NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Sequoyah, Unit 2	0 5 0 0 0 3 2 8	1 OF 0 3

TITLE (4)
Conduits Found Penetrating A Fire Barrier Without Being Sealed Due To Design Error In Drawings

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)
									Sequoyah, Unit 1	0 5 0 0 0 3 2 7
0 1 3 0	8 5		8 5	— 0 0 3	— 0 2	0 6	2 6	8 7		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)			
1	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)
1 0 0	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)	XX 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
H. R. Rogers, Plant Operations Review Staff	6 1 5 8 7 0 - 6 1 4 7

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	XX NO				

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

This LER is revised in its entirety to change the completion date for the corrective action and to change the LER to the new format.

At 1200 CST on January 30, 1985, with both units in mode 1, it was discovered by plant personnel working in the unit 2 penetration room that electrical conduit passing through fire barriers were not sealed on both ends of the fire barrier as required by the fire protection plan. A fire watch was already established in the affected areas due to previous deficiencies with 10 CFR 50, Appendix R requirements. The fire watch satisfies the requirements of the plant's Technical Specification 3.7.12 and will remain in effect for areas where the fire barrier is inoperable until compliance with the fire protection plan is achieved. The root cause of this event was determined to be inadequate conduit drawings. The drawings failed to address sealing of conduits. The drawings were revised to add a note that requires the conduit to be sealed. The effort to locate unsealed conduit is continuing. The conduits that need to be sealed will be complete by August 31, 1987. This report was required in accordance with License Condition 2.H, 10 CFR 50.73, paragraph a.2.ii, and special report requirements of Technical Specification 3.7.12. This report covered the event reported to NRC by telecopy on January 31, 1985.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Sequoyah, Unit 2	0 5 0 0 0 3 2 8	8 5	— 0 0 3	— 0 2	0 2 OF 0 3

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

DESCRIPTION OF EVENT

This LER is revised in its entirety to change the completion date for the corrective action and to change the LER to the new format.

At 1200 CST on January 30, 1985, with unit 1 in mode 1 (100 percent power, 2235 psig pressure, 578 degrees F) and unit 2 in mode 1 (100 percent power, 2235 psig pressure, 578 degrees F), it was discovered by plant personnel working in unit 2 penetration room that electrical conduit passing through fire barriers were not sealed on both sides of the fire barrier. The fire protection plan requires sealant to be installed in either end of a conduit termination or in the nearest available conduit box on each side of the fire barrier. NUREG-0800 requires openings inside conduit to be sealed at the fire barrier penetration or at both ends. The unsealed conduits that were discovered are 55 conduits going through fire barriers in the unit 2 penetration room; one conduit in the emergency gas treatment room (EIIS Code BH), one conduit in the 125V vital battery room II (EIIS Code EK); 210 fire detector heads (EIIS Code IC) in the Auxiliary Building; and approximately 100 fire detector heads in the Control Building, Diesel Generator Building, and the emergency raw cooling water (ERCW) (EIIS Code BI) pumping station. No immediate operator action was required when the event was first discovered since a fire watch had already been established. The fire watch satisfies the requirements of the plant's Technical Specification 3.7.12 and will remain in effect until compliance with the fire protection plan is achieved.

CAUSE OF EVENT

The root cause of this event was inadequate conduit drawings. The typical drawings have a note which states that the conduit should be sealed after November 1, 1979. Typical drawings show general installation design criteria that applies to all installations of a particular component. The actual drawing should provide the same information as the typical drawing plus specific installation details (locations) to correctly install each specific conduit in the plant. The actual drawings that show these conduits do not contain any sealing requirements. As far as can be ascertained, the conduits have never been sealed.

ANALYSIS OF EVENT

This report was required in accordance with License Condition 2.H, 10 CFR 50.73, paragraph a.2.ii, and special report requirements of Technical Specification (TS) 3.7.12. This report covers events reported by telecopy to NRC on January 31, 1985.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Sequoyah, Unit 2	0 5 0 0 0 3 2 8	8 5	— 0 0 3	— 0 2	0 3 OF 0 3

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

The purpose of the sealant is to block the propagation of smoke and hot gases. Had a fire occurred before the installation of the sealant, smoke and hot gases would be able to propagate through the conduit to other areas. This would not spread the fire, but the fire fighting activities could be inhibited. The majority of the conduit is small (.75 inch diameter lines) and is not expected to have allowed large quantities of smoke or hot gases to travel to other areas if in the event a fire had occurred on one side of the conduit. The potential existed that some minor smoke damage could have occurred to the plant equipment in the event of a fire, and plant fire fighting personnel could have been affected by the smoke and hot gases.

CORRECTIVE ACTION

The conduit drawings have been revised to add a note that requires the conduit to be sealed at both ends or at the fire barrier. Due to the number of fire detector heads that need to be removed, conduit sealed, detector head replaced, a functional and sensitivity test performed on each detector following sealing of the conduit to each detector head, and the ongoing effort to locate unsealed conduits, a new completion date of August 31, 1987, has been established to complete the sealing effort. The fire watch will remain in effect until completion of the conduit sealing effort.

ADDITIONAL INFORMATION

This was the first report on fire protection that involves unsealed conduits.

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TENNESSEE VALLEY AUTHORITY
Sequoyah Nuclear Plant
Post Office Box 2000
Soddy-Daisy, Tennessee 37379

June 30, 1987

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 2 - DOCKET NO. 50-328 - FACILITY OPERATING LICENSE DPR-79 - REPORTABLE OCCURRENCE REPORT SQRO-50-328/85003 REVISION 2

The enclosed revised licensee event report provides additional details and corrective actions concerning conduits found penetrating a fire barrier without being sealed. This event was reported in accordance with 10 CFR 50.73, paragraph a.2.ii, on February 13, 1985.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Nobles
Plant Manager

Enclosure
cc (Enclosure):

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