

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)									DOCKET NUMBER (2)			PAGE (3)	
Sequoah, Unit 1									0   5   0   0   0   3   2   7			1 OF 0   3	
TITLE (4)													

## Error in Technical Specification for Containment Sump Level

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)			
0   3	2   8	8   6	8   6	—   0   1   1	—   0   0	0   4	2   8	8   6	Sequoah, Unit 2	0   5   0   0   0   3   2   8			
										0   5   0   0   0   3   2   8			
OPERATING MODE (9)		5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)										
POWER LEVEL (10)	20.402(b)					20.406(c)			50.73(a)(2)(iv)			73.71(b)	
	20.405(a)(1)(ii)					50.36(c)(1)			50.73(a)(2)(v)			73.71(c)	
	20.405(a)(1)(iii)					50.36(c)(2)			50.73(a)(2)(vii)				
	20.405(a)(1)(iv)		XX			50.73(a)(2)(ii)			50.73(a)(2)(viii)(A)				
	20.405(a)(1)(v)					50.73(a)(2)(iii)			50.73(a)(2)(viii)(B)				
	20.405(a)(1)(vi)					50.73(a)(2)(iv)			50.73(a)(2)(xi)				

## LICENSEE CONTACT FOR THIS LER (12)

NAME									TELEPHONE NUMBER				
Heyward R. Rogers, Compliance Section Engineer									AREA CODE	6   1   5   8   7   0   -   6   1   4   7			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)													
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPPDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPPDS			
SUPPLEMENTAL REPORT EXPECTED (14)													
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)									<input checked="" type="checkbox"/> XX	NO	EXPECTED SUBMISSION DATE (15)		
											MONTH	DAY	YEAR

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

During a review of technical specification surveillances by a special task force, it was noted that the set point for containment sump level was in error as listed in Limiting Condition for Operation (LCO) 3.3.2.1. The technical specification stated the set point to be 30 inches above elevation 680 feet when in fact it should have been 30 inches above elevation 679 feet 9 inches (lower containment floor). The error was found to have existed since the initial issuance of the technical specification and is believed to have been caused by an error in the instrument mounting drawing for the sump level channels. The drawing error was corrected in 1983, but the error in the technical specification was not noted.

A review of the design basis of the containment sump level in the automatic swap over process has shown that the three-inch error in the set point did not present a significant safety hazard. Since no safety significance is associated with the three-inch error, it has been determined that the technical specification values can be met and still be consistent with the design basis of the plant. Therefore, no technical specification change will be made, but the instruments will be recalibrated to the set point as presently delineated in the technical specification.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 9/31/88

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

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

With both units in mode 5 (cold shutdown) during a review by a special task force team to verify that technical specification (TS) surveillances are adequately covered by plant procedures, it was discovered on March 28, 1986, that an error existed in the TSs for Limiting Condition for Operation (LCO) 3.3.2, "Engineered Safety Feature Actuation System Instrumentation," Item 9.A of Table 3.3-3 for units 1 and 2. The engineered safety feature (ESF) set point for containment sump level was found to be incorrect in that the LCO stated the set point to be 30 inches above elevation 680 feet when in fact it should be 30 inches above elevation 679 feet 9 inches, which is the floor of lower containment. Upon event discovery, an investigation was made to determine (1) the basis of the TS set point, (2) if the TS had ever been revised, and (3) if the equipment in the field was set correctly. Since both units were in mode 5, there was no immediate effect on the plant.

The containment sump high level set point inputs to the logic for automatic switch over from the injection mode to the recirculation mode following a loss of cooling accident (LOCA).

## CAUSE OF THE EVENT

The root cause of the event was determined to be an error in the TS upon initial issuance by NRC. The error may have been a result of confusion as to the exact elevation of the lower containment floor. Plant architectural drawings show the elevation as 679 feet 9 inches, and the instrument mounting drawing originally had the elevation of the floor as 680 feet which was incorrect. It is suspected that the TS set point may have been based on the instrument mounting drawing rather than the plant architectural drawing. The error on the instrument drawing was found in late 1982, and a field change request (FCR) was submitted to design to revise the drawing to match the architectural drawing. However, it was not noted that the TS was in error at that time, and subsequently, no change was made.

## ANALYSIS OF THE EVENT

A review of the set points of both units 1 and 2 containment sump level transmitters have shown that their set points were 30 inches above the lower containment floor. Since the instrument settings were inconsistent with the TS values, even though the TS were incorrect, this event is considered reportable in accordance with 10 CFR 50.73, paragraph a.2.i.b.

The design basis of the containment sump level set points was simply to ensure that a swap over did not occur based solely on a loss of refueling water storage tank (RWST) level. The containment sump input to the switch over logic is required in conjunction with a low RWST level to start an automatic swap over from the RWST to the containment sump. If the RWST level was lost, the suction to the residual heat removal (RHR) pump would not automatically swap over to a dry sump.

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

The difference of three inches between the actual floor elevation and that given in the TS is not of safety significance. This is based on the fact that the logic still required both a low RWST and an indicated water level in the sump before initiating an automatic swap over. Further, the Sequoyah Nuclear Plant Final Safety Analysis Review (FSAR), chapter 6.3.3, states that there will be 13.2 feet of water above the containment floor before RWST reaches its low limit to start the swap over sequence. Therefore, the three-inch error in the TS sump level set point would not have created any safety problems, and at all times before swap over occurred, an adequate head would have existed to ensure net positive suction head (NPSH) to the RHR pumps.

## CORRECTIVE ACTIONS

Both units 1 and 2 containment sump level transmitters are mounted correctly, and the errors in the instrument mounting drawing were corrected in March 1983. Since no safety significance exist using the present TS values, no change will be made to the TS, and before entering mode 4 (applicable mode for containment sump level as required by the TS), the instruments will be recalibrated using the existing TS values. Using the existing values in TS is more conservative in that it will ensure at least three inches more of water in the sump before a swap over occurs. Therefore, the design basis of the plant can still be met using the existing TS values.

## ADDITIONAL INFORMATION

The review of the task force on other TS surveillances is ongoing, and any further discrepancies found will be evaluated for reportability on a case-by-case basis. There have been no previous similar events identified at Sequoyah Nuclear Plant.

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

April 28, 1986

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

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOIA NUCLEAR PLANT UNIT 1 - DOCKET NO.  
50-327 - FACILITY OPERATING LICENSE DPR-77 - REPORTABLE OCCURRENCE REPORT  
SQRO-50-327/86011

The enclosed licensee event report provides details concerning a failure to calibrate the technical specification set point for containment sump level correctly. This event is reported in accordance with 10 CFR 50.73, paragraph a.2.i.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

P. R. Wallace

P. R. Wallace  
Plant Manager

Enclosure  
cc (Enclosure):

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NRC Inspector, Sequoia Nuclear Plant

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