

**MONTHLY OPERATING REPORT
BROWNS FERRY NUCLEAR PLANT**

TENNESSEE VALLEY AUTHORITY

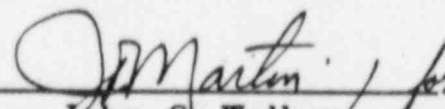
DECEMBER 1987

"Safety and Quality are Paramount"

DOCKET NUMBERS 30-259, 50-260, AND 50-296

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

Submitted by:



**John G. Walker
Plant Manager**

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0/1*

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OPERATIONAL SUMMARY

SIGNIFICANT OPERATIONAL EVENTS SUMMARY

DECEMBER 1987

Unit 1

12/01/87 0001 Unit remains on administrative hold to resolve various TVA and NRC concerns, and end of cycle 6 refueling and modifications continues.

12/31/87 2400 Unit remains on administrative hold to resolve various TVA and NRC concerns, and end of cycle 6 refueling and modifications continues.

Unit 2

12/01/87 0001 Unit remains on administrative hold to resolve various TVA and NRC concerns, and end of cycle 5 refueling and modifications continues.

12/31/87 2400 Unit remains on administrative hold to resolve various TVA and NRC concerns, and end of cycle 5 refueling and modifications continues.

Unit 3

12/01/87 0001 Unit remains on administrative hold to resolve various TVA and NRC concerns, and environmental qualifications and modifications continues.

12/31/87 2400 Unit remains on administrative hold to resolve various TVA and NRC concerns, and environmental qualifications and modifications continues.

FUEL PERFORMANCE AND SPENT FUEL STORAGE CAPABILITIES SUMMARY

DECEMBER 1987

Unit 1

Unit 1 was placed on administrative hold in March 1985 to resolve TVA and NRC concerns. The unit also began its sixth refueling on June 1, 1985, with a scheduled restart date to be determined. The sixth refueling will involve loading 8x8R (retrofit) fuel assemblies into the core. The prior-to-startup unit 1 items are environmental qualification of electrical equipment (10CFR50.49), torus modification (NUREG 0661), containment modifications (NUREG 0737), electrical changes (Appendix R 10CFR50) (all), MSIV modifications, modification of masonry walls (IEB 80-11), evaluation of the vent drain and test connections, VDTG, (LER 82020), valve modification (Appendix J), HPCI concerns, modification of PCIS logic (LER 259 85009), replacement of plant process computers, seismic qualifications of piping (IEB 79-02/14), postaccident evaluation (NUREG 0737), RPS modifications (IE Notice 78-45), H₂O₂ sample line modification (LER 81050), radiation monitors modification (LER 80033), EECW carbon to stainless pipe change out, and all NRC commitment items except Anticipated Transients Without Scram (ATWS) modifications which is scheduled for next outage.

There are 0 assemblies in the reactor vessel. The spent fuel storage pool presently contains 284 new assemblies, 764 EOC-6, 252 EOC-5, 260 EOC-4, 232 EOC-3, 156 EOC-2, and 168 EOC-1 assemblies. The present available capacity of the fuel pool is 1355 locations.

FUEL PERFORMANCE AND SPENT FUEL STORAGE CAPABILITIES SUMMARY (CONT.)

DECEMBER 1987

Unit 2

Unit 2 was shut down on September 15, 1984, for its fifth refueling outage with a scheduled restart date to be determined. On September 3, 1985, the unit was placed on administrative hold to resolve TVA and NRC safety concerns. The fifth refueling involves loading 8x8R (retrofit) fuel assemblies into the core. The prior-to-startup unit 2 items are CRD SDIV piping modification (IEB 80-17), environmental qualification of electrical equipment (10CFR50.49), torus modifications (NUREG 0661), containment modification (NUREG 0737), electrical changes (Appendix R 10CFR50) (partial), MSIV modifications, modification of masonry walls (IEB 80-11), addition of feedwater nozzle temperature monitoring (NUREG 0619), evaluation of the vent drain and test connections, VDTC, (LER 82020), valve modification (Appendix J) (partial), D/G speed sensor installation (LER 81004), HPCI and RCIC test valve check valve change out, modification of PCIS logic (LER 259 85009), HPCI concerns, seismic program review, and EECW carbon to stainless pipe change out.

There are 0 assemblies in the reactor vessel. At month end there were 304 new assemblies, 764 EOC-5, 248 EOC-4, 352 EOC-3, 156 EOC-2, and 132 EOC-1 assemblies in the spent fuel storage pool. The present available capacity of the spent fuel pool is 1481 locations. All HDRs have been installed in the pool with the exception of two.

FUEL PERFORMANCE AND SPENT FUEL STORAGE CAPABILITIES SUMMARY (CONT.)

DECEMBER 1987

Unit 3

Unit 3 was shut down on March 9, 1985, and placed on administrative hold to resolve various TVA and NRC concerns with a scheduled restart date to be determined. The sixth refueling outage has been scheduled for September 21, 1988, and involves loading 8x8R (retrofit) assemblies into the core and ATWS modifications. The prior-to-startup unit 3 items are environmental qualification of electrical equipment (10CFR50.49), containment modifications (NUREG 0737), electrical changes (Appendix R 10CFR50) (all), MSIV modifications, modification of masonry walls (IEB 80-11), evaluation of the vent drain and test connections, VDTC, (LER 82020), valve modifications (Appendix J), HPCI concerns, replacement of plant process computer, seismic qualifications of piping (IEB 79-02/14), postaccident evaluation (NUREG 0737), addition of redundant drywell control air supply, RPS modification (IE Notice 78-45), H₂O₂ sample line modification (LER 81050), radiation monitor modification (LER 80033), replacement of jet pump holddown beam assemblies (IEB 80-07), change out of switches in SGBT (LER 83018), EECW carbon to stainless pipe change out, and plant design upgrade to seismic qualification.

There are 0 assemblies in the reactor vessel. There are 764 assemblies to finish EOC-6, 248 EOC-5, 280 EOC-4, 124 EOC-3, 144 EOC-2, and 208 EOC-1 assemblies in the spent fuel storage pool. The present available capacity of the fuel pool is 585 locations. All high density racks (HDR) have been installed in the pool with the exception of six.

MSRVs (MAIN STEAM RELIEF VALVE) SUMMARY

No MSRVs were challenged in December 1987.

ISSUANCE OF SPECIAL REPORTS

The following special report was submitted to the NRC in December 1987.

- 87-37-05 Requirement was not met in that Browns Ferry Standard Practice 14.4, Drilling, Chipping, or Altering Concrete or masonry and Excavation, dated October 16, 1985, contained an inadequate methodology for computing secondary containment in-leakage resulting from core drilling operations.
- 87-37-01 The requirement was not met on October 13, 1987, when Residual Heat Removal (RHR) pump suction valve 2-74-24 was inadvertently operated by a Reactor Operator.
- 87-37-04 An instrument mechanic improperly adjusted pressure gauge E82214 which was being used in a post-modification test instruction on instrumentation used by the Reactor Protection System and Emergency Core Cooling System.

LICENSEE EVENT REPORT(S)

The following licensee event reports (LERs) were reported to the Nuclear Regulatory Commission in December 1987.

Description of Event

LER

1-87001
Rev. 1

This revision provides additional details concerning the personnel errors which caused fire watch violations.

1-87029

Personnel Error in Writing Equipment Tag-Out Clearance Results in Actuations of Engineered Safety Features.

On November 5, 1987, at 1810 hours, a fuse was removed from a panel in order to deenergize a primary containment isolation valve for modification activities. This action resulted in a primary containment ventilation isolation, auto start of two trains of the standby gas treatment system and one train of the control room emergency ventilation system. These engineered safety feature actuations were the result of improper identification of the isolation boundaries. Research into switching necessary to electrically isolate the valve was inadequate during preparation of the clearance. The individuals involved have been cautioned to check all prints carefully to ensure that no unexpected events occur. A critique of this incident has been prepared for review by operations personnel to reemphasize the need for adequate research in writing a clearance.

1-87030

Faulty Relay Coil Causes Auto Start of Control Room Emergency Ventilation System

On November 24, 1987, at 1930 hours, control room personnel observed that train B of the control room emergency ventilation (CREV) system was running. All three units were defueled and no refueling operations were in progress. The exact time of the CREV auto start is unknown. After verifying CREV train A operable and no valid initiation signal present, the licensed operator secured the system. Following investigation by electrical maintenance personnel it was determined that a burned electrical coil in the unit 3 16A-K72 relay had caused the actuation. The faulted coil was assessed as an end-of-life failure and was replaced.

Description of Event
(Continued)

LER

3-87006

Unplanned Engineering Safety Feature Actuations due to Relay Failure and Personnel Error During Corrective Maintenance

At 1945 hours, on November 22, 1987, with all three units defueled, a relay coil in the Primary Containment Isolation System (PCIS) logic developed an electrical short and cleared the fuse protecting that portion of the PCIS logic. As a result, the inboard PCIS valves for the drywell floor and the equipment drain sump discharges isolated. The fuse and relay were replaced and all systems were returned to their original status by 1940 hours, on November 24, 1987. The cause of the relay coil failure is considered to be an end-of-life failure.

During the replacement of this relay, on November 24, 1987, at 1730 hours, the jumper which was installed as part of this corrective maintenance was inadvertently dislodged by maintenance craft. This deenergized other PCIS relays. The deenergization closed the inboard isolation valve on the suction of the Reactor Water Cleanup (RWCU) system and tripped the running RWCU pump. The jumper was replaced and the isolation was reset. RWCU was returned to service 15 minutes after it isolated.

Corrective maintenance was completed by 1940 hours, on November 24, 1987, and all systems were returned to their original status.

These individual valve closures are considered unplanned actuations of engineered safety features.

DECEMBER 1987

OFFSITE DOSE CALCULATION MANUAL CHANGES

No changes were made to the Browns Ferry offsite dose calculation manual during the month.

RADWASTE SUMMARY

DECEMBER 1987

The radwaste system performed as designed. Approximately $6.92E+05$ gallons of waste liquid were discharged containing approximately $2.47E-02$ curies of activity.

There were five condensate/waste resin shipments and three trash shipments during December. All shipments were to Barnwell, SC.

Solid Radioactive Waste
December 1987

Condensate/Waste Resin Shipments (1)

Approximate volume of resin/sludge shipped: 20.4 Cu.M. (720 Cu.Ft.)

