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 1	0 5 0 0 0 3 2 7	1 OF 0 4

TITLE (4)
Personnel Errors Resulting In Failure To Comply With Action Statement For Limiting Condition For Operation On The Auxiliary Building Vent Radiation Monitor

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)
1 0	3 1	8 6	8 6	0 5 3	0 1	1 2	1 0	8 6	Sequoyah, Unit 2	0 5 0 0 0 3 2 8 0 5 0 0 0

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

OPERATING MODE (9): 5	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10): 0 0 0	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)	XX 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
J. L. Long, Plant Operating Review Staff	AREA CODE 6 1 5 8 7 0 - 7 2 5 4

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)	XX NO				

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

This revision includes additional information related to this event concerning a missing charcoal filter.

On October 20, 1986, with units 1 and 2 in mode 5 (cold shutdown), the Auxiliary Building vent monitor was declared inoperable and Limiting Condition for Operation 3.3.3.10 was entered. The Chemical Laboratory was notified and proceeded to install a backup temporary sampler as required. On October 31, 1986, it was discovered that the technical specification (TS) was not being appropriately complied with because the flow rate of the sampler was not being estimated every four hours.

Operations personnel failed to comply with the TS. The procedure, Surveillance Instruction (SI)-470.5, "Auxiliary Building Iodine Sampler Flow Estimation," normally used to comply with the TS action requirements, had been erroneously canceled by Chemistry personnel when it was interpreted that another procedure, SI-407.2, "Radioactive Gaseous Waste Effluent Particulate and Iodine Release Rates From Shield and Auxiliary Building Vents (Weekly/Conditional)," covered the TS requirements. Upon discovery of noncompliance with the TS, Operations personnel initiated action to ensure that sampler flow rate checks were made every four hours.

On November 10, 1986, after the monitor had been returned to service on November 6, 1986, it was discovered that a charcoal filter was missing, making the iodine channel inoperable. A new charcoal filter was immediately installed.

SI-470.5 will be reinstated to ensure that an instruction is available for such events in the future. Personnel will be counseled to ensure compliance with TS.

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

This revision includes additional information related to this event concerning a missing charcoal filter.

DESCRIPTION OF EVENT

On October 20, 1986, with unit 1 in mode 5 (0 percent power, 280 psig, 121.4 degrees F) and unit 2 in mode 5 (0 percent power, 15 psig, 121.7 degrees F), the Auxiliary Building vent radiation monitor (0-RM-90-101) (EIIS Code IL) was declared inoperable, and Limiting Condition for Operation (LCO) 3.3.3.10 was entered at 0430 CDT. The plant Chemical Laboratory was notified by Operations, and in accordance with action 44 of Surveillance Requirement (SR) 4.3.3.10, they proceeded to install a backup temporary sampler. The Chemical Laboratory also started taking grab samples for noble gases every twelve hours in accordance with action 42 of the SR.

The cause for the inoperable Auxiliary Building vent radiation monitor was determined to be a failed microswitch in the flow switch. A replacement microswitch was not immediately available, so the radiation monitor was out of service until a replacement could be obtained.

On October 31, 1986, at 1330 CST with unit 1 in mode 5 (0 percent power, 330 psig, 121 degrees F) and unit 2 in mode 5 (0 percent power, 330 psig, 120 degrees F), it was discovered that action 41 of the SR was not being fully complied with in that the sampler flow rate was not being estimated every four hours as required.

Upon discovery, action was taken to fully comply with the action requirements, and the sampler flow was estimated every four hours until the radiation monitor flow switch was repaired. The LCO was exited at 1359 CST on November 6, 1986.

Subsequent to the monitor being returned to service on November 10, 1986, at 1405 CST with unit 1 in mode 5 (0 percent power, 220 psig, 129 degrees F) and unit 2 in mode 5 (0 percent power, 250 psig, 126 degrees F), Instrument Maintenance personnel were performing SI-302, "Vacuum Switch and Controller Performance Check For Radiation Monitoring Gas Sample Flows (Monthly)," on the Auxiliary Building vent radiation monitor and discovered that the charcoal filter in the radiation monitor was missing. Upon discovery that the charcoal filter was missing, Instrument Maintenance personnel immediately installed a new filter. The charcoal filter is used to determine the iodine release rate from the Auxiliary Building vent and, under normal operation, is replaced on a weekly basis by the Chemistry personnel.

