximum flow, rod limited.
	1400	Reactor thermal power at 98%, maximum flow, rod limited.
	1900	Reactor thermal power at 97%, maximum flow, rod limited.
1/23	0200	Reactor thermal power at 96%, maximum flow, rod limited.
	0410	Commenced reducing thermal power for SI 4.3.A.2 (Control Rod Exercise).
	0500	Reactor power at 94% for SI 4.3.A.2.
	0530	SI 4.3.A.2 complete, commenced power ascension.
	0700	Reactor thermal power at 97%, maximum flow, rod limited.
	1500	Reactor thermal power at 96%, maximum flow, rod limited.
1/25	0700	Reactor thermal power at 97%, maximum flow, rod limited.
1/26	1500	Reactor thermal power at 96%, maximum flow, rod limited.
1/27	2100	Commenced reducing thermal power for a control rod sequence exchange.
	2400	Reactor thermal power at 46% for a control rod sequence exchange.
1/28	0020	Increasing thermal power, control rod sequence exchange in progress.

Significant Operational Events

Date	Time	Event
		Unit 1 (Continued)
1/29	0100	Reactor thermal power at 57%, holding for TIP maintenance.
	0900	Increasing thermal power from 57%, awaiting TIP maintenance.
	2130	Commenced power ascension from 60% thermal power.
1/30	0130	Commenced PCIOMR from 70% thermal power.
1/31	1500	Stopped PCIOMR at 97% due to condensate demineralizer problems, reducing power.
	2030	Commenced PCIOMR from 96% power.
	2140	Reactor power at 97%, maximum flow, rod limited.
	2400	Reactor power at 97%, maximum flow, rod limited.

Significant Operational Events

Date	Time	Event
		Unit 2
1/1	0001	Reactor thermal power at 96% and reducing for turbine control valve test and SI's.
	0100	Reactor power at 95%, turbine control valve test and SI's in progress.
	0230	Turbine control valve test and SI's complete, commenced power ascension.
	0300	Reactor thermal power at 100%, maximum flow, rod limited.
1/3	0700	Reactor thermal power at 99%, maximum flow rod limited (100% electrical).
1/6	2300	Reactor thermal power at 99%, maximum flow, rod limited (99% electrical).
1/7	2155	Commenced reducing thermal power for turbine control valve test and SI's.
1/8	0200	Reactor power at 66% for turbine control valve test and SI's.
	0445	Turbine control valve test and SI's complete, reducing thermal power for control rod pattern adjustment.
	0500	Reactor thermal power at 62%, control rod pattern adjustment in progress, increasing thermal power.
	1730	Control rod pattern adjustment complete, commenced PCIOMR from 72% power.
1/10	0430	Reactor thermal power at 100%, maximum flow, rod limited.
1/11	0700	Reactor thermal power at 99%, maximum flow, rod limited.
1/12	2400	Reactor thermal power at 99%, maximum flow, rod limited.
1/13	0700	Reactor power at 98%, maximum flow, rod limited.
1/14	2130	Commenced reducing thermal power for control rod pattern adjustment.
1/15	0300	Reactor thermal power at 74% for control rod pattern adjustment.
	0630	Control rod pattern adjustment complete, commenced PCIOMR.

Significant Operational Events

Date	Time	Event
		Unit 2 (Continued)
1/16	1500	Reactor thermal power at 100%, maximum flow, rod limited.
1/17	0700	Reactor thermal power at 99%, maximum flow, rod limited (100% electrical).
1/18	0100	Reactor thermal power at 100%, maximum flow, rod limited.
1/20	1200	Commenced reducing thermal power due to problems with condensate demineralizers.
	1300	Reactor thermal power at 92%, condensate demineralizers limited.
	1450	Commenced power ascension from 92% thermal power.
	2100	Reactor thermal power at 100%, maximum flow, rod limited.
1/21	0255	Commenced reducing thermal power for turbine control valve test and SI's.
	0315	Reactor thermal power at 91% for turbine control valve test and SI's.
	0345	Turbine control valve test and SI's complete, commenced power ascension.
	0515	Commenced PCIOMR from 93% thermal power.
	0553	Reactor Scram No. 149, from 94% thermal power during performance of SI 4.1.A-10 (Main Steam Line High Rad) following testing of the "B" channel. When "C" channel was tested, the MSIV's closed, scramming the reactor. The most likely cause of the Group I isolation was failure to reset "B" channel PCIS. The unit will remain offline for a scheduled maintenance outage.
	0840	Commenced bringing reactor to cold shutdown.
	1940	Reactor in cold shutdown.
1/24	2038	Commenced rod withdrawal for startup.
	2240	Reactor Critical No. 160.
1/25	0750	Rolled turbine/generator.
	0800	Turbine tripped, EHC problems.
	0815	Rolled turbine/generator.
	0907	Manually tripped turbine for maintenance on EHC load set.
	1322	Rolled turbine/generator.
	1343	Synchronized generator, commenced power ascension.
	1430	Stopped power ascension, CRD 42-31 will not withdraw, reactor power at 25%.

Significant Operational Events

Date	Time	Event
		Unit 2 (Continued)
1/25 (Cont)	1710	Maintenance complete on CRD 42-31 commenced power ascension from 24% thermal power.
	2140	Stopped power ascension at 53% power for a TIP set.
1/26	0305	Commenced power ascension from 53% thermal power.
	1100	Commenced PCIOMR from 78% thermal power.
1/27	0610	Received low low water level alarm and 1/4 isolation when 16AKIC relay failed. Stopped PCIOMR at 86% power.
	0930	Commenced PCIOMR from 86% thermal power.
	1950	Reactor thermal power at 94%, maximum flow, rod limited.
1/28	0255	Commenced reducing thermal power for SI 4.1.A.10 (Main Steam Line High Radiation).
	0300	Reactor power at 92% for SI 4.1.A.10.
	0335	Commenced reducing thermal power for SI 4.3.B.1.a (Control Rod Coupling Integrity).
	0342	Reactor power at 90% for SI 4.3.B.1.a.
	0345	Completed SI 4.3.B.1.a; commenced power ascension.
	0400	Reactor thermal power at 93%, maximum flow, rod limited.
	1300	Reactor thermal power at 92%, maximum flow, rod limited.
1/29	2300	Reactor thermal power at 91%, maximum flow, rod limited.
1/30	0235	Commenced power increase for SI 4.3.B.1.a.
	0400	Reactor power at 93%, maximum flow, rod limited.
	2205	Commenced reducing thermal power for a control rod pattern adjustment.
	2400	Reactor thermal power at 65% for control rod pattern adjustment.
1/31	0040	Control rod pattern adjustment complete, commenced power ascension.
	0145	Commenced PCIOMR from 92% thermal power.
	1200	Reactor thermal power at 100%, maximum flow, rod limited.
	2400	Reactor thermal power at 100%, maximum flow, rod limited.

Significant Operational Events

Date	Time	Event
		Unit 3
1/1	0001	End-of-cycle 5 refuel outage in progress.
1/31	2400	End-of-cycle 5 refuel outage in progress.