Total curies shipped: 24,8060

Principal Isotopes: Cs137, Co60, Cs134, Zn65, Fe55

Date Shipped	Disposal Facility
12/ 02/ 87	Barnwell, SC
12/ 11/ 87	Barnwell, SC
12/ 15/ 87	Barnwell, SC
12/ 18/ 87	Barnwell, SC
12/ 29/ 87	Barnwell, SC

Reactor Water Cleanup Resin Shipments

There were no reactor water cleanup resin shipments

Drummed Shipments

There were no drum shipments

Boxed Shipments (1)

Total number of boxes shipped: 29 Volume: 80.0 Cu.M. (2826.2 Cu.Ft)

Total Curies Shipped: 1,0160

Principal Isotopes: Fe55, Zn65, Co60, Cs137, Cs134

Date Shipped	Disposal Facility
12/ 02/ 87	Barnwell, SC
12/ 10/ 87	Barnwell, SC
12/ 17/ 87	Barnwell, SC

(1) All Shipments were by Sole-Use Truck

Solid Radioactive Waste (Continued)
December 1987

Summary

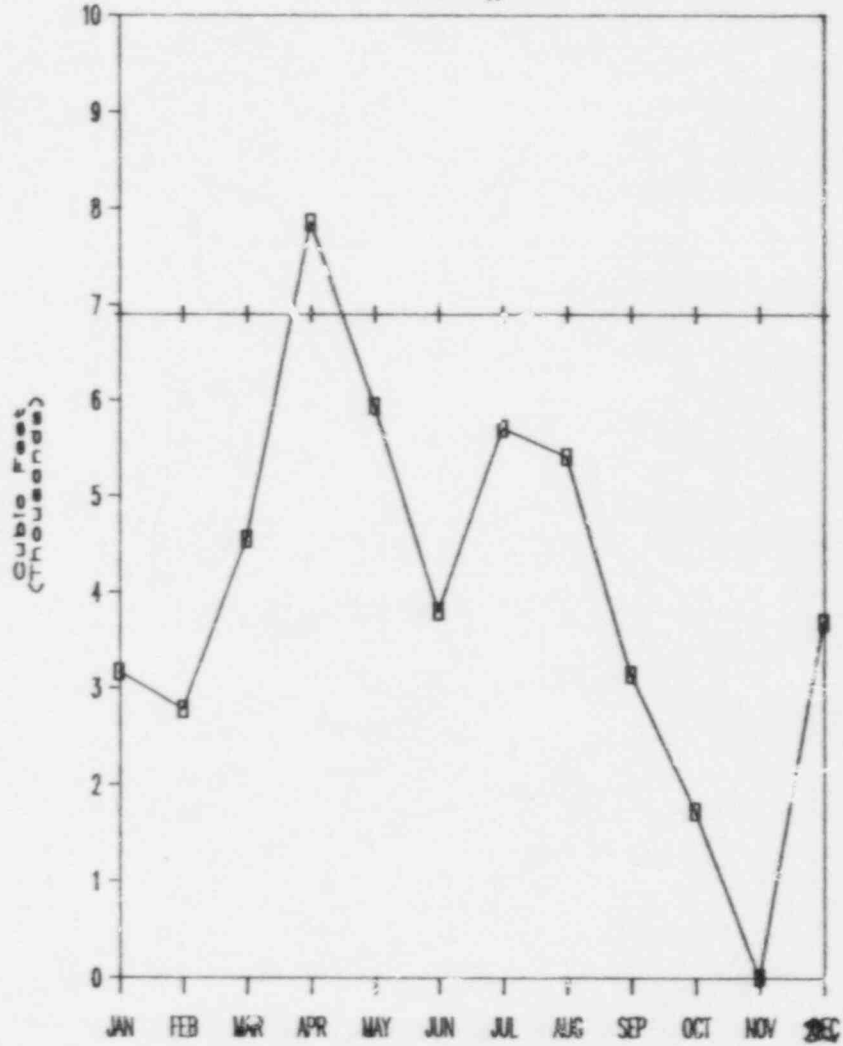
	Shipped to Barnwell	Stored on Site	Approximate Cost	Proposed for Next Month
Compacted Drums	0 Cu.Ft.(2)	60 Cu.Ft.		0 Cu.Ft.(2)
Compacted Boxes	1209 Cu.Ft.(2)	465 Cu.Ft.	\$50,740.19	1488 Cu.Ft.(2)
Drums	0 Cu.Ft.(2)	2168 Cu.Ft.		0 Cu.Ft.(2)
Boxes	1617 Cu.Ft.(2)	788 Cu.Ft.	\$66,920.33	1021 Cu.Ft.(2)
CWPS Resin	720 Cu.Ft.(1)	1923 Cu.Ft.	\$95,497.44	720 Cu.Ft.(1)
RWCU Resin	0 Cu.Ft.(1)	415 Cu.Ft.		0 Cu.Ft.(1)
TOTALS	<u>3680 Cu.Ft.(2)</u>	<u>5819 Cu.Ft.</u>	<u>\$213,157.96</u>	<u>3363 Cu.Ft.(2)</u>

Total volume of waste shipped during the month: 3680 Cu.Ft.(2)
 Total volume of waste shipped year to date: 47889 Cu.Ft.
 Unused 1987 burial volume allocation at Barnwell: 35891 Cu.Ft.

- (1) Actual resin volume.
- (2) Container burial volume.
- (3) Cost included are for containers, transportation and disposal.

BROWNS FERRY NUCLEAR PLANT

LLRW Shipped



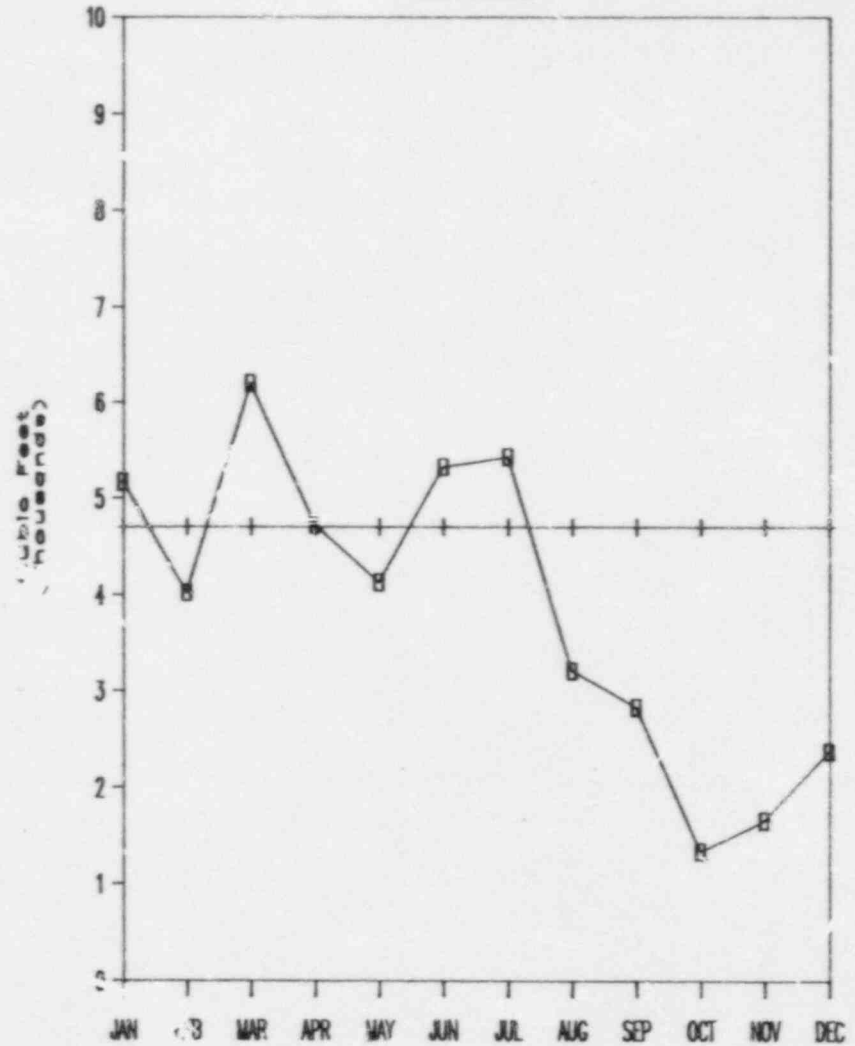
January 1987 thru December 1987

□ Shipped

+ 1987 Allotment

BROWNS FERRY NUCLEAR PLANT

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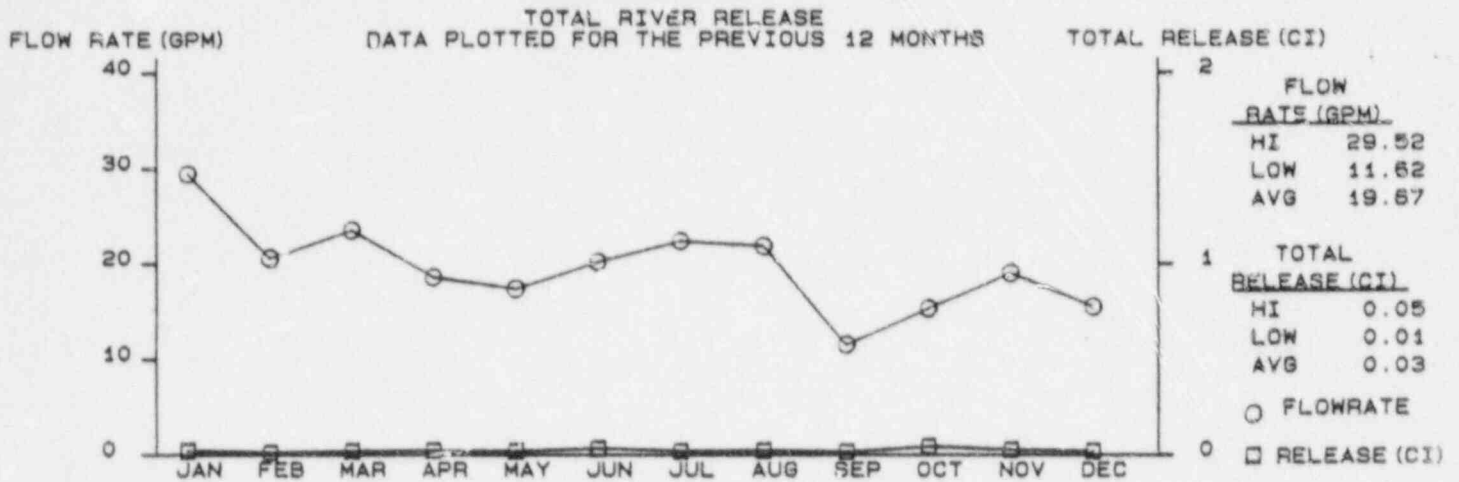


