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Joseph R. Bynum
Vice President, Nuclear Operations

FEB 14 1991

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

Dear Sir:

TVA - BROWNS FERRY NUCLEAR PLANT (BFN) UNIT 1 - DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - REPORTABLE OCCURRENCE REPORT BFRO-50-259/90021 R1

The enclosed report provides details concerning a violation of technical specifications that occurred when personnel performing roving fire watch duties could not enter an area. This report is submitted in accordance with 10 CFR 50.73(a)(2)(i)(B).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. R. Bynum

Enclosure
cc: see page 2

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U.S. Nuclear Regulatory Commission

FEB 14 1991

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NRC Form 366 (6-89) U. NUCLEAR REGULATORY COMMISSION

Approved OMB No. 3150-0104
Expires 4/30/92

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 4

TITLE (4) Hourly Fire Watch Could Not Enter Vital Area, Placing the Plant in Violation of Technical Specifications

EVENT DAY (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 9	2 7	9 0	9 0	0 2 1	0 1	0 2	1 4	9 1		0 5 0 0 0

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	20.402(b)	20.405(c)	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 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)(x)			

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (AREA CODE)
Steve Austin Compliance Engineer	2 0 5 7 2 9 - 2 0 4 9

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 December 22, 1990, it was determined that on September 27, 1990, proper compensatory actions had not been taken for fire protection detection systems out of service when an hourly roving fire watch could not enter "A" 4160V shutdown board room to perform a visual inspection of the area, thus violating technical specifications.

The cause of this event was procedural deficiency. At the time of the event, Procedure, Fire Protection Program-2 (FPP-2), "Fire Protection Attachments," did not specify a method to detect a fire behind a closed door.

FPP-2 has been revised with specific steps that are required to be taken when personnel performing fire watch duties encounter an unusual or unexpected situation.

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

DESCRIPTION OF EVENT

On December 22, 1990, it was determined that on September 27, 1990, proper compensatory actions had not been taken for fire protection detection systems [IC] out of service when an hourly fire watch could not enter "A" 4160V shutdown board room [NA] to perform a visual inspection of the area, thus violating technical specifications.

On September 27, 1990 at 1955 hours, the "A" 4160V shutdown board room was inspected by an hourly roving fire watch as required by compensatory measures for a fire protection equipment and barrier penetration removal from service permit (Attachment F).

At 2050 hours, the "A" 480V diesel auxiliary board [ED] was returned to its normal power supply during a planned evolution. Transfer of the "A" 480V diesel auxiliary board will cause a loss of the security card reading [IA] system, and for this planned evolution, security was required to manually lock vital area doors. Upon arriving at the locked door of "A" 4160V shutdown board room, the fire watch verified the temperature of the door surface was normal and, from the outward flow of air, there was no fire.

At 2130 hours, the fire watch returned to "A" 4160V shutdown board room, entered the room, and visually verified that no fire had occurred.

During this event, units 1, 2, and 3 were defueled. Failure to properly implement compensatory measures for the Attachment F resulted in a violation of technical specifications. This is reportable under 10 CFR 50.73(a)(2)(i)(B).

ANALYSIS OF EVENT

The fire detection system is installed in areas where a possible fire could cause equipment failures or prevent safe shutdown of the plant if the fire was allowed to proceed undetected. Design features in the "A" shutdown board room that would prevent the spread of postulated fire include penetration seals, fire-rated doors and walls, and Appendix R dampers.

The fire detection in "A" 4160V shutdown board room consists of ventilation duct-mounted products of combustion detector. An output signal from this detector causes dampers to close and gives an annunciation in the main control room.

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

An Attachment F was issued because two smoke control dampers controlled from the detector were inoperable; thereby, an hourly roving fire watch was required to meet technical specifications.

During the event, the safety of the plant was not compromised. The duct-mounted detector was operable so that at the onset of a postulated fire it would have been quickly detected and annunciated in the main control room, thus allowing appropriate actions to be taken. The spread of a postulated fire would have been controlled by penetration seals, fire-rated doors and walls, and the Appendix R dampers.

CAUSE OF EVENT

The root cause of this event was a procedural deficiency. At the time of the event, Procedure FPP-2, "Fire Protection Attachments," did not specify a method to detect a fire behind a closed door (feel door with back of hand and smell for smoke). These actions, however, were taken by the fire watch during the event. Contributing in this event FPP-2 did not require the shift operations supervisor (SOS) to make contact with the security shift supervisor to ensure that the appropriate level of management was aware of the need to open the locked door before exceeding a technical specification requirement.

CORRECTIVE ACTIONS

Plant Procedure, FPP-2 was revised with specific actions to be taken when personnel performing their fire watch duties encounter an unusual or unexpected situation. Personnel performing fire watch duties who encounter an unusual or unexpected situation are required to feel the door with back of hand and smell for smoke then immediately notify the SOS, (or the fire watch, if unable to contact the SOS will notify the security shift supervisor). The SOS shall then immediately notify the security shift supervisor, and the fire watch shall then notify the fire watch foreman.

Previous Similar Events

There have been two events recorded when personnel performing fire watch duties could not enter an area because access to the area could not be obtained to meet the technical specification requirement.

LER 259/90017 - A procedural error that delayed the performance of a fire watch was due to a fault on a 500kV [KF] breaker causing a voltage disturbance resulting in a security computer dropping offline, thereby locking vital area doors.

LER 259/90018 - Personnel performing fire watch duties could not gain access to an area when the security computer experienced a malfunction. The cause of this event was personnel error resulting in inadequate job planning.

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

Commitment

FPP-2 has been revised with the necessary corrective actions to prevent recurrence of this event; therefore, no commitment will be identified in this report.