

Previous Report Date 8/9/85

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8-31-88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1): Browns Ferry - Unit 3	DOCKET NUMBER (2): 0 5 0 0 0 2 9 6	PAGE (3): 1 OF 0 3
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TITLE (4):

Failed Supports on the Residual Heat Removal System

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	DOCKET NUMBER(S)							
0	7	1	6	8	5	8	5	0	1	7	0	5	0	0	0		
0	7	1	6	8	5	8	5	0	1	7	0	5	0	0	0		

OPERATING MODE (9): N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11):									
POWER LEVEL (10): 01010	20.402(b)	20.405(e)	50.73(a)(2)(i)	73.71(b)						
	20.405(a)(1)(i)	50.36(e)(1)	50.73(a)(2)(iv)	73.71(c)						
	20.405(a)(1)(ii)	50.36(e)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A):						
	20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)							
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)							
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME: Patrick N. Ebersole, Compliance Engineer	TELEPHONE NUMBER: AREA CODE: 210 5 712 91 - 317 818
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
X	DK	BKIRG	0810	Y					
X	BO	HT	11412	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (if yes, complete EXPECTED SUBMISSION DATE):	X NO	EXPECTED SUBMISSION DATE (15):	MONTH	DAY	YEAR

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

On July 16, 1985, while in cold shutdown, loop I of the unit 3 residual heat removal (RHR) system was declared inoperable following discovery of a broken hanger and a damaged snubber on the torus return line. Technical Specifications require that two RHR pumps and their associated diesel generator be operable when irradiated fuel is in the reactor, and the vessel pressure is atmospheric. One of the diesel generators associated with the loop II RHR pumps had been previously declared inoperable due to a failed generator field breaker. Maintenance activities were immediately initiated to return the inoperable diesel to service. The supports for the 18-inch test return line were repaired and returned to service on July 27, 1985. An engineering evaluation is continuing to determine the cause of the damaged hangers.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8-31-86

FACILITY NAME (1) Browns Ferry - Unit 3	DOCKET NUMBER (2) 0500029685-0117-0103 OF 03	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (If more space is required, use additional NRC Form 365A's) (17)

Following discovery and repair of the damaged supports on the RHR system, vibration data was taken while the unit was in shutdown cooling in order to find system operational parameters that would minimize the vibration to the system piping. Results were obtained and guidelines for operation in shutdown cooling were incorporated into the RHR system operating instructions for unit 3.

Shutdown cooling operations for unit 3 are now being conducted in accordance with these guidelines. This study also revealed that vibration of the RHR system piping on unit 3 is much higher on loop I of the RHR piping where the failure occurred than on loop II.

In order to ensure that this vibration has not caused problems elsewhere in the RHR system an analysis of the RHR system piping was performed. This analysis selected areas of high vibration induced stress. Subsequent dye penetrant examination of these areas on both loops of the injection piping has revealed no further problems. Therefore, it has been determined that no other vibration induced damage to the RHR system piping has occurred.

To reduce the amount of vibration present in the RHR injection line to acceptable levels a modification to the injection valve is being implemented. This change replaces the present valve disc to one that is designed to reduce the vibration present during shutdown cooling operation. This modification has been completed on both injection valves on unit 1 and the loop II injection valve on unit 2. The remaining injection valve on unit 2 is presently being replaced and both valves on unit 3 will be replaced prior to returning unit 3 to service. Following replacement of the valve disks on unit 3, vibration data will be obtained to ensure that vibration in the RHR system piping is within acceptable levels.

Responsible Plant Section - N/A

Previous Events - None

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

January 14, 1986

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

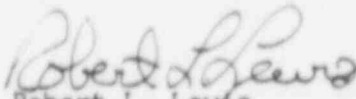
Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 3 - DOCKET
NO. 50-296 - FACILITY OPERATING LICENSE DPR-68 - REPORTABLE OCCURRENCE
REPORT BFRO-50-296/85017 R1

The enclosed report provides details concerning failed supports on the
residual heat removal system. This report is submitted in accordance
to 10 CFR 50.73 (a)(2)(i).

Very truly yours,

TENNESSEE VALLEY AUTHORITY


Robert L. Lewis
Plant Manager
Browns Ferry Nuclear Plant

Enclosures

cc (Enclosures):

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NRC Resident Inspector, Browns Ferry Nuclear Plant

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