January 1987 thru December 1987

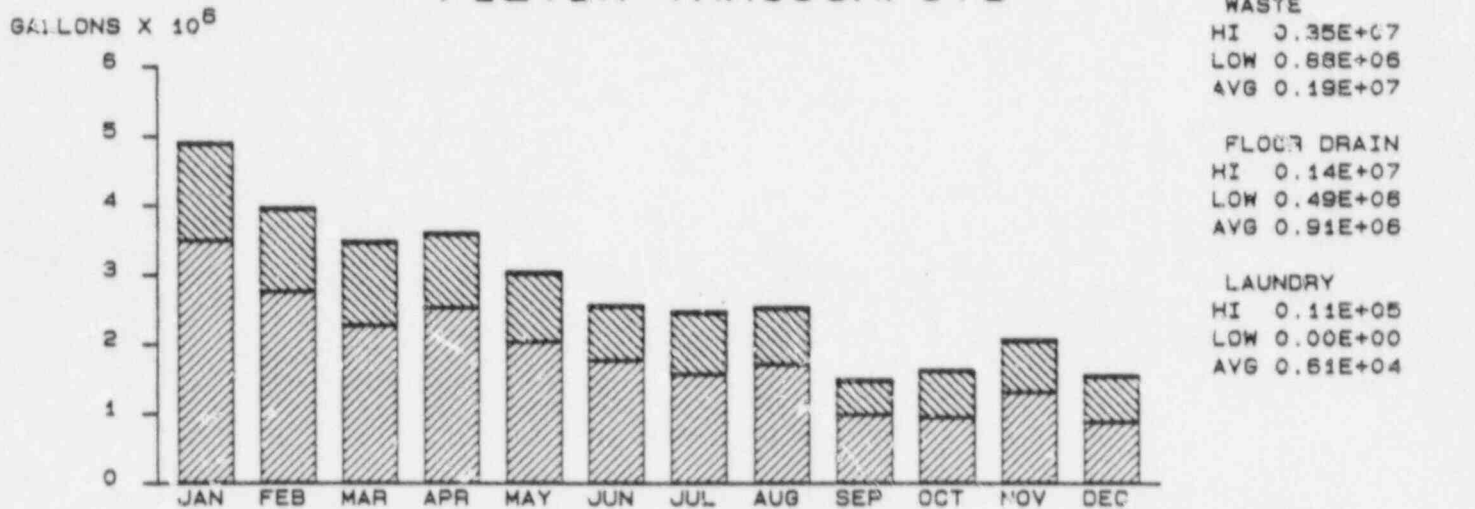
□ Generated

+ 1987 Goal

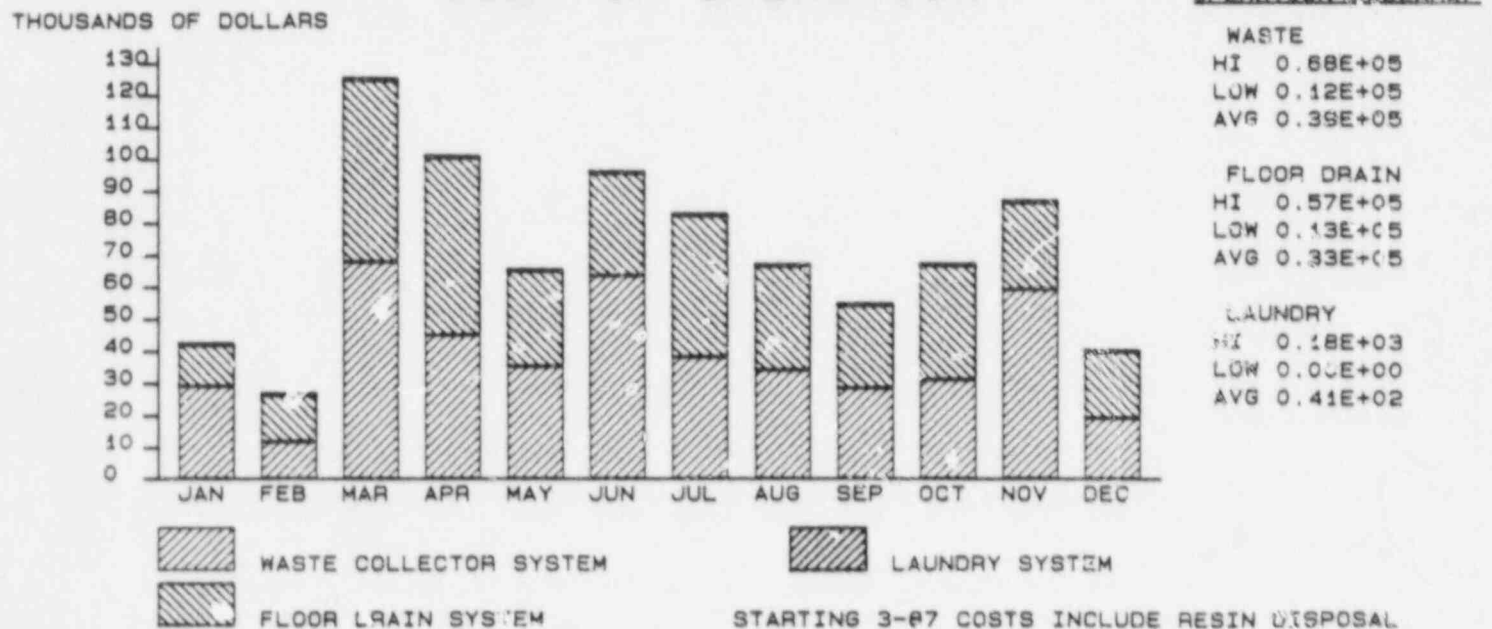
LIQUID RADWASTE MONTHLY OPERATING REPORT DECEMBER 1987



FILTER THROUGHPUTS



COST OF OPERATION



WASTE COLLECTOR SYSTEM
 LAUNDRY SYSTEM
 FLOOR DRAIN SYSTEM

STARTING 3-87 COSTS INCLUDE RESIN DISPOSAL

OPERATING
STATISTICS

OPERATING DATA REPORT

DOCKET NO. 50-259

DATE 01-01-88

COMPLETED BY J. D. Crawford

TELEPHONE (205) 729-2507

OPERATING STATUS

1. Unit Name: Browns Ferry Unit One
2. Reporting Period: December 1987
3. Licensed Thermal Power (Mwt): 3293
4. Nameplate Rating (Gross Mwe): 1152
5. Design Electrical Rating (Net Mwe) 1065
6. Maximum Dependable Capacity (Gross Mwe) 1098.4
7. Maximum Dependable Capacity (Net Mwe) 1065
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:
N/A

Notes

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

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>744</u>	<u>8760</u>	<u>117,680</u>
12. Number of Hours Reactor Was Critical	<u>0</u>	<u>0</u>	<u>59,521.38</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>6,997.44</u>
14. Hours Generator On-Line	<u>0</u>	<u>0</u>	<u>58,267.26</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>168,066,787</u>
17. Gross Electrical Energy Generated (MWH)	<u>0</u>	<u>0</u>	<u>55,398,130</u>
18. Net Electrical Energy Generated (MWH)	<u>-744</u>	<u>-14,233</u>	<u>53,706,402</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>49.51</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>49.51</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>0</u>	<u>42.85</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>0</u>	<u>42.85</u>
23. Unit Forced Outage Rate	<u>100</u>	<u>100</u>	<u>41.12</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 To be determined
26. Units In Test Status (Prior to Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	<u> </u>	<u> </u>
INITIAL ELECTRICITY	<u> </u>	<u> </u>
COMMERCIAL OPERATION	<u> </u>	<u> </u>

(9/77)

OPERATING DATA REPORT

DOCKET NO. 50-260
 DATE 01-01-88
 COMPLETED BY J. D. Crawford
 TELEPHONE (205) 729-2507

OPERATING STATUS

Notes

1. Unit Name: Browns Ferry Unit Two
2. Reporting Period: December 1987
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

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>744</u>	<u>8760</u>	<u>112,567</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>-2,007</u>	<u>-34,470</u>	<u>49,183,833</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>48.27</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>48.27</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>0</u>	<u>41.03</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>0</u>	<u>41.03</u>
23. Unit Forced Outage Rate	<u>100</u>	<u>100</u>	<u>40.25</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	<u>To be determined</u>	
26. Units In Test Status (Prior to Commercial Operation):	<u>Forecast</u>	<u>Achieved</u>
INITIAL CRITICALITY	<u>_____</u>	<u>_____</u>
INITIAL ELECTRICITY	<u>_____</u>	<u>_____</u>
COMMERCIAL OPERATION	<u>_____</u>	<u>_____</u>

(9/77)

OPERATING DATA REPORT

DOCKET NO. 50-296
 DATE 01-01-88
 COMPLETED BY J. D. Crawford
 TELEPHONE (205) 729-2507

OPERATING STATUS

1. Unit Name: Browis Ferry Unit Three
 2. Reporting Period: December 1987
 3. Licensed Thermal Power (Mwt): 3293
 4. Nameplate Rating (Gross MWe): 1152
 5. Design Electrical Rating (Net MWe) 1065
 6. Maximum Dependable Capacity (Gross MWe) 1098.4
 7. Maximum Dependable Capacity (Net MWe) 1065
 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:
N/A

Notes

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

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>744</u>	<u>8760</u>	<u>94,992</u>
12. Number of Hours Reactor Was Critical	<u>0</u>	<u>0</u>	<u>45,306.08</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>5,149.55</u>
14. Hours Generator On-Line	<u>0</u>	<u>0</u>	<u>44,194.76</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>131,868,267</u>
17. Gross Electrical Energy Generated (MWH)	<u>0</u>	<u>0</u>	<u>43,473,760</u>
18. Net Electrical Energy Generated (MWH)	<u>-4,397</u>	<u>-50,927</u>	<u>42,041,148</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>46.52</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>46.52</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>0</u>	<u>41.56</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>0</u>	<u>41.56</u>
23. Unit Forced Outage Rate	<u>100</u>	<u>100</u>	<u>43.54</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 To be determined
 26. Units In Test Status (Prior to Commercial Operation):
- | | Forecast | Achieved |
|----------------------|--------------|--------------|
| INITIAL CRITICALITY | <u>_____</u> | <u>_____</u> |
| INITIAL ELECTRICITY | <u>_____</u> | <u>_____</u> |
| COMMERCIAL OPERATION | <u>_____</u> | <u>_____</u> |

(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-259
 Unit One
 DATE 01-01-87
 COMPLETED BY J.D. Crawford
 TELEPHONE (205)729-2507

MONTH NOVEMBER 1987

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

(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-260
 Unit Two
 DATE 01-01-88
 COMPLETED BY J.D. Crawford
 TELEPHONE (205)729-2507

MONTH DECEMBER 1987

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

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 Three

DATE 01-01-88

COMPLETED BY J.D. Crawford

TELEPHONE (205)729-2507

MONTH DECEMBER 1987

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

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)

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-259
 UNIT NAME One
 DATE 01/01/88
 COMPLETED BY J. D. Crawford
 TELEPHONE (205) 729-2507

REPORT MONTH December

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
315 (cont.)	12/1/87	F	744	4					Administrative hold to resolve various TVA and NRC concerns.

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

DOCKET NO. 50-260
 UNIT NAME Two
 DATE 01/01/88
 COMPLETED BY J. D. Crawford
 TELEPHONE (205) 729-2507

REPORT MONTH December

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
305 (cont.)	12/1/87	F	744	F	4				Administrative hold to resolve various TVA and NRC concerns.

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)

22

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-296

UNIT NAME Three

DATE 01/01/88

COMPLETED BY J. D. Crawford

TELEPHONE (205) 729-2507

REPORT MONTH December

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
157 (cont.)	12/1/87	F	744	F	4				Administrative hold to resolve various TVA and NRC concerns.

