

Tennessee Valley Authority. Post Office Box 2000. Soddy-Daisy, Tennessee 37379-2000.

Robert A. Fenech Vice President, Segucyah Nuclear Plan

June 10, 1993

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

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 - DOCKET NOS. 50-327 AND 50-328 - FACILITY OPERATING LICENSES DPR-77 AND DPR-79 -LICENSEE EVENT REPORT (LER) 50-327/93013

The enclosed LER provides details concerning a failure to perform a fire watch within the timeframe required by technical specifications.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as an operation prohibited by technical specifications.

Sincerely,

Robert C. Jerr

Robert A. Fenech

Enclosure cc: See page 2



(1832 ')

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cc (Enclosure): INPO Records Center Institute of Nuclear Power Operations 700 Galleria Parkway Atlanta, Georgia 30339-5957

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U.S. NUCLEAR REGULATORY COMMISSION

Approved OMB No. 3150-0104 Expires 4/30/92

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)							DOCKET NU	HBER (2) P	AGE (3)
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TITLE (4)									
Failure to Perfo	orm a Fire Watch Within	the Timefr	ame Requi	red by Ter	chnica	1 Speci	fications		
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On May 14, 1993, at 1315 Eastern daylight time, it was discovered that a fire watch patrol was not performed within the timeframe required by technical specifications. The fire watch patrol had been established in the diesel generator (D/G) building as a compensatory measure for a breached fire door. The fire watch evacuated the D/G building when a fire panel alarm sounded. The fire watch mistakenly believed that the alarm was the carbon dioxide actuation/evacuation alarm. The fire panel alarm was in response to smoke from welding that was in progress in the shop area of a different site building. The alarm was reset in five minutes; however, approximately 2 hours and 20 minutes elapsed before the fire watch returned to duty. The cause of the late performance of the fire protection foreman. The fire watch patrol was subsequently reestablished. Personnel involved were counseled on their responsibilities concerning the SON Fire Protection Program. NRC Porm 366A (6-89)

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)
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Sequoyah Nuclear Plant (SQN), Unit 1		YEAR NUMBER NUMBER	1111
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I. PLANT CONDITIONS

Unit 1 was defueled and Unit 2 was in Mode 5, cold shutdown for a forced outage.

- II. DESCRIPTION OF EVENTS
 - A. Event

On May 14, 1993, at 1315 Eastern daylight time (EDT), it was discovered that a fire watch patrol was not performed within the timeframe required by technical specifications (TSs). A fire watch patrol had been established in the diesel generator (D/G) building (EIIS Code NB) as a compensatory measure for a breached fire door. The fire watch evacuated the D/G building when a fire panel alarm (EIIS Code IC) in the D/G building sounded. The fire watch mistakenly believed that the alarm was the carbon dioxide (EIIS Code LW) actuation/evacuation alarm. The fire panel alarm was in response to smoke from welding that was in progress in the shop area of a different site building. The alarm was reset in five minutes; however, approximately 2 hours and 20 minutes elapsed before it was determined that the fire watch had not returned to duty. The fire watch patrol was subsequently reestablished.

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

None.

C. Dates and Approximate Times of Major Occurrences

May 11, at 1200	1993 EDT	A D/G building fire door was breached by an electrical cable that was routed through the doorway. A fire watch was established at the breached door.
May 14, at 1055	1993 EDT	The fire panel in the D/G building alarmed for a fire zone in a different building. The fire watch evacuated the D/G building and the fire foreman was notified of the fire watch leaving the post. Fire Operations personnel responded to the alarm.
May 14, at 1100	1993 EDT	It was determined that the alarm was in response to smoke from welding that was in progress in the shop area of a different site building

