

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 2
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TITLE (4)
Inadvertent Initiation of Safety Systems During Surveillance Testing

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)																																			
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">OPERATING MODE (9) N</td> <td colspan="11">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)</td> </tr> <tr> <td rowspan="5">POWER LEVEL (10) 0 0 0</td> <td><input type="checkbox"/> 20.402(b)</td> <td><input type="checkbox"/> 20.406(c)</td> <td><input checked="" type="checkbox"/> 50.73(a)(2)(iv)</td> <td><input type="checkbox"/> 73.71(b)</td> </tr> <tr> <td><input type="checkbox"/> 20.406(a)(1)(i)</td> <td><input type="checkbox"/> 50.38(e)(1)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)</td> <td><input type="checkbox"/> 73.71(c)</td> </tr> <tr> <td><input type="checkbox"/> 20.406(a)(1)(ii)</td> <td><input type="checkbox"/> 50.38(e)(2)</td> <td><input type="checkbox"/> 50.73(a)(2)(vii)</td> <td rowspan="3">OTHER (Specify in Abstract below and in Text, NRC Form 366A)</td> </tr> <tr> <td><input type="checkbox"/> 20.406(a)(1)(iii)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(A)</td> </tr> <tr> <td><input type="checkbox"/> 20.406(a)(1)(iv)</td> <td><input type="checkbox"/> 50.73(a)(2)(ii)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(B)</td> </tr> <tr> <td><input type="checkbox"/> 20.406(a)(1)(v)</td> <td><input type="checkbox"/> 50.73(a)(2)(iii)</td> <td><input type="checkbox"/> 50.73(a)(2)(x)</td> <td></td> </tr> </table>												OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											POWER LEVEL (10) 0 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.406(c)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)	<input type="checkbox"/> 20.406(a)(1)(i)	<input type="checkbox"/> 50.38(e)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)	<input type="checkbox"/> 20.406(a)(1)(ii)	<input type="checkbox"/> 50.38(e)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)	<input type="checkbox"/> 20.406(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 20.406(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 20.406(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	
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LICENSEE CONTACT FOR THIS LER (12)

NAME Pat Ebersole	TELEPHONE NUMBER
	AREA CODE 2 0 5 7 2 9 - 3 7 8 8

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)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1,000 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

During the unit 3 hydrostatic test of the reactor pressure vessel a test of the instrument line high flow check valves was performed (surveillance instruction 4.7.D.1.d). During this test, valving errors caused an erroneous low vessel signal which resulted in the inadvertent starting of the residual heat removal pumps, core spray pumps, and emergency diesel generators on two separate occasions. Neither event resulted in an injection to the vessel from RHR or core spray pumps. The first event occurred when test personnel did not properly isolate all instruments affected by the excess flow check valve being tested. The second event occurred when an excess flow check valve was removed for maintenance without fully isolating all affected instruments.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR		INITIAL NUMBER	REVISION NUMBER		
				0 0 9 -	0 0	0 2	OF 0 2

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

Unit 1 was operating at 100 percent power, and units 2 and 3 were in scheduled refueling outages. With unit 3 shutdown, during the hydrostatic test of the reactor pressure vessel, a test of the instrument line excess flow check valves was being performed in accordance with technical specification 4.7.D.1.d.

During the performance of this test and subsequently during maintenance on these excess flow check valves, failure to properly isolate affected instrumentation resulted in false low reactor level indication and subsequent initiation of residual heat removal pumps, core spray pumps, and the emergency diesel generators. Inadvertent operation of these devices is not a safety problem since their availability is not affected. There are operational concerns related to maintaining vessel water cleanliness. In these instances, however, the reactor pressure was greater than 500 psig which prevented injection to the vessel from the residual heat removal or the core spray systems.

On 9/13/84 an erroneous low reactor level signal caused an initiation of these engineered safety systems. This initiation occurred as a result of maintenance personnel not isolating all of the instruments that were affected by the valve that was being tested. Involved personnel were counseled as to the importance of strict compliance with written procedures.

On 9/15/84 an excess flow check valve was isolated to inspect and clean its internals. Failure to isolate the level instrumentation associated with this flow check valve again caused an erroneous vessel level to be received and resulted in the auto initiation of these engineered safety systems. The maintenance instruction that was in effect at the time that this repair was being made had no reference as to the importance of isolating the affected instruments while a repair or inspection was being performed on one of these excess flow check valves. This instruction, MMI 123, is being revised to assure that instruments associated with these flow check valves have been isolated when any maintenance is to be performed on these valves.

During this test, eight of the instrument line excess flow check valves exhibited leakage which required maintenance consisting of disassembly and cleaning. These valves are manufactured by the Marotta Valve Corporation and are designed to go closed at a flow in the instrument line of approximately 2 gpm. These valves were then reassembled and successfully passed a leakage test. Unit 3 has been in a refueling outage for over a year which may have contributed to the additional maintenance requirements.

Responsible Plant Section - IM, MM

PNE:BDL
October 12, 1984

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

October 12, 1984

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

Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT (BFN) UNIT 3 -
DOCKET NO. 50-296 - FACILITY OPERATING LICENSE DPR-09 - REPORTABLE
OCCURRENCE REPORT BFRO-50-296/84009

The enclosed report provides details that concern the inadvertent
initiation of safety systems during surveillance testing. This report is
submitted in accordance with 10 CFR 50.73 (a)(2)(iv).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

G. T. Jones
6- G. T. Jones
Plant Manager
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, Georgia 30303

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

NRC Resident Inspector, BFN

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