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R.J. Adney  
Site Vice President  
Sequoyah Nuclear Plant

November 9, 1995

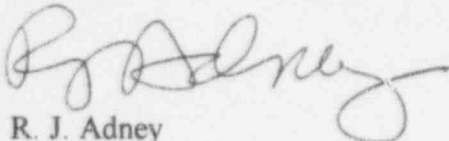
U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT (SQN)  
UNIT 1 - DOCKET NO. 50-327 - FACILITY OPERATING LICENSES DPR-77 -  
LICENSEE EVENT REPORT (LER) 50-327/95013

The enclosed report provides details concerning a missed surveillance instruction. This report is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by technical specifications.

Sincerely,



R. J. Adney

Enclosure  
cc: See page 2

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U.S. Nuclear Regulatory Commission

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Enclosure

cc (Enclosure):

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LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MN88 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Sequoyah Nuclear Plant (SQW), Unit 1	DOCKET NUMBER (2) 05000327	PAGE (3) 1 of 6
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TITLE (4) Missed Surveillance During Mode 6

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 NAME	DOCKET NUMBER
10	10	95	95	013	00	11	09	95	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) 6	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 00		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
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
		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 S. D. Gilley, Compliance Licensing Engineer	TELEPHONE NUMBER (Include Area Code) (423) 843-7427
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYS TEM	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 15 single-spaced typewritten lines) (16)

On October 10, 1995, with Unit 1 in Mode 6, Operations personnel determined that Technical Specification (TS) Surveillance Requirements (SRs) 4.9.2 and 4.9.8.1 had not been met. These SRs require that each source range neutron flux monitor have a channel check performed every 12 hours and that at least one residual heat removal loop has a flow of at least 2000 gpm verified at least once every 12 hours, respectively. Several days earlier when the surveillance instruction (SI) packages were being assembled, the schedule showed that the unit would be in Mode 5 on midnight shift of October 10, 1995. This SI was only required in Mode 6; therefore, an SI package was not prepared and sent to the control room for performance on October 10, 1995. Because of other events, the unit remained in Mode 6 on October 10, 1995, and the SI should have continued to be performed. The cause of this event was inadequate training of licensed operators in the use of the 12-week schedule. Required reading was given to licensed operators to provide additional guidance on the utilization of the schedule and the importance of verifying all surveillances received from the Technical Information Center. Procedures were also revised to include a comprehensive list of routine SIs and periodic instructions.

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Sequoyah Nuclear Plant (SQN), Unit 1	05000327	95	013	00	2 of 6

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

**I. PLANT CONDITIONS**

Unit 1 was in Mode 6.

**II. DESCRIPTION OF EVENT**

**A. Event**

On October 10, 1995, with Unit 1 in Mode 6, Operations personnel determined that Technical Specification (TS) Surveillance Requirements (SRs) 4.9.2 and 4.9.8.1 had not been met. These SRs require that each source range neutron flux monitor have a channel check performed every 12 hours and that at least one residual heat removal (RHR) loop has a flow of at least 2000 gpm verified at least once every 12 hours, respectively. Several days earlier when the surveillance instruction (SI) packages were being assembled, the schedule showed that the unit would be in Mode 5 on midnight shift of October 10, 1995. This SI was only required in Mode 6; therefore, an SI package was not prepared and sent to the control room for performance on October 10, 1995. Because of other events, the unit remained in Mode 6 on October 10, 1995, and the SI should have continued to be performed. Operations personnel on the midnight shift did not realize that the SI package was not delivered to the control room as the result of an earlier schedule. The senior reactor operator (SRO) failed to correctly read the updated 12-week schedule which correctly showed that the SI was required to be performed on midnight shift for October 10, 1995. Dayshift personnel realized that the SI was required and ordered a special performance of the SI since no in-process package was available. By the time the data had been recorded on dayshift, more than 15 hours had passed, and the TS requirements had been exceeded. When the midnight shift crew returned to work, the unit operators were requested to enter the data for the previous day using information recorded in the shift log along with any data that they remembered from the previous shift. The origin of the data was noted on the cover sheet of the SI. The SI data package had been correctly performed during the previous shift and was performed during the subsequent shift with all readings being within the acceptance criteria. This event is being reported as a condition prohibited by technical specifications.

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

None.

**C. Dates and Approximate Times of Major Occurrences**

October 2, 1995      The Periodic Test Group ran the computer scheduler for October 10. The scheduler provided the list of surveillances and periodic instruction packages required for performance on October 10 based on the current schedule, which indicated the unit would be in Mode 5. This list was subsequently forwarded to the Technical Information Center to use in the preparation of the required packages.

