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J. L. Wilson  
Vice President, Sequoyah Nuclear Plant

May 12, 1992

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

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 2 - DOCKET  
NO. 50-328 - FACILITY OPERATING LICENSE DPR-79 - LICENSEE EVENT REPORT  
(LR) 50-328/92004

The enclosed LER provides details of a containment ventilation isolation event occurring on Unit 2 as a result of a loss of power to containment radiation monitors caused by a breaker in Vital Instrument Board 2-III going to the open position. This event is being reported in accordance with 10 CFR 50.73(a)(2)(iv) as an actuation of an engineered safety feature.

Sincerely,

J. L. Wilson

Enclosure  
cc: See page 2

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*Handwritten initials/signature*

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cc (Enclosure):

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Sequoyah Nuclear Plant, Unit 2 DOCKET NUMBER (2) 050013281004 PAGE (3) 4

TITLE (4) A containment ventilation isolation occurred as a result of a spurious opening of a breaker in the power supply circuit for radiation monitors.

EVENT DAY (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES			DOCKET NUMBER(S)
0	4	1992	004	0	05	12	1992				050013281004

OPERATING MODE (9) 6 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following)(11)

<u>20.402(b)</u>	<u>20.405(c)</u>	<input checked="" type="checkbox"/> <u>50.73(a)(2)(iv)</u>	<u>73.71(b)</u>
<u>20.405(a)(1)(i)</u>	<u>50.36(c)(1)</u>	<u>50.73(a)(2)(v)</u>	<u>73.71(c)</u>
<u>20.405(a)(1)(ii)</u>	<u>50.36(c)(2)</u>	<u>50.73(a)(2)(vii)</u>	<u>OTHER (Specify in Abstract below and in Text, NRC form 366A)</u>
<u>20.405(a)(1)(iii)</u>	<u>50.73(a)(2)(i)</u>	<u>50.73(a)(2)(viii)(A)</u>	
<u>20.405(a)(1)(iv)</u>	<u>50.73(a)(2)(ii)</u>	<u>50.73(a)(2)(viii)(B)</u>	
<u>20.405(a)(1)(v)</u>	<u>50.73(a)(2)(iii)</u>	<u>50.73(a)(2)(x)</u>	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
<u>C. H. Whittemore, Compliance licensing</u>	<u>615843-7210</u>

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) NO EXPECTED SUBMISSION DATE (15) NO

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

On April 14, 1992, at 0926 Eastern daylight time, with Unit 2 in Mode 6 for the Cycle 5 refueling outage, a containment ventilation isolation (CVI) occurred because of a spurious opening of a breaker in the Train A power supply to the containment radiation monitors. Operations verified that high radiation conditions did not exist and recovered from the CVI. No problems with the breaker or radiation monitors were identified during subsequent troubleshooting. The breaker was reset and the radiation monitors were returned to service. The root cause of the breaker spuriously opening is indeterminate.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)			
		YEAR	NUMBER	REVISION	NUMBER	OF	TOTAL		
Sequoyah Nuclear Plant, Unit 2	0500328192	00	04	00	00	2	4		

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

I. PLANT CONDITIONS

Unit 2 was in Mode 6 for the Cycle 5 refueling outage. Fuel movement had been completed.

II. DESCRIPTION OF EVENTS

A. Event

On April 14, 1992, at 0926 Eastern daylight time (EDT), with Unit 2 in Mode 6, a containment ventilation isolation (CVI) (EIIS Code JM) occurred on Unit 2. This event was classified as an engineered safety feature (ESF) actuation, and NRC was notified at 1151 EDT.

The event occurred because a breaker (EIIS Code BKR) on the 120-volts alternating current Instrument Voltage Power Board 2-III opened. The opening of the breaker interrupted Train A power to the lower containment radiation monitors (EIIS Code MON). The loss of power caused the monitors to fail safe, i.e., trip condition. The CVI was the direct result of the radiation monitors fail safe trip logic. After the CVI was recognized, Operations personnel appropriately verified the absence of a high radiation condition and declared the CVI invalid. The radiation monitors were returned to service after troubleshooting, and Operations personnel recovered from the CVI event in accordance with plant procedures.

