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 2

TITLE (4)

Momentary Loss of Secondary Containment Due to Personnel Airlock Failure

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 4	1 6	8 6	8 6	0 1 2	0 0	0 5	1 3	8 6	Browns Ferry Unit 2	0 5 0 0 0 2 6 0
										0 5 0 0 0

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)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 0 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vi)	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)	X 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
David L. Smith	2 0 5 7 2 9 - 3 8 6 5

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)

At 0935 on April 16, 1986, an assistant shift engineer observed that personnel access doors from the turbine building into the reactor building were momentarily opened at the same time. This is contrary to secondary containment requirements that at least one door be closed. The doors were immediately shut and door watches posted pending investigation of the problem.

The equipment involved is the three doors between the turbine and reactor building. The turbine building door allows entry into an access chamber, and the other two doors lead from the chamber to either unit 1 or unit 2 reactor zones. To prevent opening the reactor side door and the turbine side door simultaneously, limit switches are provided that interlock the doors so that only one may be opened at a time.

Investigation of the condition by maintenance personnel found that the proximity switch and latch plate on the turbine building door were out of adjustment. This allowed simultaneous opening of the turbine and reactor side doors. The interlocking mechanisms were repaired, and the doors returned to service later the same day.

Recurrence control involves revising the weekly inspection procedure on the doors to check the limit switch operation and latch assembly adjustment.

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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)

Units 1 and 2 were in refueling outages and unit 3 was in an extended maintenance outage at the time of this condition.

At 0935 on April 16, 1986, Technical Specification 3.7.C.2 requirements were not met in that the assistant shift engineer observed the personnel access doors (DR) between the reactor building (NH) and turbine building (NM) were opened simultaneously. The assistant shift engineer immediately closed both doors and posted door watches pending investigation of the problem. This event constitutes a momentary loss of secondary containment.

These personnel airlock doors are used for access from turbine building into the reactor building. The turbine building door opens into a small chamber (approximately 7' x 7'). This chamber has two exit doors to unit 1 or unit 2, respectively. All three doors have solenoid (SOL) locking devices activated by interlocked limit switches (IS). The logic is designed to maintain a secondary containment by only allowing one door at a time to be opened.

Electrical maintenance personnel inspected the door latching mechanisms and the limit switches. Normally, a solenoid operated latch on the turbine building door engages a latch plate to lock the door. This latch plate was found out of adjustment due to wear such that the latch plunger was not inserting into the latch plate. The door was, however, closing far enough to pick up the door closed proximity switch. It was, therefore, possible that the turbine building door not be locked closed, yet the interlocking logic sensed closure. This allowed a reactor zone door open permissive, and led to the condition that both doors could be opened simultaneously. The electricians readjusted the interlocking mechanisms, and the door was returned to service the same day. These doors and lock assemblies are normally inspected weekly. To prevent recurrence of the problem, the inspection procedure is being revised to check the limit switch and latch mechanism operation.

At least one door is required to be closed to maintain secondary containment. In the event of an accident, the standby gas treatment system operates to maintain the reactor building at a negative pressure to minimize leakage of radioactive products to the environment. If both the access doors were open, the ability to maintain the reactor building at a negative pressure would be adversely affected. Considering that the doors were open only momentarily, it is not likely that the condition would cause a significant safety problem.

Previous Similar Events - BFRO 50-260/86002, 296/85012

Responsible Section - N/A

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

May 13, 1986

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-50-259/86012

The enclosed report provides details concerning momentary loss of secondary containment due to personnel airlock failure. This report is submitted in accordance to 10 CFR 50.73 (a)(2)(ii).

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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