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)

NUCLEAR PLANT OPERATING STATISTICS

Browns Ferry Nuclear Plant

Period Hours 744

Month December 1987

	Item No.	Unit No.	Unit 1		Unit 2		Unit 3		Plant	
Generation	1	Average Hourly Gross Load, kW	0	0	0	0	0	0	0	
	2	Maximum Hour Net Generation, MWh	0	0	0	0	0	0	0	
	3	Core Thermal Energy Gen, GWD (t) ²	0	0	0	0	0	0	0	
	4	Steam Gen. Thermal Energy Gen., GWD (t) ²								
	5	Gross Electrical Gen., MWh	0	0	0	0	0	0	0	
	6	Station Use, MWh	744	2007	4397	7148				
	7	Net Electrical Gen., MWh	-744	-2007	-4397	-7148				
	8	Station Use, Percent	0	0	0	0				
	9	Accum. Core Avg. Exposure, MWD/Ton ¹	0	0	0	0				
	10	CTEG This Month, 10 ⁶ BTU	0	0	0	0				
	11	SGTEG This Month, 10 ⁶ BTU								
	Factors & Use	12								
13		Hours Reactor Was Critical	0	0	0	0				
14		Unit Use, Hours-Min.	0	0	0	0				
15		Capacity Factor, Percent	0	0	0	0				
16		Turbine Avail. Factor, Percent	0	0	0	0				
17		Generator Avail. Factor, Percent	0	0	0	0				
18		Turbogen. Avail. Factor, Percent	0	0	0	0				
19		Reactor Avail. Factor, Percent	0	0	0	0				
20		Unit Avail. Factor, Percent	0	0	0	0				
21		Turbine Startups	0	0	0	0				
22		Reactor Cold Startups	0	0	0	0				
Efficiency	23									
	24	Gross Heat Rate, Btu/kWh	0	0	0	0				
	25	Net Heat Rate, Btu/kWh	0	0	0	0				
	26									
Temp & Press	27									
	28	Throttle Pressure, psig	0	0	0	0				
	29	Throttle Temperature, °F	0	0	0	0				
	30	Exhaust Pressure, InHg Abs.	0	0	0	0				
	31	Intake Water Temp., °F	0	0	0	0				
Flows	32									
	33	Main Feedwater, M lb/hr								
	34									
	35									
Misc.	36									
	37	Full Power Capacity, EFPD (3)	(4)	(4)	(4)					
	38	Accum. Cycle Full Power Days, EFPD	(4)	(4)	(4)					
	39	Oil Fired for Generation, Gallons							7,380	
	40	Oil Heating Value, Btu/Gal.							139,700	
	41	Diesel Generation, MWh							46.2	
Station Data	42									
	Max. Hour Net Gen.		Max. Day Net Gen.		Load Factor, %		X			
	MWh	Time	Date	MWh	Date					
	0			0						
Remarks: ¹ For BFNP this value is MWD/STU and for SQNP and WBNP this value is MWD/MTU.										
² (t) indicates Thermal Energy.										
³ Information furnished by Reactor Analysis Group, Chattanooga										
⁴ Administrative hold.										

Date Submitted _____ Date Revised _____

John Walker 1/12/88
Plant Superintendent

UNIT OUTAGE AND AVAILABILITY

Browns Ferry, Nuclear Plant

Licensed Reactor Power 3293 M⁴(th)

Unit No. One

Generator Rating 1152 MW(e)

Month/Year December 1987

Design Gross Electrical Rating 1098.4 MW

Period Hours 744

Day	Time Unit Available						Time Not Available						Unit		METHOD OF SHUTTING DOWN REACTOR	UNIT STATUS DURING OUTAGE	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION	
	Total		Gen.		Not Used		Turbine		Gen.		Reactor		Time Out	Time In				
	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min						
1							24	00										
2																		
3																		
4																		
5																		
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28																		
29																		
30																		
31																		
Total							744	00	241	00	241	00	241	00	24	00	744	00

UNIT OUTAGE AND AVAILABILITY

Browns Ferry Nuclear Plant

Licensed Reactor Power 3293 MW(th)

Unit No. Two

Generator Rating 1132 MW(e)

Month/Year December 1987

Design Gross Electrical Rating 1098.4 MW

Period Hours 744

Day	Time Unit Available						Time Not Available						Unit		OUTAGE CAUSE	METHOD OF SHUTTING DOWN REACTOR	UNIT STATUS DURING OUTAGE	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION
	Total		Gen.		Not Used		Turbine		Gen.		Reactor		Unit					
	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Time Out	Time In				
1							24	00										
2							24	00										
3																		
4																		
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29																		
30																		
31																		
Total							744	00	744	00	744	00	744	00				

UNIT OUTAGE AND AVAILABILITY

Brown Ferry Nuclear Plant

Licensed Reactor Power 3293 MW(th)

Generator Rating 1152 MW(e)

Design Gross Electrical Rating 1098.4 MW

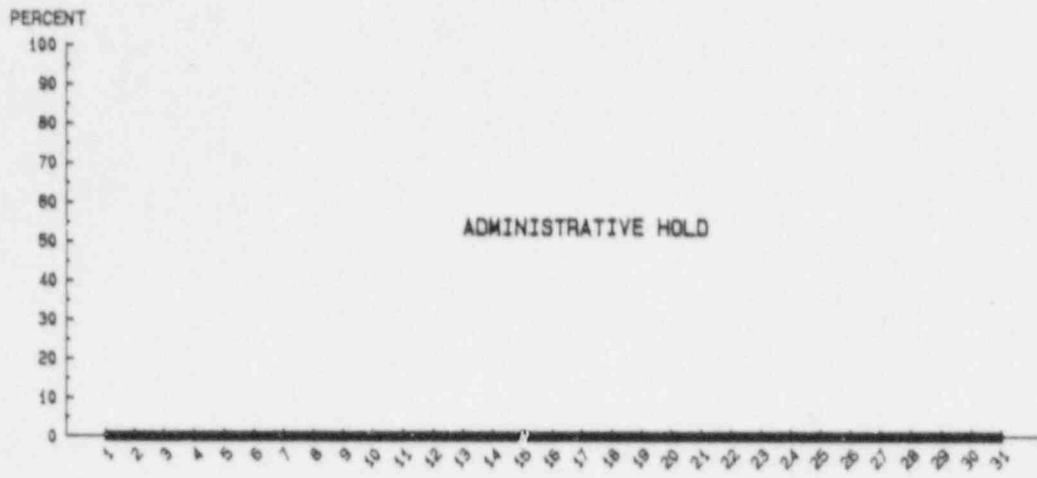
Month/Year December 1987

Period Hours 744

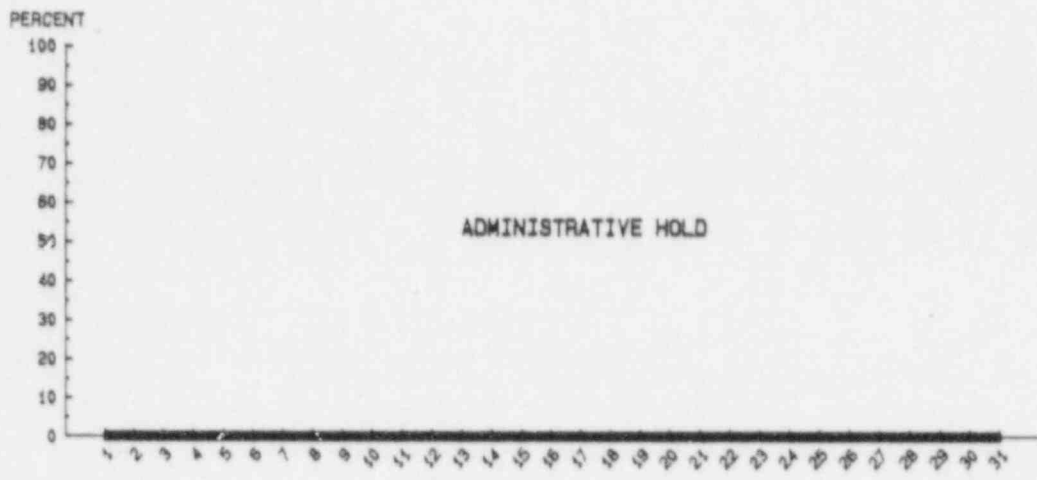
Unit No. Three

Day	Time Unit Available						Time Not Available						Unit		OUTAGE CAUSE	METHOD OF SHUTTING DOWN REACTOR	UNIT STATUS DURING OUTAGE	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION
	Total		Gen.		Not Used		Turbine		Gen.		Reactor		Time Out	Time In				
	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min				
1							24	00										
2																		
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Total							744	00	744	00	744	00	744	00	744	00		

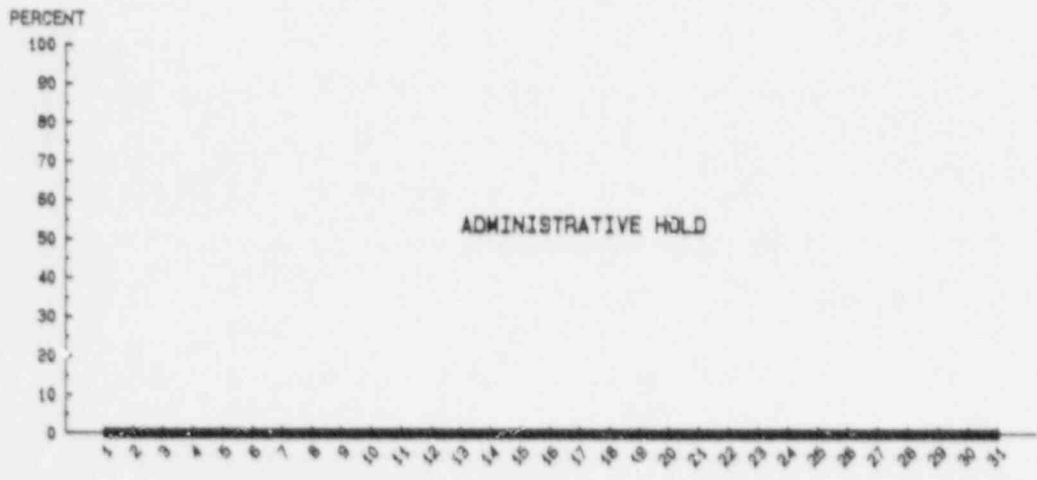
REACTOR POWER PERCENT
DECEMBER 1987
UNIT 1



UNIT 2



UNIT 3



MAINTENANCE
SUMMARY

ELECTRICAL TECHNICAL SECTION
MONTHLY REPORT
DECEMBER 1987

I. WORK TIME SCHEDULE

	<u>Received/ Assigned</u>	<u>Completed</u>	<u>Open</u>
Red Folders	3	2	8
Orange Folders	1	2	8
Yellow Folders	0	0	1
Blue Folders	0	1	1
Purple Folders	0	0	1
Active Engineering Assignments	0	0	21
Engineering Backlog	0	0	76
New Engineering Assignments	0	0	0
Completed Engineering Assignments	0	1	0

II. COMMITMENT TRACKING

Licensing Issues (NCO & SLT)			
NCO	1	9	26
SLT	0	1	4
PORS Tracking Items (BFC)			
CAQRs	2	8	8
Average Age of CAQRs	Three months and five days		
Employee Concerns	0	0	1
Safety Issues List	0	0	0

III. STAFFING LEVELS AND TRAINING

<u>Personnel</u>	<u>Approved Headcounts</u>	<u>Current Headcounts</u>
ASP	24	24
ATL	2	4
HTL	0	0
Contractors	<u>11</u>	<u>6</u>
TOTAL	37	34

IV. OVERTIME 4.2%

V. PROCEDURES

1 procedures PORC approved
8 procedures sent to Word Processing

Electrical Technical Section
Monthly Report

Review of unit-1 and unit-3 fuse data sheets have been prepared.

