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O. J. "Ike" Zeringue  
Vice President, Browns Ferry Nuclear Plant

FEB 26 1993

U.S. Nuclear Regulatory Commission  
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Dear Sir:

TVA - BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2, AND 3 - DOCKET NOS. 50-259, 260, AND 296 - FACILITY OPERATING LICENSE DPR-33, 52, AND 68 - LICENSEE EVENT REPORT LER 50-259/93001

The enclosed report provides details concerning a missed surveillance on the reactor building crane. The surveillance is required prior to handling new or spent fuel or the spent fuel cask.

This report is submitted in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by the technical specifications.

Sincerely,

O. J. Zeringue

Enclosure  
cc: See page 2

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U.S. Nuclear Regulatory Commission

FEB 26 1993

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## LICENSEE EVENT REPORT (LER)

On January 28, 1993, at 1740 hours, the reactor building crane surveillance instruction (SI) could not be verified to have been performed to support the new fuel receipt and inspection activities. The handling of the new fuel had started on January 10, 1993, in preparation for the Unit 2, Cycle 6 refueling outage.

The missed SI is a conditional surveillance which is required to be performed quarterly on the reactor building crane prior to handling new or spent fuel or the spent fuel cask. This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by the technical specifications.

The root cause of the event was determined to be ambiguous or missing instructions as to who should sign off the SI verification step in the new fuel operations instruction. Contributing to the event was the lack of formalized guidance to determine the status of completed SIs.

Immediate corrective actions were to stop all reactor building crane activities and perform the required crane surveillance. GOIs will be revised to identify work control as the required signoff organization to verify SI completion. Operations personnel will be instructed to verify the latest SI performance through work control. TVA will review conditional SIs to determine if sufficient procedural controls are in place to ensure that conditional SIs are performed as required.

LICENSEE EVENT REPORT (LER)  
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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)			
Browns Ferry Unit 1		YEAR		SEQUENTIAL NUMBER		REVISION NUMBER			
	050002519	93	--	001	--	0002	OF	05	

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

I. PLANT CONDITIONS

Browns Ferry Units 1 and 3 were shutdown and in a defueled condition. Unit 2 was at approximately 70 percent power in a normal coastdown to a refueling outage.

II. DESCRIPTION OF EVENT

A. Event:

On January 28, 1993, the reactor building [NG] crane surveillance instruction (SI) could not be verified to have been performed to support new fuel receipt and inspection activities. The handling of the new fuel had started on January 10, 1993, in preparation for the Unit 2, Cycle 6 refueling outage. The missed SI is a conditional surveillance on the reactor building crane system that is required by technical specifications (TS) to be performed quarterly prior to any handling of new or spent fuel or the spent fuel cask.

On January 8, 1993, the refuel floor (RFF) shift manager initialed off the reactor building crane SI (O-SI-4.10.D) verification step in the new fuel operations general operating instruction (GOI) (O-GOI-100-2) after receiving positive feedback from the mechanical foreman that the reactor building crane SI had been completed within its periodicity. The RFF shift manager then allowed new fuel inspection and fuel handling activities to take place. On January 10, 1993, new fuel bundles were lifted for inspection using the reactor building crane's five-ton auxiliary hoist.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by the plant's technical specifications (TS). TS 3.10.D requires the reactor building crane to be operable anytime new or spent fuel is handled with the five-ton hoist.

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

None.

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

January 8, 1993	RFF shift manager signed O-SI-4.10.D verification step
January 10, 1993, at approximately 2300 hours CST	New fuel bundles inspection started
January 28, 1993, at approximately 1740 hours CST	Operations notified of missed O-SI-4.10.D performance
January 28, 1993, at 2328 hours CST	O-SI-4.10.D Successfully performed

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

None.

**E. Method of Discovery:**

On January 27, 1993, during the verification of the reactor building crane TS surveillance completions, Quality Assurance auditors discovered the operability surveillance for the reactor building crane had not been performed within three months (or 92 day window) before new fuel bundles were handled between January 10, 1993, and January 18, 1993.

**F. Operator Actions:**

Upon being notified of the missed crane SI, operators immediately stopped all reactor building crane activities.

**G. Safety System Responses:**

None.

**III. CAUSE OF THE EVENT**

**A. Immediate Cause:**

The immediate cause of the event was miscommunications between the mechanical foreman and the RFF shift manager. The foreman and the shift manager did not clearly communicate to each other concerning the periodicity of the SI performance. This resulted in the RFF shift manager believing that the surveillance was performed within the last quarter and allowing new fuel to be handled with the five-ton crane.

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		YEAR	NUMBER	NUMBER			
		050002	15	19	93	--	001--00004 OF 05

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

**B. Root Cause:**

The root cause of the event was determined to be ambiguous or missing instructions as to who should sign off the SI verification step in the new fuel operations instruction.

**C. Contributing Factors:**

Contributing to the event was the lack of formalized guidance to determine the status of completed SIs. Knowledge of whether or not an SI has been performed is not necessarily information that the RFF shift manager or mechanical foreman would have.

**IV. ANALYSIS OF THE EVENT**

The reactor building crane is a refuel floor overhead crane which consists of a 125-ton main hoist and a five-ton auxiliary hoist. TS require the reactor building crane to be operable anytime new or spent fuel is handled with the five-ton hoist. New fuel operations instruction O-GOI-100-2, step 4.3.1 verifies the completion of the reactor building crane surveillance O-SI-4.10.D prior to fuel handling. This crane surveillance is performed quarterly (i.e., every three months or 92 days) during fuel handling activities.

Between January 10, 1993, and January 18, 1993, the five-ton hoist of the reactor building crane was used to handle new fuel receipt and inspection. The hoist had been functionally tested in August 1992 and subsequent to the event, was satisfactorily tested on January 28, 1993. Although the SI was performed outside its quarterly surveillance window, the reactor building crane was fully functional during the fuel handling activities. Therefore, the plant and the public safety was not adversely affected and the safety of plant personnel was not compromised.

**V. CORRECTIVE ACTIONS**

**A. Immediate Corrective Actions:**

New fuel receipt and inspection activities involving use of the overhead crane to handle fuel bundles and spent fuel casks were immediately stopped. The reactor building crane surveillance to check and inspect the overhead crane in the refuel floor was performed and completed on January 28, 1993.



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

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

GOIs will be revised to identify work control as the required signoff organization to verify SI completion. Operations personnel will be instructed to verify the latest performance of SIs through work control. Additionally, TVA will review conditional SIs to determine if sufficient procedural controls are in place to ensure that conditional SIs are performed as required.

**VI. ADDITIONAL INFORMATION**

**A. Failed Components:**

None.

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

BFN has had a history of late SI performances as a result of inadequate control and tracking of surveillances schedule. However, this event was not caused by a SI scheduling problem. Instead, this event was the result of a procedure which did not designate a signoff individual for the SI verification step in the GOI.

**VII. COMMITMENTS**

- GOIs will be revised to identify work control as the required signoff organization to verify SI completion by March 31, 1993.
- Operations personnel will be instructed to verify the latest performance of SIs through work control by March 31, 1993.
- Conditional SIs will be reviewed to determine if sufficient procedural controls are in place to ensure that conditional SIs are performed as required by April 30, 1993.

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].