

Operations Summary

November 1985

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

There were five reportable occurrences and three revisions to previous occurrences reported to NRC during the month of November.

Unit 1

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

Unit 2

The unit remained in administrative hold the entire month. The unit is also undergoing its end-of-cycle 5 refueling.

Unit 3

There are 305 full power days estimated remaining until depletion of reactivity. With a capacity factor of 85-percent, the beginning-of-coast-down would be reached August 22, 1986.

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

Prepared principally by B. L. Porter.

Revision

Refueling Information

NOVEMBER 1985

Unit 1

The unit was shut down on March 19, 1985, and remains in cold shutdown because of unfinished modifications to meet environmental concerns. The unit began its sixth refueling on June 1, 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 assemblies in the reactor vessel. The spent fuel storage pool presently contains 252 EOC-5 assemblies, 260 EOC-4 assemblies, 232 EOC-3 assemblies, 156 EOC-2 assemblies, and 168 EOC-1 assemblies. The present fuel pool capacity is 3,471 locations.

Unit 2

Unit 2 was placed on administrative hold to resolve various TVA and NRC concerns. The unit was shut down for its fifth refueling outage on September 15, 1984, with a scheduled restart date of June 1, 1986. This refueling involves loading additional 8x8R (retrofit) assemblies into the core, finishing torus modification, turbine inspection, piping inspection, TMI-2 modifications; postaccident sampling facility tie-ins, core spray change-out, and feedwater sparger inspection.

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

Refueling Information

NOVEMBER 1985

Unit 3

Unit 3 started its environmental qualification outage to comply with NRC requirements December 1, 1985, with a scheduled restart date of March 1987. The unit was shut down on March 9, 1985, and remained in cold shutdown until December 1, 1985, on administrative hold to resolve various TVA and NRC concerns. 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 (10 CFR 50.49), containment modifications (NUREG-0737), electrical changes (Appendix R 10 CFR 50) (all), MSIV modifications, modifications of masonry walls (IEB-80-11), evaluation of vent drains and test connections, VDTs, (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 81-050), radiation monitor modification (LER 80033), replacement of jet pump holddown beam assemblies (IEB-80-07), change out switches in SBT (LER-83-018), EECW carbon to stainless pipe change out, and plant design upgrade to seismic qualification.

There are 764 assemblies presently in the reactor vessel. There are 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 914 locations.

Revision

SIGNIFICANT OPERATIONAL EVENTS

NOVEMBER 1985

Unit 1

11/01/85	0001	Unit remains on administrative hold to resolve various TVA and NRC concerns and end of cycle 6 refueling and modifications continues.
11/30/85	2400	Unit remains on administrative hold to resolve various TVA and NRC concerns and end of cycle 6 refueling and modifications continues.

Revision

SIGNIFICANT OPERATIONAL EVENTS

NOVEMBER 1985

Unit 2

11/01/85	0001	Unit remains on administrative hold to resolve various TVA and NRC concerns and end of cycle 5 refueling and modifications continues.
11/30/85	2400	Unit remains on administrative hold to resolve various TVA and NRC concerns and end of cycle 5 refueling and modifications continues.

Revision

OPERATING DATA REPORT

DOCKET NO. 50-259
 DATE 12/1/85
 COMPLETED BY T. Thom
 TELEPHONE (205) 729-2509

OPERATING STATUS

1. Unit Name: Browns Ferry One
 2. Reporting Period: November 1985
 3. Licensed Thermal Power (MWt): 3293
 4. Nameplate Rating (Gross MWe): 1152
 5. Design Electrical Rating (Net MWe): 1065
 6. Maximum Dependable Capacity (Gross MWe): 1098.4
 7. Maximum Dependable Capacity (Net MWe): 1065
 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>720</u>	<u>8,016</u>	<u>99,416</u>
12. Number Of Hours Reactor Was Critical	<u>0</u>	<u>1,647.78</u>	<u>59,521.38</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>512.22</u>	<u>6,997.44</u>
14. Hours Generator On-Line	<u>0</u>	<u>1,626.67</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>4,950,821</u>	<u>168,066,787</u>
17. Gross Electrical Energy Generated (MWH)	<u>0</u>	<u>1,652,650</u>	<u>55,398,130</u>
18. Net Electrical Energy Generated (MWH)	<u>-5,596</u>	<u>1,546,769</u>	<u>53,760,590</u>
19. Unit Service Factor	<u>0</u>	<u>20.3</u>	<u>58.6</u>
20. Unit Availability Factor	<u>0</u>	<u>20.3</u>	<u>58.6</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>18.1</u>	<u>50.8</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>18.1</u>	<u>50.8</u>
23. Unit Forced Outage Rate	<u>*100</u>	<u>*79.7</u>	<u>*27.8</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: July 14, 1986
 26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

Forecast	Achieved
_____	_____
_____	_____
_____	_____

* Revision

OPERATING DATA REPORT

DOCKET NO. 50-260
 DATE 12/1/85
 COMPLETED BY T. Thom
 TELEPHONE (205) 729-2509

OPERATING STATUS

1. Unit Name: Browns Ferry Two
 2. Reporting Period: November 1985
 3. Licensed Thermal Power (MWt): 3293
 4. Nameplate Rating (Gross MWe): 1152
 5. Design Electrical Rating (Net MWe): 1065
 6. Maximum Dependable Capacity (Gross MWe): 1098.4
 7. Maximum Dependable Capacity (Net MWe): 1065
 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>720</u>	<u>8,016</u>	<u>94,303</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>-4,240</u>	<u>-32,150</u>	<u>49,270,823</u>
19. Unit Service Factor	<u>0</u>	<u>0</u>	<u>57.6</u>
20. Unit Availability Factor	<u>0</u>	<u>0</u>	<u>57.6</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0</u>	<u>0</u>	<u>49.1</u>
22. Unit Capacity Factor (Using DER Net)	<u>0</u>	<u>0</u>	<u>49.1</u>
23. Unit Forced Outage Rate	<u>*100</u>	<u>*100</u>	<u>*25.2</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: June 1986

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>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1985

DOCKET NO. 50-259
 UNIT NAME One
 DATE 12/1/85
 COMPLETED BY T. Thom
 TELEPHONE (205) 729-2509

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.)	11/1/85	*F	720	*P	*4				* Administrative hold to resolve various TVA and NRC concerns.

¹
 F: Forced
 S: Scheduled

*Revision

(9/77)

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