Valve status has been put on the computer system for all 106 valves involved in unit-two start-up.

Limiter valve status sheets are now controlled by the electrical technical section. They were controlled by the mechanical technical section in the past. This status also includes a bar graph to the plant manager on physical work, testing and signature analysis to show present valve progress.

Revised work plan 2225-87 to allow completion of the work plan.

Completing field sketch which will aid in the installation of terminal block on 2-FCV-01056.

Updated P/2 schedule for drywell coordination meeting to reflect all work on drywell valves which will need to be complete before lead shielding removal can begin.

74-07 valve was declared functional on 12/21/87 to support restart test program.

69-02 physical work is complete except for grade 5 motor thru bolt replacement. Valve will be functional by early January.

CAQR's BFP-870126 and BFP-870092 were closed by the valve group in the month of December, 1987.

ELECTRICAL TECHNICAL SECTION

MONTHLY REPORT

DECEMBER, 1987

Unit Common

Major Routine Activities --

Performed inspection of unit two generator bushing box for stator cooling leaks. Two leaks were located on the exciter end of the generator. A purchase request has been issued to bring General Electric technicians in-house to perform leak repairs. During the inspections, a dusting of rust particles was found to be coming from the ends of the hydrogen header at the top of the generator. A General Electric generator specialist was brought in to evaluate the generator condition and make corrective recommendations. A report on his findings and recommendations is expected by January 4, 1988.

A Brown Boveri representative is on-site to install anodes in the unit 3 generator breaker as part of vendor improvement to prevent stress corrosion cracking.

Successfully completed D/G-D load acceptance testing for Systems and Restart test.

Completed two year review and submitted permanent change to EMI-100.

Submitted permanent changes to EMI-107, EMI-111 and EMI-120.

Reperformed discharge test on shutdown board "B" battery bank. Battery capacity increased from 85% to 125%.

CIRCUIT BREAKER REBUILDS:	<u>4160V</u>	<u>480/250V</u>
Total number of breakers to be rebuilt	303	497
Total number of breakers rebuilt	9	13
Completed this month	0	3

Electrical Technical engineer attended pooled inventory management meeting in Houston, Texas.

500KV Trinity #2 line grounding switch 5291G continues out of service for lack of materials to make repairs.

Major maintenance was started on 500KV power circuit breaker 5214 (Unit 1 - transformer bank breaker).

Fuse Control Program: BF 6.12, SEMI-42, EMI-92 and EMI-110 are in revision.

13 fuse labels remain to be placed. Unit 1 and unit 3 data sheets can be completed for EQIS data base revisions. These revisions will show up in revision "D" of the fuse engraving report along with some additions from the drawing review effort and DNE/contractor information. Revision "D" is expected in April or May. The fuse engraving report will eventually be replaced with a DNE output document called the fuse tabulation. In January, fuse engraving report revision B labeling will be completed and a fuse control training program will be set-up. At this time, most tech-spec instrument fuses should be located and placed in the electrical equipment list.

I&C TECHNICAL
DECEMBER 1987

I. Work Item Schedule

	Received/ Assigned	Completed	Open
Red Folders	0	0	3
Orange Folders	1	0	8
Yellow Folders	0	0	0
Blue Folders	0	0	0
Total Assignments			
Active Engineering Assignments	10	17	52
Engineering Backlog			23

II. Commitment Tracking

Licensing Issues(NCO & SLT)			
NCO	0	0	18
SLT	0	0	6
PORS Tracking Items(BFC)	0	0	3
DR	0	0	2
CAR	0	0	0
CAQR (Onsite)	0	0	12
CAQR (Off-site)	0	0	0
Average Age of CAQRs	5.9 months		
Employee Concerns	0	0	0
Safety Issues List	0	0	0

III. Staffing Levels and Training

<u>Personnel</u>	<u>Approved Headcounts</u>	<u>Current Headcounts</u>
ASP	17	12
ATL	4	5
HTL	0	0
Contractors	-	4
TOTAL	21	21

IV. Overtime 9.81%

V. Procedures

24 procedures were sent to Word Processing

I&C TECHNICAL
DECEMBER 1987

SUMMARY

The major activities of the month involved preparation of procedures to support the retest schedule and the scheduled NRC SI review. Scaling and Setpoint Documents to support these procedures are also being issued.

MECHANICAL TECHNICAL SECTION MONTHLY REPORT
COMMON UNIT (UNIT 0)
DECEMBER 1987

Common

No major nonroutine activities.

1. Closed the following commitments:

- a. SEQ LER 327-87-060 - Inadequate D/G start caused by inadequate procedure.
- b. INPO SER 87-035 - Non-Isolable Reactor Coolant System Leak.
- c. NCO 860287004 - Leaks Identified During Walkdown Control Air System.
- d. BFC 861084002 - Inspect Springs of all Atwood & Morrill MSIVs.
- e. BFC 861084003 - Inspect Springs of all Atwood & Morrill MSIVs.
- f. SLT 870010001 - Miscellaneous Hardware Problems - Main Steam Tunnel.
- g. G-29(R0) - 1.M.1.2-10 Sht 3 & 4(R0)
- h. G-29(R0) - PS 4.M.4.1 Add. 4(R4)
- i. G-29(R0) - PS 4.M.1.2 Add. 3(R0)
- j. G-29(R0) - PS 4.M.1.1 Add. 9(R10)
- k. G-29(R0) - GT 1.1-1(R1)
- l. G-29(R0) - GT 1.1.2(R4)
- m. G-29(R0) - GT 88.0-7(R0)
- n. G-29(R0) - PF 1062(R2)
- o. G-29(R0) - GT-SM11-0-3C(R2)
- p. G-29(R0) - TB 107.107-10(R0)
- q. G-29(R0) - GT-SM11-0-2A(R2)
- r. N-PT-8(R0) - Liquid Penetrant Examination
- s. N-UT-38(R1) - Ultrasonic Examination of Safe-End Crevices Regions
- t. N-VT-2(R7) - Visual Examination of AWS Structural Welds
- u. N-VT-6(R2) - Visual Examination of Structural Weld Using NCIG-01

MECHANICAL TECHNICAL SECTION MONTHLY REPORT
COMMON UNIT ONLY (UNIT 9)
DECEMBER 1987

- v. NQAM,III,2.2 QN(RO) - Receipt, Inspection, Handling, and Storage of Materials
 - w. NQAM,II,5.3A(R4) - Training Certification Program for QC Inspectors
 - x. NQAM,II,6.1(R4) - Generic Procedure
 - y. NQAM,II,6.1(R4) - Generic Procedure (We received and closed this blue folder twice in this month)
 - z. BFC 870086010 - Trending Program - Engine Oil Cooler Performance
2. The following instructions were approved, revised, or cancelled.
- a. MMI-100 - Maintenance of Reactor Building Closed Cooling Water Heat Exchanger
 - b. MMI-147 - Surface Indication Removal
 - c. MMI-162 - Radioactive Waste Transport Trailer Maintenance
 - d. MMI-42 - Testing, Inspection, and Maintenance of the Air Supply System for the Main Steam Isolation Valves and the ADS Main Steam Relief Valves
 - e. MMI-87 - Preventive and Corrective Maintenance of Limitorque Operators
 - f. MMI-170 - Fuel Pool Cooling (FPC) Pump Maintenance, Units 1, 2, and 3
 - g. MCI-0-032-VLV004 - Control Air Supply to Drywell Check Valve CKV-032-333; Disassembly, Inspection, Rework, and Reassembly
 - h. MCI-0-033-CLR001 - Service Air System Compressor Aftercooler, Joy Model WNOL 112E; Disassembly, Inspection, Rework, and Reassembly
 - i. MCI-0-075-VLV002 - Core Spray Check Valves VLV-75-537A, 537B, 537C, and 537D; Disassembly, Inspection, Rework, and Reassembly
 - j. MCI-0-082-BL0001 - Standby Diesel Generator Blower Bearings; Disassembly, Inspection, Replacement, and Reassembly
 - k. MCI-0-032-CLR001 - Standby Diesel Engine Water Coolers; Disassembly, Inspection, Rework, and Reassembly
 - l. MCI-0-082-PMP001 - Diesel Engine Scavenging Lube Oil Pump; Disassembly, Inspection, Rework, and Reassembly
 - m. MCI-0-085-VLV001 - Scram Pilot Valves FSV-85-39A or 85-39B; Disassembly, Cleaning, Replacement, and Reassembly

MECHANICAL TECHNICAL SECTION MONTHLY REPORT
COMMON UNIT ONLY (UNIT 0)
DECEMBER 1987

- n. MCI-0-085-VLV002 - Inlet Scram Valve Disassembly, Valve Packing, Replacement Actuator, Diaphragm Replacement, Valve Seat Replacement, and Valve Reassembly
 - o. MCI-0-085-VLV003 - Outlet Scram Valve Disassembly, Valve Packing, Replacement Actuator, Diaphragm Replacement, Valve Seat Replacement, and Valve Reassembly
3. The following CAQRs (Conditions Adverse to Quality Reports) were closed.
- a. BFP 87-1020 - MMI-184 was PORC'd, USQD has not been reviewed.
 - b. BFP 87-414 - Unit 1 RHR Heat Exchanger '1B'.
 - c. BFP 87-741 - Lack of Procedural Guidance to Perform Base Metal Weld Repair.
 - d. BFP 87-770 - Pilot Scram Valves are to be torqued during reassembly.
4. The Mechanical Technical Section devoted 200 hours to training during the month of December.

