NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Browns Ferry Unit 1	0 5 0 0 0 2 5 9	1 OF 0 3

TITLE (4)
Unplanned Standby Gas Treatment Actuation Due to Personnel Error

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)
									Browns Ferry Unit 2	0 5 0 0 0 2 6 0
0 6	0 4	8 8	8 8	0 1 7	0 0	0 7	0 1	8 8	Browns Ferry Unit 3	0 5 0 0 0 2 9 6

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
	N	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 0 0	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Stephen C. Willard, Engineer, Plant Operations Review Staff	2 0 5 7 2 9 - 1 2 5 3 6

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)		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)

On June 4, 1988, at 2015 hours, with all three units defueled the C train of standby gas treatment (SBGT) actuated while the system was being returned to service following maintenance. The train was immediately stopped and placed in standby readiness.

The engineer directing the maintenance had erroneously instructed the craft personnel to change the state of a latching relay (labeled MCX) in the train's control circuit. The relay was manually put in the actuate (or operate) state by the craft personnel, as instructed, thereby allowing train actuation upon supply breaker closure. The engineer made an erroneous assumption concerning operation of this relay.

The Shift Operations Supervisor (SOS) was notified prior to the event of a possible engineered safety feature actuation because the maintenance engineers were unsure of the relay state. The SOS directed the main control room hand switch for the SBGT train be placed in pull-to-lock believing that to be an absolute control over train actuation. The relay in question is located downstream of the pull-to-lock contacts and was not affected by the action.

Maintenance engineers will receive information on these events. Operators will receive information on these events and pull-to-lock logic. The breaker maintenance procedure and the SBGT system operating instruction will be revised to add more detail defining the states of the MCX relay. Additional information will also be provided in the operating instruction concerning the pull-to-lock logic.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Browns Ferry Unit 1	0 5 0 0 0 2 5 9	8 8	0 1 7	0 0	0 2 OF 0 3

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

DESCRIPTION OF EVENT

Browns Ferry units 1, 2, and 3 were defueled during this event. The standby gas treatment (SBGT) system (EIIS code BH) is common to all three units.

On June 4, 1988, at 2015 hours, the C train of SBGT actuated while the system was being returned to service following maintenance. The train was immediately stopped and placed in standby readiness.

The engineer directing the maintenance had erroneously instructed the craft personnel to change the state of a latching relay (labeled MCX) in the train's control circuit. The relay was manually put in the actuate (or operate) state by the craft personnel, as instructed, thereby allowing train actuation upon supply breaker closure.

The Shift Operations Supervisor (SOS) was notified prior to the event of a possible engineered safety feature actuation because the maintenance engineers were unsure of the relay state. The SOS directed the main control room hand switch for the SBGT train be placed in pull-to-lock believing that to be an absolute control over train actuation. The relay in question is located downstream of the pull-to-lock contacts and was not affected by the action.

CAUSE OF EVENT

The SBGT train actuated because the MCX relay was latched in the actuate state when the power supply breaker was closed. The engineer directing the maintenance had erroneously instructed the craft personnel to place the relay in the actuate state. The engineer made an erroneous assumption concerning operation of this relay.

CORRECTIVE ACTION

Maintenance engineers will receive information on these events. Operators will receive information on these events and pull-to-lock logic. The breaker maintenance procedure and the SBGT system operating instruction will be revised to add more detail defining the states of the MCX relay. Additional information will also be provided in the operating instruction concerning the pull-to-lock logic.

ANALYSIS OF EVENT

SBGT is designed to limit the release of radioactivity from secondary containment to the environment following an accident by providing a

controlled, filtered, and elevated release path. There are no other systems which perform this same function.

The actuation of this SBGT train was a successful completion of its design function. It placed the SBGT train in a conservative configuration and did not adversely affect other plant systems, plant operations, or safe shutdown capabilities. Neither the plant's response nor the safety implications would be significantly altered should this occur during power operations.

The train was stopped and returned to standby readiness immediately.

PREVIOUS SIMILAR EVENTS - BFRO-50-259/88009

COMMITMENTS - Maintenance engineers will receive information on these events.

- Operators will receive information on these events and pull-to-lock logic.

- The breaker maintenance procedure and the SBGT system operating instuction will be revised to add more detail defining the states of the MCX relay. Additional information will also be provided in the operating instruction concerning the pull-to-lock logic.

TENNESSEE VALLEY AUTHORITY
Browns Ferry Nuclear Plant
Post Office Box 2000
Decatur, Alabama 35602

JUL 02 1988

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-50-259/88017

The enclosed report provides details concerning the unplanned standby gas treatment train actuation due to personnel error. This report is submitted in accordance with 10 CFR 50.73 (a)(2)(iv).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

John Walker

J. G. Walker
Plant Manager
Browns Ferry Nuclear Plant

Enclosures
cc (Enclosures):
Regional Administration
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, Browns Ferry Nuclear Plant

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