B. Inoperable Structures, Components, or Systems That Contributed to the Event

None.

C. Date and Approximate Time of Major Occurrences

1. April 14, 1992 at 0926 EDT The CVI occurred.
2. April 14, 1992 at 1151 EDT NRC was notified via red phone in accordance with 10 CFR 50.72.
3. April 14, 1992 at 1224 EDT Recovered from the CVI in accordance with plant procedures.

D. Other Systems or Secondary Functions Affected

As a result of the CVI, the upper and lower containment radiation monitors' sample lines automatically isolated as designed, causing these monitors to actuate malfunction alarms. Containment purge was in progress, and upon receipt of the CVI signal, the operating fan stopped and the purge valves closed, as designed.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Sequoyah Nuclear Plant, Unit 2	0150003128	1982	004	00	03	OF 04

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

E. Method of Discovery

The CVI was detected when the unit operator acknowledged that the radiation monitors for Unit 2 upper and lower containment had instrument malfunction alarms, and the radiation monitor sampling lines were isolated. Also, a high radiation alarm existed on the lower containment monitor.

F. Operator Actions

The unit operator noting the loss of Train A power supply to the monitors inspected the power supply panel, i.e., Vital Board 2-II, and discovered a breaker in the open or trip position. A work request was initiated to inspect and test the breaker.

Operations personnel requested that the plant Chemistry group pull a sample on the lower containment to verify whether the high radiation alarm was valid or not.

After the high radiation alarm was verified as being invalid, the operators initiated the process of recovering from the event, in accordance with plant procedures.

G. Safety System Response

Upon receipt of the CVI signal, the equipment operated as designed. The opening of the breaker on Vital Board 2-III caused the radiation monitors to fail safe, which is a trip condition. Containment Purge Exhaust Fan "B" stopped, and the associated valves closed.

III. CAUSE OF EVENT

A. Immediate Cause

The immediate cause of the CVI was the opening of the breaker on Vital Board 2-III, causing the lower containment radiation monitor to go to the trip position. The trip position logic of the radiation monitor is to initiate a CVI.

B. Root Cause

The root cause of the event could not be determined. The breaker was tested and no abnormalities were identified. The breaker was reset and has not experienced any further trips. The plant was in a stable condition (Mode 6), and no abnormal evolutions were in progress. There were no indications of any inappropriate actions by plant personnel, and there were no work or testing activities in the area that could have affected the breaker either directly or indirectly.

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TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)			
		YEAR	NUMBER	SEQUENTIAL	REVISION				
Sequoyah Nuclear Plant, Unit 2		92	004	00	00	01	00	00	04

TEXT (if more space is required, use additional NRC Form 365A's) (17)

C. Contributing Factors

None.

IV. ANALYSIS

This event is being reported in accordance with 10 CFR 50.73(a)(2)(iv) as an ESF actuation that was not part of a preplanned sequence. Upon receipt of the CVI signal, the equipment that is required to operate performed as designed. Following the CVI, Operations personnel verified that a high radiation condition did not exist and initiated appropriate actions to recover from the event. Since this was an inadvertent CVI actuation, and no actual high radiation condition existed, there was no threat to plant personnel or to the general public.

V. CORRECTIVE ACTIONS

A. Immediate Corrective Actions

The immediate corrective action taken was to determine the validity of the CVI signal and to initiate actions for recovery from the CVI.

B. Corrective Action

Troubleshooting activities were performed on the breaker and radiation monitors before being reset and returned to service.

C. Actions Taken to Prevent Recurrence

There is no objective evidence to substantiate any inappropriate action by personnel, nor was any malfunction or failure of any equipment identified during troubleshooting activities. The root cause of the inadvertent breaker opening cannot be determined; therefore, no additional corrective actions are considered necessary. However, as a conservative measure, the breaker was replaced on May 5, 1992, without any abnormalities identified.

VI. ADDITIONAL INFORMATION

There have been several previous reports involving spurious CVIs where the root cause was indeterminate. However, this event is the only CVI initiated by a breaker spuriously opening and causing loss of power to the radiation monitors. The review of previous events did not reveal any corrective action that should have prevented this event.