0919G

MODIFICATIONS MONTHLY REPORT

DECEMBER 1987

<u>MAJOR WORK PERFORMED</u>	<u>ECN</u>	<u>NARRATIVE</u>
Appendix R	P0671	Continued modification of existing fire suppression system.
	P0808	Continued conduit and cable work on control power circuits.
	P0883	Continued work on fuse protection of 250V DC trip circuits.
	P0885	Continued conduit and support work on RB fire detectors.
	P0879	Continued structural and electrical work on Phase III fire door modifications.
Environmental Qualification	P3145	Continued electrical conduit sealing activities.
	P3205	Continued small piping and support work on H ₂ O ₂ analyzer lines.
Seismic Issues	P0370	Continued structural work on seismic qualification and designation of block walls.
	P0361	SMMI rework of torus attached piping supports (RHR and core spray systems) continued.
	P0859	Continued work on non-CRD attachments and catwalks R9 and 13.
	P0207	Completed craft work on HPCI/RCIC platforms.
	P0933	Continued seismic qualification of Unit 2 RB elev 593-621 conduit.
	P0998	Drywell catwalk upper elevation work continued on a concerted basis.

<u>MAJOR WORK PERFORMED</u>	<u>ECN</u>	<u>NARRATIVE</u>
HVAC Upgrade	PC697	Continued installation of conduit, cable, and
TMI Mods	P0324	Continued electrical work on high-range containment radiation monitors.
Appendix J	P0792	Piping and valve work and hydros completed; remaining workplan in closeout cycle.
	P0795	Physical work (valves and piping in core spray system) complete; workplans in closeout.
	P0959	Support installation continued on RBCCW system.
	P0965	HPCI valve and support work continued.
	P0963	Completed craft work on CAD valve and supports.
Other	P0286	Continued work on yard security lighting.
	P0284	Continued fabrication and installation of seismic conduit supports for the acoustic monitoring system.
	P0392	Continued SMMI rework of scram discharge volume supports.
	P0569	Continued support work on RPV vent line.
	P0720	Continued work of jet pump instrumentation lines.
	P0956	Continued installation of duct and duct supports for new shutdown board room HVAC.
	P5291	Continued seismic support work on reactor water level instrument sensing line.
	P5434	Continued piping and support work on torus narrow range water level instrumentation.

TVA
GENERATING
AVAILABILITY
DATA SYSTEM
(GADS)
EVENT REPORT

YEAR 87

TVA GADS EVENT REPORT FORM

MONTH December

NET WINTER MDC, MW 1065

PLANT Browns Ferry

UNIT 1

LINE	CARD CODE	A.C. ID	EVENT TYPE	COMPONENT CAUSE CODE	COMPONENT IDENTIFICATION	NET CAPABILITY DURING - MW	START TIME			END TIME			EVENT DISTRIBUTION CODE	LOAD/AT/DESYN	VERBAL DESCRIPTION
							MONTH	DAY	HR	MIN.	MO	TH			
1	A	UL	7	10		0000							1		ADMIN HOLD TVA & NRC CONCERNS
2	C	UL	95	10		0000									
3	D	SB	20	70		0000							3		ECC-6 REFUEL OUTAGE
4	D	SB	44	50		0000							3		TURB INSP & OVERHAUL
5	D	SB	48	30		0000							3		GEN INSP & OVERHAUL
6	D	SB	26	28		0000							3		TORUS MOD
7	D	SB	22	30		0000							3		RECIRC PIPING INSP
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

(MAY BE CONTINUED ON THE NEXT CARD IN COLUMNS 38-77, IF SO PUT A '1' IN COLUMN 6 AND COMPLETE COLUMNS 7-27 OF THE CONTINUATION CARD.)

YEAR 87

TVA GAD'S EVENT REPORT FORM

MONTH December

NET WINTER MDC, MW 1065

PLANT Browns Ferry UNIT 2

LINE	CODE	202	YEAR	87	MONTH	December	NET WINTER MDC, MW	1065	PLANT	Browns Ferry	UNIT	2																																																									
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
													START TIME	END TIME	VERBAL DESCRIPTION																																																						
													MAY BE CONTINUED ON THE NEXT CARD IN COLUMNS 38-77. IF SO PUT A 1 IN COLUMN 6 AND COMPLETE COLUMNS 7-27 OF THE CONTINUATION CARD.																																																								
CARD CODE (A, C, D1)	EVENT TYPE	COMPONENT CAUSE CODE	COMPONENT IDENTIFICATION	NET CAPABILITY DURING - MW	MONTH	DAY	HOUR	MIN.	MONTH	DAY	HOUR	MIN.	EVENT CONTRIBUTION CODE	LOAD (A) (D) (S) (Y)																																																							
1	U	9 5 10		0 0 0 0									1		ADMIN HOLID TVA & NRC CONCERNS																																																						
2	U	9 5 10		0 0 0 0									1																																																								
3	SE	2 0 70		0 0 0 0									2		FOC -5 REFUEL OUTAGE																																																						
4	SE	4 4 5 0		0 0 0 0									3		TURB INSP & OVERHAUL																																																						
5	SE	4 8 3 0		0 0 0 0									3		GEN INSP & OVERHAUL																																																						
6	SE	2 6 2 8		0 0 0 0									3		TORS MOD																																																						
7	SE	2 2 3 0		0 0 0 0									3		RECT RC PIPING INSP																																																						
8																																																																					
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YEAR 87

TVA GADS EVENT REPORT FORM

MONTH December

NET WINTER MDC, MW 1065

PLANT Browns Ferry

UNIT 3

LINE	CODE	203	YEAR	87	START TIME	END TIME	GENERAL DESCRIPTION
6	7	8	9	10	11	12	13
14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37
38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53
54	55	56	57	58	59	60	61
62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77
1	A	UI	9	5	10		
2	A	UI	9	5	10		ADMIN HOLD TVA & NRC CONCERNS
3	D	SE	4	4	50		
4	D	SE	4	8	30		TURB INSP & OVERHAUL
5	D	SE	2	6	28		GEN INSP & OVERHAUL
6	D	SE	2	2	30		TURUS MOD
7							RECIRC PIPING INSP
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

MAY BE CONTINUED ON THE NEXT CARD IN COLUMNS 38-77, IF SO PUT '1' IN COLUMN 6 AND COMPLETE COLUMNS 7-27 OF THE CONTINUATION CARD

OTHER
REPORTS

CHEMISTRY SUMMARY

DECEMBER 1987

Primary Coolant Chemistry

Unit 1

The conductivity of the reactor coolant remained within technical specification and fuel warranty limits during the month. Chloride concentration and pH of the reactor coolant remained within technical specification and fuel warranty limits during the month. This calendar year, the technical specification and fuel warranty limits for conductivity and chloride have not been exceeded.

Unit 2

The conductivity of the reactor coolant remained within technical specification and fuel warranty limits during the month. Chloride concentration and pH of the reactor coolant remained within technical specification and fuel warranty limits during the month. This calendar year, the technical specification and fuel warranty limits for conductivity and chloride were exceeded in early May during vessel flood up after safe end repair as described in LRED 87-2-218 and LRED 87-2-220.

Unit 3

The conductivity of the reactor coolant remained within technical specification and fuel warranty limits during the month. Chloride concentration and pH of the reactor coolant remained within technical specification and fuel warranty limits during the month. This calendar year, the technical specification and fuel warranty limits for conductivity and chloride have not been exceeded.

PRIMARY COOLANT CHEMISTRY
DECEMBER 1987

<u>Parameter</u>	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>
1. <u>Gross Radioactivity</u>			
a. <u>Crud (filter) (µci/ml)</u>			
High	N/A	N/A	N/A
Low	N/A	N/A	N/A
Average	N/A	N/A	N/A
b. <u>Filtrate (µci/ml)</u>			
High	N/A	N/A	N/A
Low	N/A	N/A	N/A
Average	N/A	N/A	N/A
2. <u>Milipore Iron (Fe,ppb)</u>			
High	N/A	N/A	N/A
Low	N/A	N/A	N/A
Average	N/A	N/A	N/A
3. <u>Tritium (µci/ml)</u>			
High	8.28E-05	7.88E-05	1.51E-04
Low	7.35E-05	7.07E-05	1.33E-04
Average	7.73E-05	7.55E-05	1.43E-04
4. <u>Iodine-131 (µci/ml)</u>			
High	0	0	0
Low	0	0	0
Average	0	0	0
5. <u>Iodine-131:Iodine-133 Ratio</u>			
High	N/A	N/A	N/A
Low	N/A	N/A	N/A
Average	N/A	N/A	N/A

PRIMARY COOLANT CHEMISTRY (Continued)

DECEMBER 1987

<u>Parameter</u>	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>
6. <u>Chloride (ppb)</u>			
High	<10	<10	<10
Low	<10	<10	<10
Average	<10	<10	<10
7. <u>pH@25°C</u>			
High	6.5	6.2	6.4
Low	5.8	5.8	5.8
Average	6.0	5.9	5.9
8. <u>Conductivity (μmho/cm@25°C)</u>			
High	0.19	0.92	0.45
Low	0.12	0.69	0.11
Average	0.15	0.79	0.21

CHEMISTRY SUMMARY (Continued)

DECEMBER 1987

Environmental Technical Specification Requirements

The ambient upstream river temperature (24-hr. avg max) averaged 50.8°F and ranged from 53.8°F on December 1 to 48.7°F on December 31. The downstream temperature ranged from 53.7°F on December 1 to 48.6°F on December 31 and averaged 50.4°F. The greatest temperature change was 1.4°F on December 8.

Maintenance work on the sedimentation pond dike (DSN102) continued in December. It was necessary to discharge accumulated precipitation on December 28 and 29. This discharge was in compliance with the UPDES permit limits.

Compliance problems were experienced with the discharge from the unit 1 and 2 office building drain (DSN110). Three non complying discharges on December 21, 25, and 27 had total suspended solid (TSS) concentration of 188, 117, and 457 mg/L exceeding the permitted limit of 100 mg/L.

The discharge from the sewage lagoon exceeded the NPDES permit limit of 45 mg/L for BOD₅ on December 7 when the BOD₅ concentration reached 50 mg/L. The average daily flow was 46,005 gpd and the maximum flow 60,192 gpd on December 8 BOD₅ concentration averaged 29 mg/L. The TSS concentrations ranged from 24 mg/L on December 28 to 31 mg/L on December 7 and averaged 27 mg/L.