Discussion with Chemistry personnel and Instrument Maintenance personnel has indicated that the filter was in place on November 6, 1986, when the radiation monitor was declared operable and put back in service.

The Auxiliary Building vent radiation monitor is common to both units 1 and 2.

CAUSE OF EVENT

This event was a result of personnel errors. First, Operations personnel failed to comply with action 41 of the SR. Surveillance Instruction (SI)-2, "Shift Log," instructs Operations personnel that when the Auxiliary Building vent monitor is inoperable, use SI-470.5, "Auxiliary Building Iodine Sampler Flow Estimation," for recording the estimated sampler flow rate every four hours. However, SI-470.5 had been erroneously canceled in June 1986. This contributed to the error by Operations personnel in that it was thought that Chemistry personnel were performing the four-hour requirement under SI-407.2.

SI-470.5 had been canceled by Chemistry personnel when it was interpreted that the requirements were covered by another procedure, SI-407.2, "Radioactive Gaseous Waste Effluent Particulate and Iodine Release Rates From Shield and Auxiliary Building Vents (Weekly/Conditional)." Canceling this procedure was another error.

As stated above, the cause for the missing charcoal filter is indeterminate. The filter should have been in place when the radiation monitor was put back in service on November 6, 1986; however, the filter was either removed and not replaced sometime between November 6 and November 10, 1986, or was not reinstalled before placing the radiation monitor back in service on November 6, 1986. No record of work being performed on this monitor was found for the November 6 to November 10, 1986 timeframe. The most probable cause of the event was that the filter was not reinstalled on November 6, 1986.

ANALYSIS OF EVENT

This event is reportable under 10 CFR 50.73, paragraph a.2.i.B, as an operation prohibited by the plant technical specifications (TSs). SR 4.3.3.10 action 41 states that with the number of channels operable (less than required), effluent releases may continue provided that the flow rate monitor and sampler flow rate monitor are estimated once every four hours. The sampler flow rate was not estimated every four hours. Additionally, effluent releases occurred for a period up to four days without a charcoal filter in place after the radiation monitor was put back in service.

Chemical analysis of the Auxiliary Building stack discharge effluent and exhaust flow rate taken while the radiation monitor was known inoperable was estimated as required by the TS. There was no radioactivity detected above TS's lower limit of detection; thus, no violations of 10 CFR 20 or 10 CFR 100 occurred as a result of this event. Since both units have been in mode 5 (cold shutdown) for greater than one year, no iodine concentration exists. Therefore, during the period that the charcoal filter was missing from the radiation monitor, there were no iodine releases. Had the units been in operation during this event, the particulate and the noble gas channels of the radiation monitor were operable and would have isolated the Auxiliary Building in the event of high radiation levels. Additionally, had a LOCA or fuel handling accident occurred during this time, this effluent pathway would have been isolated. Isolation would occur as a result of a safety injection signal for a LOCA event or from the spent fuel radiation monitors for a fuel handling accident in the Auxiliary Building.

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

CORRECTIVE ACTIONS

SI-470.5 is being reinstated to ensure that an approved and correct procedure exists for estimating sampler flow rates when the Auxiliary Building vent radiation monitor is inoperable. This action will be complete by December 21, 1986.

Both Operations personnel and Chemistry personnel will be counseled on ensuring that TS action statements are met.

The charcoal filter was replaced, and the radiation monitor was declared operable upon completion of maintenance. Chemistry personnel will be counseled on ensuring that radiation monitors are maintained to provide reliable service.

ADDITIONAL INFORMATION

Previous Occurrences - None.

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

December 10, 1986

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

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 1 - DOCKET NO. 50-327 - FACILITY OPERATING LICENSE DPR-77 - REPORTABLE OCCURRENCE REPORT SQRO-50-327/86053 REVISION 1

The enclosed revised licensee event report provides details concerning personnel errors in failure to comply with an action statement after entering the Limiting Condition for Operation on an Auxiliary Building vent radiation monitor and a missing charcoal filter for the iodine channel. This event is reported in accordance with 10 CFR 50.73, paragraph a.2.i.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

P. R. Wallace
Plant Manager

Enclosure
cc (Enclosure):

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