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Masoud Bajestani  
Site Vice President  
Sequoyah Nuclear Plant

February 11, 2000

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

10 CFR 50.73

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT (SQN)  
UNIT 1 - DOCKET NO. 50-327 - FACILITY OPERATING LICENSES DPR-77  
- LICENSEE EVENT REPORT (LER) 50-327/2000001

The enclosed report provides details concerning the failure to perform response time testing on a refueling water storage tank level transmitter. This event is being reported, in accordance with 10 CFR 50.73(a)(2)(i), as a condition prohibited by technical specifications.

Sincerely,

  
Masoud Bajestani

Enclosure  
cc: See page 2

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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 mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1) Sequoyah Nuclear Plant (SQN) UNIT 1		DOCKET NUMBER (2) 05000327	PAGE (3) 1 OF 6
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TITLE (4)  
Failure to perform response time testing on a refueling water storage tank (RWST) level transmitter.

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
01	17	2000	2000	001	00	02	11	2000	NA	05000
									NA	05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER LEVEL (10)	100	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(2)(v)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)					
		<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(x)					
		<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	73.71					
		<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(iv)	OTHER					
		<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A					
		<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)						

LICENSEE CONTACT FOR THIS LER (12)

NAME J. Bajraszewski, Licensing Engineer	TELEPHONE NUMBER (Include Area Code) (423) 843-7749
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO					

Abstract (Limit to 1400 paces, i.e., approximately 15 single-spaced typewritten lines) (16)

On January 18, 2000, at approximately 0847 Eastern standard time, with Unit 1 in power operation at approximately 100 percent, during review of an implemented work document, it was determined that Refueling Water Storage Tank (RWST) Level Transmitter 1-LT-63-53 had not been response time tested during postmaintenance testing as required by Technical Specification Surveillance Requirement 4.3.2.1.3. On January 17, 2000, Maintenance personnel replaced an RWST level transmitter and calibrated the new instrument. This was followed by a channel check and the new instrument was placed in service. Upon identification of the condition, the instrument was removed from service, response time testing was performed and found acceptable, and the instrument was returned to service. The cause of the condition was an inadequate work package review. Corrective actions include reinforcement of response time test requirements with appropriate plant personnel and coaching and counseling of the involved individuals.

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

**I. PLANT CONDITION(S)**

Unit 1 was in power operation at approximately 100 percent.

**II. DESCRIPTION OF EVENT**

**A. Event:**

On January 18, 2000, at approximately 0847 Eastern standard time (EST), during review of an implemented work document, it was determined that Refueling Water Storage Tank (RWST) [EIIS Code BP] Level Transmitter 1-LT-63-53 [EIIS Code LT] had not been response time tested during postmaintenance testing (PMT) as required by Technical Specification (TS) Surveillance Requirement (SR) 4.3.2.1.3. On January 17, 2000, Maintenance personnel replaced an RWST level transmitter and calibrated the new instrument. This was followed by a channel check and then the new instrument was placed in service.

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

None.

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

January 16, 2000, at 1111 EST	Unit 1 entered TS Limiting Condition for Operation (LCO) 3.3.2.1, Action 18 for performance of a channel calibration on RWST level Channel IV, Level Transmitter 1-LT-63-53.
at 1512 EST	RWST Level Transmitter 1-LT-63-53 failed calibration.
at 1540 EST	RWST Channel IV was placed in by-pass in accordance with TS LCO 3.3.2.1, Action 18.

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January 17, 2000,  
at 1727 EST

RWST level transmitter was replaced, a new transmitter was installed and calibrated, and RWST Channel IV was returned to service. TS LCO 3.3.2.1, Action 18 was exited.

January 18, 2000,  
at 0847 EST

It was determined that the new RWST level transmitter was placed in service without response time testing. Unit 1 entered TS LCO 3.0.3 for inoperability of RWST Level Transmitter 1-LT-63-53.

at 0905 EST

Unit 1 exited TS 3.0.3 based on RWST Channel IV being placed in by-pass in accordance with TS LCO 3.3.2.1, Action 18. Unit 1 entered TS LCO 3.3.2.1, Action 18.

at 2047 EST

RWST level transmitter response time testing was completed and the channel was returned to service. TS LCO 3.3.2.1, Action 18 was exited.

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

None.

**E. Method of Discovery:**

The condition was identified during review of the work document after the maintenance field activity was completed.

**F. Operator Actions:**

Operations personnel declared the instrument inoperable and entered the appropriate LCOs. Action was initiated to perform response time testing.

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**G. Safety System Responses:**

None, no safety responses were required.

**III. CAUSE OF THE EVENT**

**A. Immediate Cause:**

The immediate cause of the condition was an inadequate PMT specified in the work package.

**B. Root Cause:**

The root cause of the condition was an inadequate review of the work package PMT requirements as a result of personnel error.

During development of the work document, the Maintenance planner, who develops PMT recommendations for consideration during approval of the work document, failed to identify the response time test requirement.

Following work document development, the Maintenance foreman misunderstood the review requirements and failed to obtain a technical review of the package before providing the work document to Operations personnel for review. By failing to obtain a technical review, an opportunity was missed that may have identified the need for response time testing.

The Operations person that reviewed the work document, for PMT adequacy, failed to recognize the need for a response time test of the new transmitter to fully satisfy TS SRs.

**IV. ANALYSIS OF THE EVENT**

The RWST is the part of the emergency core cooling system (ECCS) that ensures a sufficient supply of borated water is available for injection by the ECCS in the event of a loss-of-coolant accident. The four RWST level transmitter channels ensure an automatic switch over occurs to the containment sump upon a low RWST level coincident with a high

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containment sump level and a safety injection. Following identification of the condition, the one level channel was removed from service, response time testing was performed and found acceptable showing that the instrument would have performed its function as required by TSS. Therefore, this condition did not adversely affect the health and safety of plant personnel or the general public.

**V. CORRECTIVE ACTIONS**

**A. Immediate Corrective Actions:**

Upon identification of the condition, Operations personnel were notified and the instrument channel was declared inoperable. Response time testing was performed, the transmitter was found acceptable, and the channel was returned to service.

**B. Corrective Actions to Prevent Recurrence:**

The involved individuals were coached and counseled on the failure to perform an adequate work document review.

Additionally, the associated Corrective Action Program document contains actions to reinforce response time test requirements and performance of work document reviews with appropriate plant personnel, and review of the work document review process for process improvements.

**VI. ADDITIONAL INFORMATION**

**A. Failed Components:**

None

**B. Previous LERs on Similar Events:**

There were three previous similar events identified.

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- LER 50-327/87007 was associated with the failure to perform response time testing on portions of electronics in radiation monitors. The cause was determined to be an inadequate procedure.
- LER 50-328/97-001 was associated with an inadequate PMT resulting in the failure to meet TS SRs.
- LER 50-327/97-009 addressed the failure to perform a response time test following replacement of a radiation monitor signal processor. The cause was a lack of understanding of response time SR that have to be satisfied for operability of the equipment.

The corrective actions of the first two LERs would not have prevented this identified condition.

The actions taken in the third LER of restructuring the work order PMT and adding a question to the Operations work preapproval checklist should have prevented the current condition. The current condition is an isolated case of personnel error.

**C. Additional Information:**

None.

**D. Safety System Functional Failure:**

This event did not result in a safety system functional failure in accordance with NEI 99-02.

**VII. COMMITMENTS**

None.