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- October 9, 1995      The 12-week rolling system schedule changed because of ongoing outage work, and the new schedule showed that the unit would remain in Mode 6 through October 10.
- October 9, 1995      During the evening shift, the surveillance and periodic instruction packages were taken to the main control room where they were separated for the two units and for each shift by the unit operators.
- October 9, 1995  
at 2230 EDT      The midnight shift arrived and performed the surveillance and periodic packages that had previously been separated. 0-SI-OPS-000-065.S had not been sent to the control room and was not performed.
- October 10, 1995      Dayshift operators remembered that on the previous day they had performed the SI package and when they did not find an in-process package for the current day, they ordered a special performance. After receiving the special performance package, it was performed, and all readings were within the acceptance criteria.
- October 10, 1995  
at 2235 EDT      The midnight shift crew returned to work and was informed that they failed to run the SI on the previous shift. The ASOS requested the unit operators to enter the required data from the previous shift using shift logs and their memory. A notation was placed on the front of the SI discussing the origin of the data.

**D. Other Systems or Secondary Functions Affected**

None.

**E. Method of Discovery**

This SI is performed during each shift when the unit is in Mode 6. The SI package is issued and is used to record the data for midnight shift, then dayshift, and then evening shift. After evening shift records their data, that package is complete, and a new package is begun on midnight shift for the following day.

In this event, a routine package was not issued to the control room because several days earlier when the packages were issued, the unit was scheduled to be in Mode 5 on October 10, 1995. When October 10, 1995, arrived, the unit was in Mode 6. The SRO read the 12-week rolling system schedule and failed to identify this SI as being required on midnight shift. The midnight shift crew did not recognize the need to obtain a special performance package for the SI. When the dayshift crew arrived and did not find an in-process performance of this SI, they requested a special performance package be issued. The lack of an in-process SI available for dayshift indicated to Operations personnel that the SI had not been performed for the previous shift (midnight shift).



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**F. Operator Actions**

When no in-process package for this SI could be located on dayshift, a special performance was ordered and performed.

**G. Safety System Responses**

No safety system response was required.

**III. CAUSE OF EVENT**

**A. Immediate Cause**

The immediate cause of this event was the failure to perform the surveillance requirements required in Mode 6.

**B. Root Cause**

The root cause of the event was determined to be inadequate organization to program interface requirements between the Operations organization and the 12-week rolling system schedule. The failure to provide adequate training on the 12-week rolling system schedule led to the SRO failing to correctly read the schedule and identify the surveillance to be performed.

**C. Contributing Factors**

SI packages are assembled approximately 9 days in advance of their respective due dates. This allows time for the various packages to be copied and distributed to the responsible organization. It also gives the organization time to make any necessary changes to their work schedules based on available resources. The result of this process is that a group of SI packages is distributed to the control room, based on what the schedule reflected several days before. Therefore, the current schedule must be used to get an accurate account of the SRs required for a particular shift rather than relying on the group of packages that was sent to the control room for that shift. In this event, the reactor operators relied on the correct packages being in the control room rather than on the schedule.

**IV. ANALYSIS OF EVENT**

The source range neutron flux channels detect changes by monitoring the reactivity condition of the core. The RHR system provides a means of removing decay heat from the core. When the RCS inventory is less than 23 feet above the reactor head flange, both RHR loops are required operable so that a single failure does not result in a complete loss of RHR capability. The requirement for 2000 gpm flow rate in one RHR loop ensures decay heat removal and minimizes the potential for damage caused by cavitation or air entrapment.

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The SRs for the neutron flux monitors and the RHR loops were successfully completed during the shift immediately prior to this event as well as the following shift. This data, in conjunction with the board walkdowns conducted during the midnight shift, supports the conclusion that there were no events in the interim that would have resulted in a change in the readings. Therefore, there is no reason to believe that the neutron flux monitors or the RHR loops were not operating as required during this event. Therefore, it can be concluded that there were no adverse consequences to plant personnel or to the general public as a result of this event.

V. CORRECTIVE ACTIONS

A. Immediate Corrective Action

Upon discovery, a special performance surveillance package was ordered and was successfully performed.

B. Corrective Action to Prevent Recurrence

The operator at the controls' shift Periodic Instructions 1-PI-OPS-000-020.1, 1-PI-OPS-000-020.2, 2-PI-OPS-000-022.1, and 2-PI-OPS-000-022.2 contained lists of routine daily and shiftly surveillances required to be performed for Modes 1 through 6, but the lists were not all inclusive. The lists in these procedures have been revised so that the lists are now comprehensive with respect to routine daily and shiftly surveillances.

A required reading memorandum was issued for licensed operators to (1) inform them of the correct methodology to be used in reading the 12-week schedule, (2) emphasize that the 12-week schedule is the definitive source for determining the surveillances required to be performed on a shift, and (3) emphasize the importance of verifying the surveillances received from the Technical Information Center prior to performance.

Additionally, the overall surveillance instruction process is being evaluated for potential program improvements.

VI. ADDITIONAL INFORMATION

A. Failed Components

None.

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**B. Previous Similar Events**

A review of previous reportable events identified several LERs associated with the failure to conduct SIs as a result of scheduling problems, but none of these involved the situation where the SI was not performed as a result of the plant being in a different mode than scheduled when the packages were developed.

**VII. COMMITMENTS**

None.