

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Browns Ferry - Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 2 5 9										PAGE (3) 1 OF 0 2							
TITLE (4) Underdesigned Emergency Equipment Cooling Water Vacuum Priming Valve																											
EVENT DATE (5)						LER NUMBER (6)						REPORT DATE (7)						OTHER FACILITIES INVOLVED (8)									
MONTH		DAY		YEAR		YEAR		SEQUENTIAL NUMBER		REVISION NUMBER		MONTH		DAY		YEAR		FACILITY NAMES									
0 2		2 1		8 4		8 4		0 1 5		0 0		0 3		0 9		8 4		Browns Ferry - Unit 2									
0 2		2 1		8 4		8 4		0 1 5		0 0		0 3		0 9		8 4		Browns Ferry - Unit 3									
OPERATING MODE (9)		N		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)																							
POWER LEVEL (10)		0 0 0		20.402(b)						20.406(c)						50.73(e)(2)(iv)						73.71(b)					
				20.406(a)(1)(i)						50.36(e)(1)						50.73(e)(2)(v)						73.71(c)					
				20.406(a)(1)(ii)						50.36(e)(2)						50.73(e)(2)(vii)						OTHER (Specify in Abstract below and in Text, NRC Form 305A)					
				20.406(a)(1)(iii)						50.73(e)(2)(i)						50.73(e)(2)(viii)(A)											
				20.406(a)(1)(iv)						50.73(e)(2)(ii)						50.73(e)(2)(viii)(B)											
				20.406(a)(1)(v)						50.73(e)(2)(iii)						50.73(e)(2)(ix)											
LICENSEE CONTACT FOR THIS LER (12)																											
NAME David L. Smith												TELEPHONE NUMBER AREA CODE 2 0 5 7 2 9 1 - 1 0 8 1 5															
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs																	
B	B I	I V I T V	N I O I I O	Y																							
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH		DAY		YEAR									
YES (If yes, complete EXPECTED SUBMISSION DATE)												X NO															

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

During Engineering Design's evaluation for residual heat removal service water and emergency equipment cooling water performance on February 20, 1984, it was discovered that the emergency equipment cooling water vacuum priming valve was not qualified for its application. The north header only was affected. (The south header has no vacuum priming valve.) The vacuum priming valve has been in operation for over ten years without its valve body failing due to system pressure. The vacuum priming valve has now been isolated along with administrative controls requiring at least one emergency equipment cooling water pump to operate at all times; thus minimizing the need for the vacuum priming valve on the north header (since the header is charged with water.) The long term solution will be to replace the valve with a qualified one.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Browns Ferry - Unit 1	0 5 0 0 0 2 5 9	8 4	— 0 1 5	— 0 0	0 2	OF	0 2

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

Unit 1 was in cold shutdown, unit 2 was in cold shutdown, and unit 3 was in a refueling outage. This event affected all three units.

During an ongoing design review of plant systems due to previous nonconforming items (LER BFRO-5C-259/84013), it was discovered that the emergency equipment cooling water (BI) vacuum priming valve (VTV) on the north header (one of two such headers; the other header not having a vacuum priming valve) was underdesigned for system pressure. The valve is an iron body, bronze trim, Nash J-36096, with a rating of 20 psi differential pressure. The system where the valve is used has a pressure of 185 psig.

Although the valve was underdesigned for its intended function, it was in service for over 10 years without valve body failures. A failure could have resulted in reduced flow to components served by EECW. The valve will be upgraded with the proper pressure rated valve; however, in the interim, the valve has been isolated from the header. In this condition, with the header charged with water, only one pump (P) will be run continuously for header supply minimizing the possibility of intrapped system air. In this alignment, the emergency equipment cooling water system is fully operational.

Responsible Plant Section - ED

Previous Similar Events - None

TENNESSEE VALLEY AUTHORITY

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

March 9, 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-50-259/84015

The enclosed report provides details concerning underdesigned emergency
equipment water vacuum priming valve. This report is submitted in
accordance with 10 CFR 50.73 (a)(2)(iii).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. E. Swindell

for 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

NRC Inspector, Browns Ferry Nuclear Plant

IE-22

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