AIRBORNE RELEASES(1)

 DECEMBER 1987

SUMMATION OF ALL RELEASES -----	UNIT -----	THIS MONTH -----
A. FISSION AND ACTIVATION GASES -----		
1. TOTAL RELEASE	CI	3.14E-01
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	1.04E-01
3. PERCENT OF TECH. SPEC. LIMIT(0.05 CI/SEC)	%	2.08E-04
B. IODINES -----		
1. TOTAL IODINE - 131	CI	< 3.50E-05
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	< 1.16E-05
3. PERCENT OF TECH. SPEC. LIMIT(0.40 UCI/SEC)	%	0.02E-01
C. PARTICULATES -----		
1. PARTICULATES WITH HALF-LIFES > OR = 10 8 DAYS	CI	1.88E-04
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	6.23E-05
3. PERCENT OF TECH. SPEC. LIMIT(2.19 UCI/SEC)	%	1.56E-02
4. GROSS ALPHA RADIOACTIVITY	CI	2.16E-06
D. TRITIUM -----		
1. TOTAL RELEASE	CI	2.00E-02
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	6.63E-03
3. PERCENT OF TECH. SPEC. LIMIT(2.19 UCI/SEC)	%	3.03E-01
4. GROUND LEVEL RELEASE	CI	1.91E-02
5. ELEVATED RELEASE	CI	9.27E-04

(1) REPORTING PERIOD 35 DAYS

AIRBORNE RELEASES (CONTINUED)

 DECEMBER 1987

ELEVATED RELEASES

A. FISSION GASES

	UNIT	THIS MONTH
-----	-----	-----
KR-85M	CI	< 7.50E-02
KR-85	CI	3.14E-01
KR-87	CI	< 6.97E-02
KR-88	CI	< 3.21E-01
XE-133	CI	< 2.26E-01
XE-135M	CI	< 2.55E-01
XE-135	CI	< 5.83E-02
XE-138	CI	< 4.38E-01

OTHERS (SPECIFY)

TOTAL FOR PERIOD

CI 3.14E-01

B. IODINES

I-131	CI	< 4.63E-06
I-133	CI	< 6.56E-05
I-135	CI	< 4.59E-02

TOTAL FOR PERIOD

CI < 4.60E-02

AIRBORNE RELEASES (CONTINUED)

 DECEMBER 1987

ELEVATED RELEASES

C. PARTICULATES

UNIT THIS MONTH

SR-89	CI	< 3.29E-07
SR-90	CI	< 1.56E-07
CS-134	CI	< 1.49E-06
CS-137	CI	< 4.86E-06
BA-140	CI	< 1.15E-05
LA-140	CI	< 1.67E-06

OTHERS (SPECIFY)

TOTAL FOR PERIOD

CI < 2.00E-05

D. TRITIUM

CI 9.27E-04

AIRBORNE RELEASES (CONTINUED)

 DECEMBER 1987

GROUND RELEASES

A.	FISSION GASES -----	UNIT -----	THIS MONTH -----
	KR-85M	CI	< 4.90E-01
	KR-85	CI	< 1.30E 02
	KR-87	CI	< 1.08E 00
	KR-88	CI	< 9.71E-01
	XE-133	CI	< 1.22E 00
	XE-135M	CI	< 6.81E-01
	XE-135	CI	< 2.40E-01
	XE-138	CI	< 3.70E 00

OTHERS (SPECIFY)

TOTAL FOR PERIOD

CI < 1.38E 02

B. IODINES

	I-131	CI	< 3.04E-05
	I-133	CI	< 6.80E-04
	I-135	CI	< 8.86E-01

TOTAL FOR PERIOD

CI < 8.87E-01

AIRBORNE RELEASES (CONTINUED)

 DECEMBER 1987

GROUND RELEASES

C.	<u>PARTICULATES</u>	<u>UNIT</u>	<u>THIS MONTH</u>
	SR-89	CI	< 2.26E-06
	SR-90	CI	< 1.56E-06
	CS-134	CI	< 2.96E-05
	CS-137	CI	< 2.60E-05
	BA-140	CI	< 7.65E-05
	LA-140	CI	< 2.70E-05
	OTHERS (SPECIFY)		
	----- CO-60	CI	1.38E-04
		<u>TOTAL FOR PERIOD</u>	
		-----	1.38E-04
D.	TRITIUM	CI	1.91E-02

BROWNS FERRY NUCLEAR PLANT
 MONTHLY REPORT CALCULATIONS
 LIQUID RELEASES
 DECEMBER, 1987

RADIOACTIVE LIQUID EFFLUENTS

1. <u>GROSS RADIOACTIVITY</u>	UNITS	
-----	-----	
a) TOTAL RELEASE	CURIES	2.47E-02
b) AVERAGE DILUTED CONCENTRATION RELEASED	UCI/ML	2.40E-09
c) PERCENT OF APPLICABLE LIMIT (1E-07 UCI/ML)	%	2.40E 00
2. <u>TRITIUM</u>		

a) TOTAL RELEASE	CURIES	4.98E-02
b) AVERAGE DILUTED CONCENTRATION RELEASED	UCI/ML	4.83E-09
c) PERCENT OF APPLICABLE LIMIT (3E-03 UCI/ML)	%	1.61E-04
		(1)
3. <u>DISSOLVED NOBLE GASES</u>		

a) TOTAL RELEASE	CURIES	< 9.04E-04
b) AVERAGE DILUTED CONCENTRATION RELEASED	UCI/ML	< 8.77E-11
c) PERCENT OF APPLICABLE LIMIT (2E-04 UCI/ML)	%	< 4.39E-05
4. <u>GROSS ALPHA RADIOACTIVITY</u>		

a) TOTAL RELEASE	CURIES	6.52E-04
b) AVERAGE DILUTED CONCENTRATION RELEASED	UCI/ML	6.32E-11
5. <u>VOLUME OF LIQUID WASTE TO DISCHARGE CANAL</u>	LITERS	2.62E 06

6. <u>VOLUME OF DILUTION WATER</u>	LITERS	1.03E 10

(1) INCLUDES Xe-133, Xe-135, AND OTHERS

BROWNS FERRY NUCLEAR PLANT
 MONTHLY REPORT CALCULATIONS
 LIQUID RELEASES
 DECEMBER, 1987

ISOTOPES RELEASED -----	UNITS ----- CI
CR-51	< 2.12E-02
MN-54	3.65E-05
CO-58	< 1.87E-04
FE-59	< 3.88E-04
CO-60	3.19E-03
ZN-65	1.24E-03
NB-95	< 1.68E-04
ZR-95	< 3.47E-04
MOTC-99M	< 1.95E-04
I-131	< 2.96E-04
XE-133	< 7.50E-04
CS-134	4.52E-03
XE-135	< 1.54E-04
CS-137	1.37E-02
BA-140	< 9.98E-04
LA-140	< 9.63E-05
CE-141	< 3.38E-04
SR-89	< 3.50E-05
SR-90	< 3.43E-05

BROWNS FERRY NUCLEAR PLANT
MONTHLY REPORT CALCULATIONS
LIQUID RELEASES
DECEMBER, 1987

OTHERS

UNITS

CI

S8-125

1.76E-05

CE-144

2.90E-05

BROWNS FERRY NUCLEAR PLANT
MONTHLY REPORT CALCULATIONS
LIQUID RELEASES
DECEMBER, 1987

LAUNDRY DRAIN VOLUME RELEASED:	11190.3	GALLONS
FLOOR DRAIN VOLUME RELEASED:	644601.9	GALLONS
WASTE SAMPLE TANK VOLUME RELEASED:	36313.1	GALLONS
DISTILLATE TANK VOLUME RELEASED:	0.0	GALLONS
LOCATION OTHER THAN RADWASTE VOLUME RELEASED:	0.0	GALLONS
 TOTAL VOLUME RELEASED TO THE RIVER:	 692105.3	 GALLONS
 HIGHEST BATCH ACTIVITY RELEASED FOR MONTH:	 1.68E-08	 UCI/ML A/D
 LONGEST RELEASE TIME FOR MONTH:	 345	 MINUTES
SHORTEST RELEASE TIME FOR MONTH:	203	MINUTES
TOTAL TIME OF RELEASES FOR MONTH:	6810	MINUTES
AVERAGE TIME FOR BATCH RELEASES:	262	MINUTES

COMPOSITE INFORMATION:

	COMPOSITE UCI/ML -----	CI RELEASED -----	AFTER DILUTION UCI/ML -----
SR-89	< 2.10E-08	< 5.50E-05	< 5.33E-12
SR-90	< 1.31E-08	< 3.43E-05	< 3.33E-12
H-3	1.90E-05	4.98E-02	4.83E-09
GROSS ALPHA	2.49E-07	6.52E-04	6.32E-11

NUMBER OF BATCHES RELEASED:	26
NUMBER OF ADMINISTRATIVE LIMIT VIOLATIONS:	0
NUMBER OF TECHNICAL SPECIFICATION VIOLATIONS:	0

RESIN USAGE REPORT
 DECEMBER 1987
 RESIN CONSUMED (CU.FT.)

	% of						
	<u>Total</u>	<u>Bead</u>	<u>POWDEX</u>	<u>ECODEX</u>	<u>ECOSORB</u>	<u>EPIFLOC</u>	<u>Total</u>
<u>Radwaste</u>							
Floor Drain Filter	43.9	0	78	0	0	36	114
Waste Demineralizer	0	0	0	0	0	0	0
Waste Filter	38.5	0	84	0	16	0	100
Fuel Pool Demins	7.7	0	20	0	0	0	20
<u>Reactor Water Cleanup</u>							
Unit 1	0	0	0	0	0	0	0
Unit 2	6.1	0	16	0	0	0	16
Unit 3	0	0	0	0	0	0	0
<u>Cond. Demins</u>							
Unit 1	0	0	0	0	0	0	0
Unit 2	3.8	0	10	0	0	0	10
Unit 3	0	0	0	0	0	0	0
Totals	100	0	208	0	16	36	260

FUEL CLADDING INTEGRITY PARAMETERS
DECEMBER 1987

Unit 1

Reactor Water Iodines (uci/sec.)

Date I-131 I-132 I-133 I-134 I-135

Unit in Outage

Fission Gases at Discharge of SJAE (uci/sec)

Date Flow MWt Xe-138 Kr-87 Kr-88 Kr-85m Xe-135 Xe-133

Unit in Outage

Unit 2

Reactor Water Iodines (uci/sec.)

Date I-131 I-132 I-133 I-134 I-135

Unit in Outage

Fission Gases at Discharge of SJAE (uci/sec)

Date Flow MWt Xe-138 Kr-87 Kr-88 Kr-85m Xe-135 Xe-133

Unit in Outage

Unit 3

Reactor Water Iodines (uci/sec.)