NRC Form 365A (6-89) U.S. NUCLEAR REGULATORY COMMISSION

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TEXT (If more	space is required, use	e additional NRC Form 366A's) (17)
	May 14, 1993 at 1105 EDT	The alarm was silenced; the fire foreman verified that the alarm was clear and informed Site Security that personnel could reenter the D/G building.
	May 14, 1993 at 1315 EDT	The labor foreman proceeded to the D/G building and observed that the fire watch was outside of the building. The fire foreman was notified and the fire watch returned to duty.
	May 17, 1993 at 1545 EDT	The cable was removed from the doorway, the fire door breach was removed, and the fire watch patrol was discontinued.
D.	Other Systems or	Secondary Functions Affected
	None.	
Ε.	Method of Discove	ry
	A labor foreman o away from the ass	bserved that the fire watch was outside of the D/G building, igned duty station.
F.	Operator Actions	
	No operator actio	ms were required.
G.	Safety System Res	ponses
	The fire detectio from ongoing work alarm on the D/G	n system alarm functioned as designed. A build-up of smoke activities in the Modifications shop area initiated the building fire panel and in the main control room on the main

111. CAUSE OF THE EVENT

A. Immediate Cause

control panel.

The immediate cause was that the fire watch did not return to the duty location after the fire panel alarm had been cleared. The fire watch did not exhibit a questioning attitude by remaining outside of the D/G building for over 2 hours without contacting the foreman or Fire Operations personnel. NRC Form 366A

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

B. Root Cause

The root cause of the late fire watch performance was inadequate supervision of the fire watch by the responsible fire foreman. The fire foreman was notified when the fire watch patrol left the duty station and was aware that the fire watch patrol was impacted by the alarm and evacuation of the D/G building. The fire foreman notified Site Security personnel that the D/G building alarm was cleared and personnel could reenter. The fire foreman failed to ensure resumption of the fire watch patrol within the required timeframe.

C. Contributing Factors

A contributing cause to the event was that the fire watch did not recognize the difference between the fire panel alarm and the carbon dioxide evacuation/actuation alarm. As a result, the fire watch evacuated the D/G building, mistakenly believing that the fire panel alarm was the carbon dioxide evacuation/actuation alarm.

V. ANALYSIS OF THE EVENT

The fire watch patrol was in place as a result of a fire door breach, in accordance with TS Limiting Condition for Operation 3.7.12. The breach consisted of an electrical cable routed through the doorway. The electrical cable did not interfere with closure of the sliding fire door. The breached fire door is located between the LA and 2A D/G 480-volt board rooms. Both A-train D/Gs were out of service. Fire loads on either side of the fire door were low and the fire detection and protection systems were operable and capable of performing their functions. Therefore, there was no adverse consequences to plant personnel or to the public as a result of this event.

V. CORRECTIVE ACTIONS

A. Immediate Corrective Actions

The fire watch patrol was reestablished.

B. Action to Prevent Recurrence

A meeting was conducted by the Fire Protection Manager with the fire foremen to ensure that each individual understood their responsibilities for ensuring that TS compensatory fire watches are established as described in the Fire Protection Plan.

Personnel involved were counseled on their responsibilities concerning the SQN Fire Protection Program. Specific training was provided to the fire watch on the differences between a fire panel alarm and a carbon dioxide alarm. NRC Form 366A (6-89)

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A revision to fire watch training is in process to include training on fire alarms, including fire panel trouble buzzers, fire panel alarms, and carbon dioxide alarms to expand on and reinforce general employee training that currently provides carbon dioxide alarm training.

VI ADDITIONAL INFORMATION

A. Failed Components

None.

B. Previous Similar Events

A review of previous events identified one LER (LER 50-327/91014) that was a result of inadequate administrative control of fire watch personnel. In that event, a fire watch was released from the patrol by the labor shop without reestablishing a roving patrol from the Fire Operations group. The corrective action established one organization responsible for managing fire watch patrols. This was accomplished by making the Operations, Fire Protection unit fire foreman responsible for fire watch personnel. That action would not have prevented the event described by this LER that resulted from inadequate supervision of the fire watch by the fire foreman.

VII. COMMITMENTS

None.