

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Browns Ferry - Units 1 and 2	DOCKET NUMBER (2) 0 5 0 0 0 2 5 9	PAGE(S) 1 OF 0 2
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TITLE (4)
Failure to Meet Design Basis for Cable Separation

EVENT DATE (5)			LER NUMBER (8)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
0	5	0	5	8	4	8	4	0	Browns Ferry Unit 2		0 5 0 0 0 2 6 10
0	5	0	5	8	4	0	2	1			0 5 0 0 0

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENT(S) OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) 1 0 0	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)						
	20.406(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)						
	20.406(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	20.406(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)							
	20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(vii)(B)							
20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)								

LICENSEE CONTACT FOR THIS LER (12)

NAME B. L. Bartlett	TELEPHONE NUMBER
	AREA CODE: 2 0 5 7 2 9 1 - 10 7 18 18

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)
		0 9 0 3 8 4

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

Browns Ferry's Final Safety Analysis Report, Sections 10.11 and 8.9, and the Browns Ferry Fire Recovery Plan (Part X, Section A, Paragraph 3.1.2) require the cables for the relief valves assigned to the automatic depressurization system to be separated from the cables for nonautomatic depressurization system relief valves, and that the cables for the high pressure coolant injection system be separated from the cables for the automatic depressurization system. Due to design errors during the recovery modification, after the 1975 Browns Ferry fire this separation was not fully achieved. During a later modification, the separation which had been achieved was degraded. This error was found by TVA's Engineering Design group during the 10 CFR 50, Appendix R evaluation and was reported by a nonconformance report.

Immediate corrective action was to place fire watches in the areas of inadequate separation, placing into effect administrative controls regarding relief valve operability, and issuing changes to operating instructions regarding a fire in the affected areas.

Modifications were completed on May 24, 1984 to ensure that at least four relief valves would be operable during or after a fire in the area for Unit 2.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Browns Ferry - Unit 1 and 2	DOCKET NUMBER (2) 0 5 0 0 0 2 5 9 8 4	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		84	021	00	02	OF 02

TEXT (If more space is required, use additional NRC Form 366A's) (17)

Unit 1 was at 100-percent power, unit 2 was at 61-percent power, and unit 3 was in a refueling outage. Only units 1 and 2 were affected by this event.

At 2115 on May 5, 1984, it was determined that: (1) Cabling (CBL) for the main steam relief valves (RV) assigned to the automatic depressurization system was not adequately separated from cabling for nonautomatic depressurization system main steam relief valves. (2) Cabling for the high pressure coolant injection (BJ) system was not adequately separated from automatic depressurization system cabling. This is contrary to the design basis of Final Safety Analysis Report, Sections 10.11 and 8.9, and the Browns Ferry Fire recovery plan (Part X, Section A, paragraph 3.1.2). These errors were discovered during TVA's design review for 10 CFR 50, Appendix R evaluation and recorded by a nonconformance report to the site.

Immediate corrective action was to establish a fire watch at 2300 on May 8, 1984 at the areas of inadequate separation.

An evaluation had previously determined that four relief valves are adequate to achieve safe shutdown in the event of a fire. Administrative controls were initiated to identify the particular valves which would be available and operating instructions revised accordingly; these actions were completed May 10, 1984.

It was subsequently determined that four relief valves on Unit 1 were adequately separated and could be operated from either the control room or the backup control center in the event of a fire. Modifications on Unit 2 were completed May 24, 1984 to achieve adequate separation in accordance with the fire recovery plan and to provide a minimum of four operable relief valves in the event of a fire. Fire watches were removed, but were later reestablished after discussions with NRC Region II. Evaluation of this problem continues.

This situation was caused by design error during recovery from the 1975 Browns Ferry fire and further complicated by later modification.

This error was found by TVA's Engineering Design group as part of the Appendix R review which is ongoing. A followup report will be submitted in about 90 days.

Safety Analysis

A similar design error was identified in three other boiling water reactors as noted in Inspection and Enforcement Notice 79-32. As identified for those plants there is no significant decrease in the health and safety of the public.

Responsible Plant Section - ED

Previous Similar Events - None

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

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

June 4, 1984

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

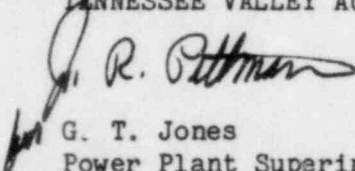
Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET
NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - REPORTABLE OCCURRENCE
REPORT BFRO-50-259/84021

The enclosed report provides details concerning failure to meet design
basis for cable separation. This report is submitted in accordance with 10
CFR 50.73 (a)(2)(ii).

Very truly yours,

TENNESSEE VALLEY AUTHORITY



G. T. Jones
Power Plant Superintendent
Browns Ferry Nuclear Plant

Enclosure

cc (Enclosure):
Regional Administrator
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region II
101 Marietta Street, Suite 2900
Atlanta, GA 30303

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, GA 30339

NRC Inspector, Browns Ferry Nuclear Plant

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