



Tennessee Valley Authority Post Office Box 2000 Saddy-Daisy Tennessee 37379

December 8, 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 2 - DOCKET NO. 50-328 - FACILITY OPERATING LICENSES  
DPR-79 - LICENSEE EVENT REPORT (LER) 50-328/2000003**

The enclosed report provides details concerning the failure to perform containment sump level instrument channel functional tests on four containment sump level channels. This event is being reported, in accordance with 10 CFR 50.73(a)(2)(i)(B), as a condition prohibited by technical specifications.

Sincerely,

A handwritten signature in cursive script that reads "Richard T. Purcell".

Richard T. Purcell

Enclosure

cc: See page 2

IE22

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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)

FACILITY NAME (1) Sequoyah Nuclear Plant (SQN) UNIT 2		DOCKET NUMBER (2) 05000328	PAGE (3) 1 OF 7
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TITLE (4)  
Missed SI - Failure to perform Containment Sump Level Instrument Channel Functional Tests (CFTs) on containment sump level channels

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
11	09	2000	2000	-- 003	-- 00	12	8	2000	NA	05000
									NA	05000

OPERATING MODE (9)	5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
		20.2201(b)		20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)		50.73(a)(2)(viii)		
POWER LEVEL (10)	000	20.2203(a)(1)		20.2203(a)(3)(I)		50.73(a)(2)(ii)		50.73(a)(2)(x)		
		20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71		
		20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER		
		20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A		
		20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)				

LICENSEE CONTACT FOR THIS LER (12)

NAME Z. T. Kitts, Licensing Engineer	TELEPHONE NUMBER (Include Area Code) (423) 843-7018
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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 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On November 9, 2000, with Unit 2 in a refueling outage, it was discovered that the four surveillance instructions (SIs) for the Containment Sump Level Instrument CFTs had not been performed as required by Technical Specifications 4.3.2.1.1. These SIs were erroneously entered as "complete" in the SI Program database on June 8, 2000. This inadvertent status change resulted in removal of the CFTs from the daily schedule for the August 21, 2000 work week. This updated daily schedule was used to determine which SIs were to be performed. The CFT SIs were immediately performed upon identification. Each Containment Sump Level Instrument Channel performed satisfactorily and was determined to be operable. The root cause of this event was a personnel error resulting in an inadvertent status change of four scheduled SIs to "complete". The involved individual was coached and counseled. The SI database was reviewed and the review did not identify any other missed surveillances. The SI Program database was modified to ensure a SI schedule date can not be inappropriately changed.

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

**I. PLANT CONDITION(S)**

Unit 2 was in Mode 5 in a refueling outage.

**II. DESCRIPTION OF EVENT**

**A. Event:**

On November 9, 2000, it was discovered that the four surveillance instructions (SIs) for Unit 2 Containment Sump [EIIS Code BP] Level Instrument Channel Functional Tests (CFTs) had not been performed on August 21, 2000 as required by Technical Specification (TS) 4.3.2.1.1. These four level channels, part of the emergency core cooling system (ECCS) [EIIS Code JE], provide the main control room with containment sump water level indication and are a part of the automatic sump swap-over logic. The specific CFTs are performed at a quarterly frequency and were last performed on June 5 and 6, 2000. Applying the 25 percent maximum extension of TS 4.0.2 would have required performance by September 28 and 29, 2000. These SIs were erroneously entered as "complete" in the SI Program database on June 8, 2000. This inadvertent status change resulted in removal of the CFTs from the daily schedule for the August 21, 2000 work week. This updated daily schedule was used to determine which SIs were to be performed, resulting in the delinquency of the four level channel SIs.

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

None.

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

June 5-6, 2000	The Instrument Channel Calibration work packages were completed.
June 7	The June 5-6, 2000 Instrument Channel Calibrations work packages were stasured to 'WC' (work complete) in the SI Program database without adding a 'special performance' record for the four CFTs contained in the Instrument Channel Calibration performance.
June 8	The June 5-6, 2000 Instrument Channel Calibration work packages were stasured to 'CD' (complete to document control) and the August 21, 2000 CFT work packages were inadvertently stasured as 'CD' in the SI Program database.
July 14	Instrument Channel Calibration work dates were erroneously applied to the next scheduled August 21, 2000 CFTs performance, resulting in their removal from the daily schedule.
July 26	The SI Program database was revised such that an error message is generated to prevent taking a scheduled SI directly from 'AW' (available for work) to 'CD' (complete to document control) unless first updated to 'WC' (work complete) including the date field.
September 28-29	Missed performance of the four CFT SIs.

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November 9                      A review of surveillance records identified the missed August 21, 2000 CFTs.

November 9                      Maintenance personnel performed the four CFTs SIs and determines each of the four level channels operable.

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

None.

**E. Method of Discovery:**

The condition was identified during a review of surveillance records by Maintenance personnel in preparation for Unit 2 entering Mode 4 during the refueling outage.

**F. Operator Actions:**

None.

**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 the delinquent performance of CFTs required by TSSs.

**B. Root Cause:**

The root cause of the condition was personnel error resulting in an inadvertent status change of the four August 21, 2000 CFT SIs to 'CD' (complete to document control) in the SI Program database by the Periodic Test Group.

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**C. Contributing Factors:**

The SI Program database did not contain a barrier to prevent statusing future SIs from 'AW' (available for work) to 'CD' (complete to document control) without first having entered a 'WC' (work complete) date.

**IV. ANALYSIS OF THE EVENT**

The containment sump level channels are part of the emergency core cooling system (ECCS) that ensures an automatic switch over from injection mode to recirculation mode occurs in the event of a loss-of-coolant accident. Following identification of the condition and while in Mode 5, functional testing was performed on each level channel. Each channel was found acceptable indicating the instruments would have performed their function as required by TSS.

**V. ASSESSMENT OF SAFETY CONSEQUENCES**

Based upon the above Analysis Of The Event, this condition did not adversely affect the health and safety of plant personnel or the general public.

**VI. CORRECTIVE ACTIONS**

**A. Immediate Corrective Actions:**

Upon identification of the condition, Maintenance personnel performed the four CFT SIs, finding each channel acceptable.

A review of all SI Program database SIs, where a 'WC' (work complete) date greater than 5 days prior to the scheduled due date, was performed to ensure maximum extension had not been exceeded.

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

The involved individuals were coached and counseled on the expectations for processing SIs.

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On July 26, 2000 the SI Program database was modified to ensure that a status change from 'AW' (available for work) to 'WC' (work complete) can not be made without the appropriate 'WC' date first being entered and a further status change to 'CD' (complete to document control) can not be made without the appropriate 'CD' date first being entered.

Management continues to emphasize the expectation of applying human performance error avoidance techniques such as application of self-checking, maintaining a questioning attitude, and not becoming complacent during repetitive work activities. Additional corrective actions are included in the Corrective Action Program under Problem Evaluation Report No. 00-010254-000.

**VII. ADDITIONAL INFORMATION**

**A. Failed Components:**

None

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

A review of previous reportable events for the past three years has identified one similar event associated with missed SI.

- LER 50-327/00-001 was associated with the failure to perform response time timing during postmaintenance testing (PMT). The cause was determined to be inadequate review of PMT requirements.

The corrective actions of this LER would not have prevented the identified condition. The current condition is an isolated case of personnel error with a contributing cause of inadequate barriers in the SI Program database.

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**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.

**VIII. COMMITMENTS**

None.