

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Sequoyah, Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 3 2 7 1 OF 0 4										PAGE (3) 1 OF 0 4									
Title Radiation Monitor Technical Specification Surveillance Requirement Omitted From Surveillance Program Due To An Oversight																													
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 Sequoyah, Unit 2						DOCKET NUMBER(S) 0 5 0 0 0 3 2 8					
0 3		1 4		8 8		8 8		0 1		3 0		0 4		0 1		8 8								0 5 0 0 0 3 2 8					
OPERATING MODE (9) 3						THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENT, OF 10 CFR § (Check one or more of the following) (11)																							
POWER LEVEL (10) 0 0 0						20.402(b)						20.405(e)						50.73(a)(2)(iv)						73.71(b)					
						20.405(a)(1)(i)						50.38(c)(1)						50.73(a)(2)(v)						73.71(c)					
						20.405(a)(1)(ii)						50.38(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)(ix)																	
LICENSEE CONTACT FOR THIS LER (12)																													
NAME Tom Rogers K. W. Fenn, Plant Operations Review Staff												TELEPHONE NUMBER AREA CODE 6 1 5 8 7 0 - 6 5 1 1																	
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																													
CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NRC		CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NRC											
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)

On March 14, 1988, at 1200 EST with unit 1 in mode 5 (cold shutdown) and unit 2 in mode 3 (hot standby), it was discovered that four steam generator blowdown system radiation monitors had not been adequately functionally tested. These monitors have not been tested to ensure they can provide a close signal to the flow control valves and that the flow control valves will close upon receipt of a high radiation condition in the steam generator blowdown effluent to the cooling tower blowdown line or as a result of a loss of instrument power. These functional tests are required to meet a quarterly technical specification surveillance requirement (SR) 4.3.3.9. Subsequent to the discovery of this condition, manual valves in series with the automatic flow control valves were locked closed and tagged to preclude an inadvertent release via this pathway.

The cause of this condition is attributed to an oversight during the implementation of the Surveillance Instruction Review program. This program was implemented, in part, to ensure all SRs are implemented within the Sequoyah surveillance instruction network.

As corrective actions, the unit 2 surveillance instruction used to functionally test radiation monitors that provide automatic functions was revised to include these functional tests. The tests were satisfactorily completed following the revision, and the unit 2 manual control valve was reopened. The applicable unit 1 surveillance instruction will also be revised in a similar manner, and the functional tests will be satisfactorily completed before the unit 1 manual control valve is reopened.

8804050007 880401  
PIR ADOCK 05000327  
S DCD

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Sequoyah, Unit 1	0 5 0 0 0 3 2 7 8 8	0	1	3	0	0

TEXT (If more space is required, use additional NRC Form 368A's) (17)

## DESCRIPTION OF EVENT

On March 14, 1988, at 1200 EST while unit 1 was in mode 5 (0 percent power, 6 psig, 125 degrees F) and unit 2 was in mode 3 (0 percent power, 1870 psig, 535 degrees F), it was discovered that four of the radiation monitors (EIIS Code IL) in the steam generator blowdown (SGB) system (EIIS Code WI) were not included in the Sequoyah surveillance instructions used to perform quarterly functional tests of radiation monitors that perform automatic actions. A quarterly functional test is required by Technical Specification (TS) Surveillance Requirement (SR) 4.3.3.9 to ensure automatic closure of the isolation valves in the pathway to the cooling tower blowdown line in the event of high SGB effluent activity or in the event of a loss of instrument power to the radiation monitor.

This condition was discovered through a restart test program effort to validate the implementation of required testing for Sequoyah radiation monitors. A review of Surveillance Instruction (SI)-281, "Functional Test of Radiation Effluent Monitors with Automatic Actions (Quarterly)," found that the quarterly channel functional tests of 1-RM-90-120 and 1-RM-90-121 to close 1-FCV-15-44 upon receipt of a high radiation test signal and upon a loss of instrument power were inadvertently omitted. Similar omissions were found upon reviewing SI-281.2, "Functional Test of Radiation Effluent Monitors with Automatic Actions (Quarterly)," for the quarterly channel functional tests of 2-RM-90-120 and 2-RM-90-121 to close 2-FCV-15-44 upon receipt of a high radiation test signal and loss of instrument power. The omission of these functional tests within these SIs has resulted in a partial noncompliance with SR 4.3.3.9 since receiving the plant operating license. 1-FCV-15-44 and 2-FCV-15-44 are the unit 1 and unit 2 automatic isolation valves used to isolate a radioactive release from the SGB effluent to the cooling tower blowdown line. 1-FCV-15-44 and 2-FCV-15-44 discharge to a common cooling tower blowdown line which will ultimately be released to waters beyond the site boundary. 1-RM-90-120 and 1-RM-90-121 are redundant channels used to monitor unit 1 SGB effluent. 2-RM-90-120 and 2-RM-90-121 are redundant channels used to monitor unit 2 SGB effluent. Subsequent to the discovery of these omissions, manual valves 1-HCV-1-875 and 2-HCV-1-875, which are in series with the respective automatic isolation valves, were locked closed and tagged under Hold Order 0-88-0150 to preclude a release via this pathway until satisfactory channel functional tests could be completed.

