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O. J. "Ike" Zeringue  
Vice President, Browns Ferry Operations

OCT 14 1992

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

Dear Sir:

TVA - BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2, AND 3 - DOCKET NOS. 50-259,  
260, AND 296 - FACILITY OPERATING LICENSE DPR-33, 52, AND 68 - LICENSEE EVENT  
REPORT (LER) 50-259/92004

The enclosed report provides details concerning an unplanned engineered safety  
feature actuation that occurred as a result of a spike on the control room  
ventilation radiation monitor. This report is submitted in accordance with  
10 CFR 50.73(a)(2)(iv).

Sincerely,

for O. J. Zeringue

Enclosure  
cc: See page 2

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U.S. Nuclear Regulatory Commission

OCT 14 1992

cc (Enclosure):

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## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Browns Ferry Nuclear Plant (BFN) Unit 1										DOCKET NUMBER (2) 01510101215191101015		PAGE (3) 015							
TITLE (4) Unplanned Engineered Safety Feature Actuation Due to a High Radiation Spike on the Control Room Ventilation Radiation Monitor.																			
EVENT DAY (5)				LER NUMBER (6)				REPORT DATE (7)				OTHER FACILITIES INVOLVED (8)							
				SEQUENTIAL MONTH DAY YEAR YEAR 019114912912				REVISION NUMBER NUMBER 004001014912				FACILITY NAMES BFN Unit 2 BFN Unit 3							
OPERATING MODE (9) N				THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5:								DOCKET NUMBER(S) 0151010121610							
				(Check one or more of the following)(11)															
20.402(b)				20.405(c)				X 50.73(a)(2)(iv)				73.71(b)							
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							
20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(viii)(A)				Abstract below and in							
20.405(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)				Text, NRC Form 366A)							
20.405(a)(1)(v)				50.73(a)(2)(i)				50.73(a)(2)(x)											
LICENSEE CONTACT FOR THIS LER (12)																			
NAME Clare Hsieh, Compliance Licensing Engineer										TELEPHONE NUMBER 210571291-2161315									
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	
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)									
YES (If yes, complete EXPECTED SUBMISSION DATE) X NO																			

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

On September 14, 1992, at 2055 hours, with Units 1 and 3 defueled and Unit 2 at approximately 100 percent power, a control room ventilation isolation occurred when both control room emergency ventilation (CREV) trains inadvertently initiated. The initiation was due to a spike above the upscale setpoint on the Unit 1 control room ventilation radiation monitor. No high radiation levels were present. This event is reportable in accordance with 10 CFR 50.73(a)(2)(iv) due to an unplanned engineered safety feature (ESF) actuation.

The spike on the control room ventilation radiation monitor was confirmed by checking its recorder. At 2225 hours the ESF isolation/initiation was reset and the CREV system returned to normal. The root cause of the spike has not been determined. TVA's investigation determined that the spike was not due to the keying of radios or vibrations caused by personnel working in the monitor area.

A walkdown of the cable routing to the control room ventilation radiation monitor was performed. The cables in the monitor may be deficient and are presently suspect. TVA will test the monitor cables to verify their adequacy. Additionally, TVA will evaluate the feasibility of incorporating a time delay for the CREV high radiation trips.

**LICENSEE EVENT REPORT (LER)**  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)
		SEQUENTIAL	REVISION
Browns Ferry Unit 1		YEAR	NUMBER
	01501002	15 9 9 2	004 000 02 OF 05

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

**I. PLANT CONDITIONS**

Browns Ferry Units 1 and 3 were in a defueled condition. Unit 2 was at approximately 100 percent power. There was no work in progress on the equipment involved at the time of the event.

**II. DESCRIPTION OF EVENT**

**A. Event:**

On September 14, 1992, at 2055 hours, a control room ventilation isolation occurred when both control room emergency ventilation (CREV) [VI] trains inadvertently initiated. The initiation was due to a spike above the upscale setpoint on the Unit 1 control room ventilation radiation monitor [1L] 0-RM-90-259A. No actual high radiation levels were present and the radiation monitor level indications returned to normal immediately. The redundant control room ventilation radiation monitor 3-RM-90-259B was unaffected. All required alarms and equipment actuations were received as expected.

The spike on the control room ventilation radiation monitor was confirmed by checking its recorder. The Shift Operation Supervisor (SOS) (utility, licensed) performed a walkdown in the area of the monitor. No keying of two-way radios or vibrations from personnel working in the monitor area were found to have caused the spike. At 2225 hours the isolation/initiation was reset and the CREV returned to normal.

This event is reported in accordance with 10 CFR 50.73(a)(2)(iv) as an event or condition that resulted in a manual or automatic actuation of P.A. ESF.

**B. Inoperable Structures, Components, or Systems that Contributed to the Event:**

None.

**C. Dates and Approximate Times of Major Occurrences:**

September 14, 1992 at 2055 CDST	Control Room High Radiation Isolation and CREV Initiation.
September 14, 1992 at 2225 CDST	Isolation/Initiation reset and CREV units secured.
September 14, 1992 at 2305 CDST	A four hour report was made to the NRC in accordance with 10 CFR 50.72(b)(2)(ii).

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)
Browns Ferry Unit 1		SEQUENTIAL REVISION	
	YEAR	NUMBER	NUMBER
	05000259	91200400	03 OF 05

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

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	NUMBER	REVISION	NUMBER	OF	PAGES
Browns Ferry Unit 1	105100021519912	00	4	0	0	4	5

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

#### IV. ANALYSIS OF THE EVENT

The radiation monitor is designed to fail in the safe condition and subsequently cause initiation of the isolation logic. Since the initiation occurred as designed, this event had no safety significance.

#### V. CORRECTIVE ACTIONS

##### A. Immediate Corrective Actions:

1. The SOS immediately performed a walkdown of the area. There were no personnel working in the direct area of the monitor and no radios were present.
2. TVA attempted to recreate spiking on the monitor by duplicating the exact system configuration immediately before the event. No spiking was observed.
3. A work request was initiated to investigate the spike on the control room ventilation radiation monitor.

##### B. Corrective Actions to Prevent Recurrence:

A detailed walkdown of the cable routing to the control room ventilation radiation monitor was performed. The cables in the monitor may be deficient and are presently suspect. TVA will test the monitor cables to verify their adequacy.

In addition, TVA will evaluate the feasibility of incorporating a time delay for the CREV high radiation trips.

#### VI. ADDITIONAL INFORMATION

##### A. Failed Components:

None.

##### B. Previous LERs on Similar Events:

BFN has had a history of radiation monitor spiking resulting from RFI and vibrations/bumping. However, this event was not caused by vibrations due to personnel working in the monitor area or keying of radios. Extensive troubleshooting failed to identify a conclusive cause.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)
		SEQUENTIAL	REVISION
Browns Ferry Unit 1		YEAR	NUMBER
	105101012 15 19 19 12	0 0 4	0 0 0 5 OF 0 5

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

VII. COMMITMENTS

TVA will test the control room ventilation radiation monitor cables to verify their adequacy by November 7, 1992.

TVA will evaluate the feasibility of incorporating a time delay for the CREV high radiation trips by December 29, 1992.

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].