Date I-131 I-132 I-133 I-134 I-135

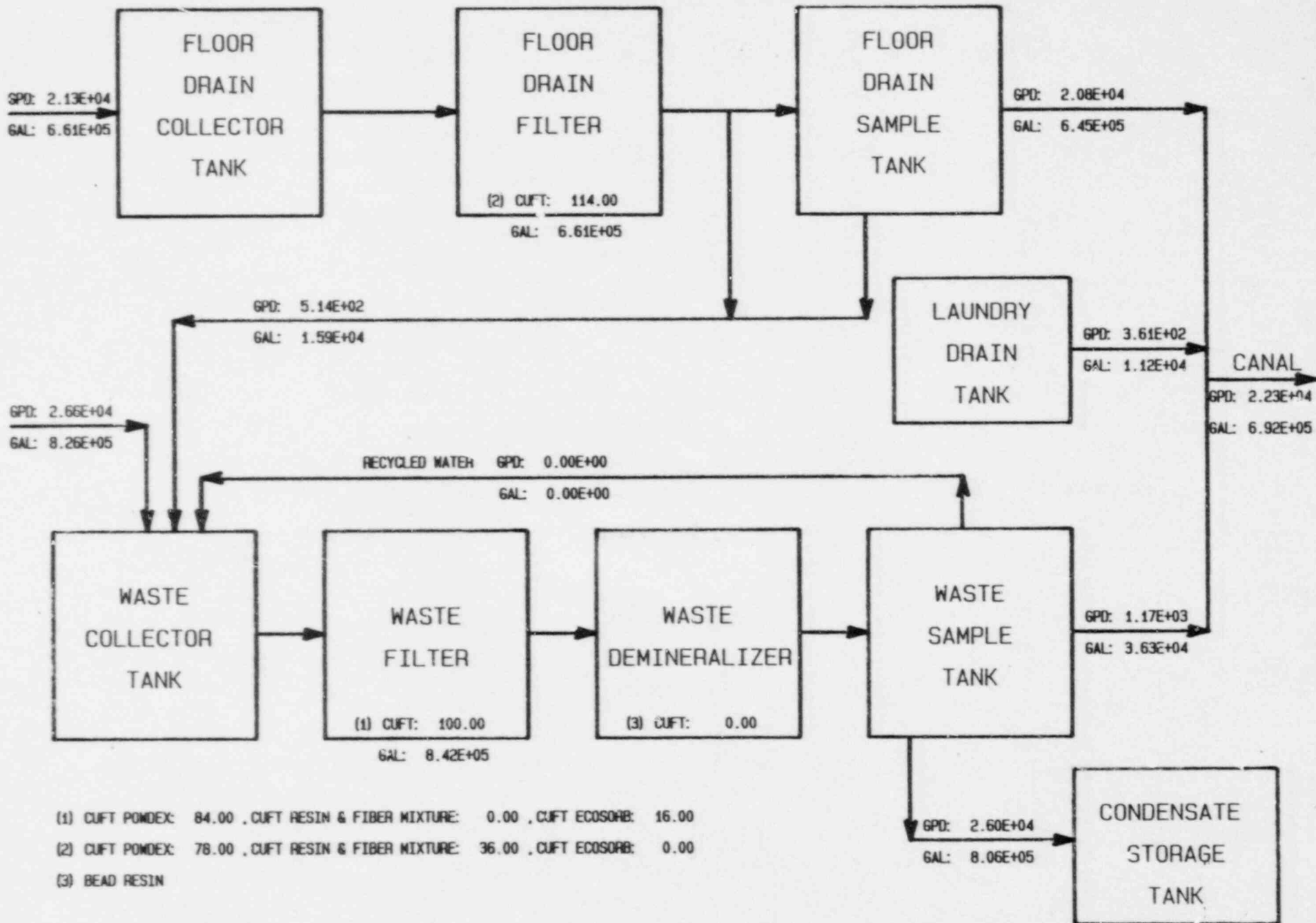
Unit in Outage

Fission Gases at Discharge of SJAE (uci/sec)

Date Flow MWt Xe-138 Kr-87 Kr-88 Kr-85m Xe-135 Xe-133

Unit in Outage

WASTE TREATMENT SYSTEM THROUGHPUTS DECEMBER 1987



(1) CUFT POWDEX: 84.00 , CUFT RESIN & FIBER MIXTURE: 0.00 , CUFT ECOSORB: 16.00
 (2) CUFT POWDEX: 78.00 , CUFT RESIN & FIBER MIXTURE: 36.00 , CUFT ECOSORB: 0.00
 (3) BEAD RESIN

TESTING SUMMARY

DECEMBER 1987

Surveillance Testing

Unit 0

A total of 136 surveillance tests were completed per 48 different test instructions.

Unit 1

A total of 102 surveillance tests were completed on unit 1 per 36 different test instructions.

Unit 2

A total of 167 surveillance tests were completed on unit 2 per 18 different test instructions.

Unit 3

A total of 101 surveillance tests were completed on unit 3 per 23 different test instructions.

Changes, Test, and Experiments Requiring Authorization

From the NRC Pursuant to 10 CFR 50.59(a)

There was one revision for unit 1, 2, and 3 technical specifications.

TESTING SUMMARY (Continued)

DECEMBER 1987

Changes, Tests, and Experiments not Requiring

Authorization from NRC Pursuant to 10 CFR 50.59(a)

There were three special tests completed for this month.

ST-8723 Test Description: To obtain data on the diesel generator excitation system. This data will be used in completing the dynamic analysis of the diesel generator system. (Refer to sections 1.0 and 3.0 for additional description/purpose/test method).

ST-8729 Test Description: Test provides instructions for determining the optimum disposal technique for contaminated mops and rags utilizing the drum compactor.

ST-8735 Test Description: The basis of this special test is SI-4.9.A.1.b.4 diesel generator 'D' emergency load acceptance test. 4KV shutdown board 'D', Diesel generator auxillary board 'B', 480V shutdown board 2B and motor generator sets 2DA and 2EN unloaded will be the loads powered by diesel generator 'D' during this test.

TESTING SUMMARY

DECEMBER 1987

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TESTING SUMMARY (Continued)

DECEMBER 1987

Changes, Tests, and Experiments not Requiring

Authorization from NRC Pursuant to 10 CFR 50.59(a)

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REACTOR VESSEL 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	0.00431
Feedwater nozzle	0.29782	0.21319	0.16139
Closure studs	0.24204	0.17629	0.14360

OPERATIONS SUMMARY (Continued)

DECEMBER 1987

Change in Procedure

There were 130 revisions to plant instructions during the month; 122 instructions were changed primarily for correction, and the remaining 8 revisions related to safe operation of the plant.

Change in Facility Design

Package Number

Description

Safety Related

ECN P5016 - Reactor
Recirculation System -
Unit 2

(WP 2079-35) - Documented the removal of the 4" bypass line and the associated snubbers SS-9 Loop A and B which were removed under ECN L1633. Also, documented the removal of the snubber support brackets which were removed by MRs to facilitate weld overlay repairs.

Based on the results of DNE calculations, the pipe break analysis is still valid, and the seismic analysis was not adversely affected by the modification.

The ECN was completed for unit 2, was previously completed on unit 3 but was only partially implemented on unit 1.

ECN P5309 - Cable Tray Support
System - Unit 2

(WP 2184-85) - Performed modifications required to seismically qualify affected cable tray systems for unit 2 startup and interim operation. This work plan covered the cable tray supports at the Intake Pumping Station and the unit 2 Cable Spreading Room. W. P. 2180-85 covered from the cable tray tunnel (rectangular portion of tunnel from the intake structure to the plant).

The modifications assure that the affected cable trays meet the seismic qualifications of seismic class I cable tray/supports for unit 2 start-up and interim operation.

The ECN was completed.

OPERATIONS SUMMARY (Continued)

DECEMBER 1987

Package Number

Description

Safety Related

ECN P0896 - High Pressure
Fire Protection System -
Unit 2

(WP&IR 2149-86) Prefabricated supports at
ASCOA fab shop for installation in the unit 2
reactor building.

(WP&IR 2150-86) - Installed piping and
supports in the unit 2 reactor buildings,
elevation 592'.

(WP&IR 2098-87) - Fabricated and installed
rigid supports in unit 2 reactor building,
elevation 593'.

The additional pipings, sprinklers, and
supports did not degrade safety related
equipment. Since the modification improved
fire protection in the unit 2 reactor
buildings, the margin of safety was not
reduced.

The ECN was completed.

ECN P0894 - High Pressure
Fire Protection System -
Unit 2

(WP&IR 2144-86) - Installed piping and
supports in the unit 2 reactor building,
elevation 541'.

The additional piping, sprinklers, and
supports did not degrade any safety related
equipment. The modification improved fire
protection in the unit 2 reactor building,
therefore, the margin of safety was not
reduced.

The ECN was completed.

OPERATIONS SUMMARY (Continued)
DECEMBER 1987

Package Number

Description

Safety Related

ECN P0895 - High Pressure
Fire Protection System
Unit 2

(WP&IR 2146-86) - Prefabricated supports at
ASCOA fab shop for installation in unit 2.

(WP&IR 2147-86) - Installed piping and
supports in unit 2 reactor building elevation
565'.

(WP&IR 2097-87) - Fabricated and installed
rigid supports installation in unit 2 reactor
building.

The installation of the automatic sprinklers
provides direct fire protection for equipment
located in unit 2. No reduction in the
margin of safety is foreseen.

The ECN was completed.

OPERATIONS SUMMARY (Continued)
DECEMBER 1987

Package Number

Description _____

Non-Safety Related

ECN P5432 -
Communications Common

(WP&IR-0044-86) - Pulled fiber optic cable from communications in Control Bay to modification building and the new training center.

The ECN was not completed.

DCN B00015A - Plant
Non-Preferred 120V
AC Battery Board-Common

(WP&IR 00...-87) - Replaced 120V time delay relay "W" on the Plant Non-preferred transfer switch with a 240V relay.

The DCN was totally completed.

PLANT INSTRUCTION REVISIONS
DECEMBER 1987

<u>Category</u>	<u>Instruction</u>	<u>Reason for Request</u>
Change in Response to LER, IE Bulletin, NRC Inspection Report, OPQA Audit, etc.	SDSP 2.1 Site Procedures and Instructions	Implement Technical Specification Amendments 138 (U1), 134 (U2), and 109 (U3) providing for Technical Review of certain procedures instead of PORC review.
	SDSP 2.11 Implementation and Change of Site Procedures and Instructions.	Implement Technical Specification Amendments 138 (U1), 134 (U2), and 109 (U3) providing for Technical Review of certain procedures instead of PORC review.
	SDSP 12.1 Restart Test Program	Incorporate SDSP 27.1 Corrective actions for CAQRs BFQ-870534 and BFQ 850541, and procedure improvements from Incident Critique 87-041.
	SDSP 12.2 Development of System Test Specifications	Incorporate SDSP 27.1 Corrective actions for CAQRs BFQ-870534 and BFQ 870541, and procedure improvements from Incident Critique 87-041.
	SDSP 23.2 Radioactive Source Control	Change responsible section from Chemical Technical to RADCON clarification per NRC/C LER 259/87017.
	SI 4.8.B.2-2 Airborne Effluent - Particulate Filter Analysis (monthly gross alpha).	To add attachments for alpha activity calculations and steps to tie the SI to the CI. To delete ITC-02. NRC/C IE report 87-30.
	RWI 151 Verification of Radioactive Waste Package Contents (Non-Compacted)	New procedure to provide for the inspection of radwaste packages containing non-compacted material in order to ensure compliance with all applicable regulations and requirements.
	RWI 152 Verification of Radioactive Waste Package Contents (Compacted)	New procedure to provide for the inspection of radwaste packages containing compacted material in order to ensure compliance with all applicable regulations and requirements.

CHANGES IN PLANT ORGANIZATION

DECEMBER 1987

There were two changes in plant staff for those positions designated as key supervisory positions, Donald E. Hosmer, Project Manager, Site Director's Staff, Mark B. Whitaker, Jr., Manager, Operational Readiness Review Staff.

ACCIDENTS

There was one loss-of-time accidents during the month.