## CAUSE OF EVENT

The root cause of this occurrence is attributed to an oversight during the implementation of the SI Review program. The SI Review program was implemented via SI-1, "Surveillance Program," to ensure, in part, that all TS SRs are implemented within the Sequoyah SI network. Though many findings were made and corrected during this SI review program, the omissions of the quarterly channel functional tests of the SGB radiation monitors in the effluent line to the cooling tower blowdown line were not identified.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)  Sequoyah, Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 3 2 7 8 8 - 0 1 3 - 0 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
					0 3	OF	0 4

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

## ANALYSIS OF EVENT

This report is submitted pursuant to the requirements of 10 CFR 50.73, paragraph a.2.i, as a condition prohibited by TSs.

The function of the subject radiation monitors is to monitor radiation in the SGB effluent release path to the cooling tower blowdown line and to automatically isolate this path upon detection of unacceptable levels of radiation or upon a loss of radiation monitoring capability. The quarterly SR provides assurance that the automatic isolation feature will perform as designed in the event radiation is measured at a level above the actuation setpoint or upon the loss of instrument power. Thus, the failure to perform the functional tests on the quarterly schedule reduced the reliability of the system to automatically isolate a SGB release to the cooling tower blowdown line which is ultimately released beyond the site boundaries. However, these radiation monitors also provide indication and annunciation in the main control room to alert the control room operators of a high radiation condition in the SGB system and in the event of a radiation monitor malfunction. Surveillance of these radiation monitors include a daily channel check of the indication and a monthly source check of the circuits in accordance with SI-3, "Daily, Weekly, and Monthly Logs." The operators also have a remote-manual control switch in the main control room to close 1-FCV-15-44 or 2-FCV-15-44 if the control room indication requires a release to be stopped. Therefore, the failure to perform the quarterly functional test as required, is not considered to have had a significant effect on the health and safety of the public.

## CORRECTIVE ACTION

As immediate corrective action, manual valves 1-HCV-1-875 and 2-HCV-1-875 were locked closed and tagged under Hold Order 0-88-150 to preclude a SGB release to the cooling tower blowdown line.

On March 15, 1988, SI-281.2 was changed to include the quarterly functional tests of 2-RM-90-120 and 2-RM-90-121 in order to provide an implementing procedure for the unit 2 monitors. On March 19, 1988, 2-RM-90-120 and 2-RM-90-121 were satisfactorily functionally tested to meet the quarterly channel functional test requirements of TS SR 4.3.3.9.

SI-281 will be revised by April 30, 1988, to include the quarterly functional tests of 1-RM-90-120 and 1-RM-90-121 in order to provide an implementing procedure for the unit 1 monitors. Subsequent to this revision, the functional test will be performed.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)  Sequoyah, Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 3 2 7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 8	— 0 1 3	— 0 0 0	4	OF	0 4

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

The Sequoyah program used to review surveillance instruction to ensure proper and complete implementation of TS SRs is conducted through an SI-1, Appendix F review. SI-1, Appendix F, was initiated in 1986 and is required to be used for reviews of new procedures, procedure revisions, and as a biennial audit of existing procedures that include safety-related functions in accordance with Administrative Instruction (AI)-4, "Preparation, Review, Approval and Use of Site Procedures/Instructions."

The restart test program effort to validate the implementation of required testing of the radiation monitors was conducted to ensure all functions of the radiation monitors are adequately tested before unit 2 is restarted. This effort was conducted independent of the SI-1 review process. Since independent groups performed these two test program reviews and since each program had a different approach in validating the implementation of required testing, there is a high assurance that all functional testing of the Sequoyah radiation monitors required by TSs is included in the SI network.

## ADDITIONAL INFORMATION

There have been 23 previously reported occurrences of incomplete implementation of TS SRs within the Sequoyah surveillance program. Sixteen of these reports were a direct result of SI-1, Appendix F reviews. SQRO-50-327/84071, 86007, 86012, 86013, 86023, 86027, 86030, 86035, 86039, 86042, 86044, 86050, 87002, 87006, 87007, 87008, 87014, 87017, 87018, 87022, 87038, 87059 and -328/86006.

0904Q

TENNESSEE VALLEY AUTHORITY

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

April 1, 1988

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

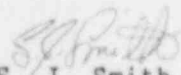
Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 - DOCKET  
NOS. 50-327 AND 50-328 - FACILITY OPERATING LICENSE DPR-77 AND DPR-79 -  
REPORTABLE OCCURRENCE REPORT SQRO-50-327/88013

The enclosed licensee event report provides details concerning an omission  
of a quarterly technical specification surveillance requirement in the  
Sequoyah surveillance program for four steam generator blowdown radiation  
monitors. This event is reported in accordance with 10 CFR 50.73,  
paragraph a.2.i, as a condition prohibited by technical specifications.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
S. J. Smith  
Plant Manager

Enclosure  
cc (Enclosure):

J. Nelson Grace, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Suite 2900  
101 Marietta Street, NW  
Atlanta, Georgia 30323

Records Center  
Institute of Nuclear Power Operations  
Suite 1500  
1100 Circle 75 Parkway  
Atlanta, Georgia 30339

NRC Inspector, Sequoyah Nuclear Plant

IE22  
11