

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1) McGuire Nuclear Station - Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 3 6 9										PAGE (3) 1 OF 4																																		
TITLE (4) Missed Surveillance for Unit 1 Spent Fuel Ventilation Performance Test																																																						
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)																	
1 2			1 0			8 5			8 5			0 3			9 0			0 1			2 7			8 5													0 5 0 0 0																	
1 2			1 0			8 5			8 5			0 3			9 0			0 1			2 7			8 5													0 5 0 0 0																	
OPERATING MODE (9) 1										THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																																												
POWER LEVEL (10) 1 0 0										20.402(b)										20.405(c)										50.73(a)(2)(iv)										73.71(b)														
										20.406(a)(1)(i)										50.36(c)(1)										50.73(a)(2)(v)										73.71(c)														
										20.406(a)(1)(ii)										50.36(c)(2)										50.73(a)(2)(vii)										OTHER (Specify in Abstract below and in Text, NRC Form 365A)														
										20.406(a)(1)(iii)										X 50.73(a)(2)(ii)										50.73(a)(2)(viii)(A)																								
										20.406(a)(1)(iv)										50.73(a)(2)(iii)										50.73(a)(2)(viii)(B)																								
20.406(a)(1)(v)										50.73(a)(2)(iii)										50.73(a)(2)(ix)																																		
LICENSEE CONTACT FOR THIS LER (12)																																																						
NAME Julio G. Torre, Licensing																				TELEPHONE NUMBER 710 14 3171 31-18 10 1219																																		
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																																						
CAUSE					SYSTEM					COMPONENT					MANUFACTURER					REPORTABLE TO NRC					CAUSE					SYSTEM					COMPONENT					MANUFACTURER					REPORTABLE TO NRC									
SUPPLEMENTAL REPORT EXPECTED (14)																																																						
XX YES (If yes, complete EXPECTED SUBMISSION DATE)																				NO										EXPECTED SUBMISSION DATE (15) 0 2 2 6 8 6																								
ABSTRACT (Limit to 1400 spaces, i.e. approximately fifteen single-space typewritten lines) (16)																																																						
<p>On January 1, 1986, it was discovered that the Unit 1 Spent Fuel Pool Ventilation (VF) Performance Test had not been performed by the required date. Technical Specifications require a performance test on this system at least once every 18 months. The test had been previously performed on May 30, 1984, and was required to be performed by November 28, 1985, with the grace period extending up to December 10, 1985. On January 1, 1986, the VF Performance Test was successfully completed for VF exhaust fan 1A, and the system was declared operable. Also, a work request was submitted to repair VF exhaust fan 1B.</p> <p>On January 17, 1986, exhaust fan 1B was repaired and was successfully run. On January 27, it was discovered that the VF Performance Test had not been performed for exhaust fan 1B after repairs were completed on January 17, 1986. A second VF Performance Test was performed on January 27, 1986 which reestablished system operability.</p> <p>Unit 1 was in Mode 1 at 100% power at the time of the discovery.</p> <p>This incident is classified as a Personnel Error because the responsible engineer did not ensure the test was performed by the required date.</p> <p>During this event, the Spent Fuel Pool Ventilation System was operating as required.</p>																																																						
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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
McGuire Nuclear Station - Unit 1	0 5 0 0 0 3 6 9	8 5	0 3 9	0 0	0 2	OF	0 4

TEXT (If more space is required, use additional NRC Form 368A's) (17)

On January 1, 1986, it was discovered that the Unit 1 Spent Fuel Pool Ventilation (VF) Performance Test had not been performed by the required date. Technical Specification 4.9.11.1c requires a performance test on this system at least once every 18 months. The test had been previously performed on May 30, 1984, and was required to be performed by November 28, 1985, with the grace period extending up to December 10, 1985. On January 1, 1986, the VF Performance Test was successfully completed for VF exhaust fan 1A, and the system was declared operable. Also, a work order was submitted to repair VF exhaust fan 1B.

On January 17, 1986, exhaust fan 1B was repaired and was successfully run. On January 27, 1986, it was discovered that the VF Performance Test had not been performed for exhaust fan 1B after repairs were completed on January 17, 1986. A second VF Performance Test was performed on January 27, 1986, which reestablished system operability. This second part of the event will be covered in a supplemental report.

Unit 1 was in Mode 1, Power Operation, at 100% power at the time of the discovery.

This incident is classified as a Personnel Error because the responsible engineer did not ensure the test was performed by the required date.

BACKGROUND:

The Performance Periodic Test (PT) program has relied upon a single responsible engineer to schedule all PTs. The responsible engineer would receive a monthly computer print-out which listed last performed dates, due dates, and latest due dates for all PTs. In addition, a weekly printout would be sent to the subject engineer which listed PTs which were due to be performed within the next 2 months. The responsible engineer would use these printouts to develop quarterly PT schedules for Unit 1 and Unit 2. The schedules were then given to the appropriate personnel who had responsibility for each test.

Effective December 30, 1985, a new method of PT scheduling was adopted to reduce the chances of missing a surveillance requirement. The new method includes a revision to the 12 week schedule. Whereas the old schedule was generated by a computer and revised as required, the new schedule is hand typed with input coming from the Surveillance Engineer, the Test Supervisors, and the System Performance Analysis Engineer. These individuals meet once a quarter (approximately 12 weeks) and schedule tests to be performed on the due dates. They will also meet every four weeks to review tests performed the previous four weeks, resolve problems, and review the remainder of the schedule for possible revision. If problems arise with other groups which could delay any tests, the Surveillance Engineer will be notified to mediate. Each morning, the responsible engineer will review all tests that are planned for that day.

The function of the Spent Fuel Pool Ventilation (VF) system is to provide normal ventilation requirements for the spent fuel pool area. The supply portion of this system consists of a 100% capacity air handling unit containing cooling coils, heating coils, filters, and associated ductwork. A 100% capacity filter train, two 100% capacity exhaust fans, and associated ductwork make up the exhaust portion of the system. Consequences of airborne radiological releases that might occur in the fuel pool area are reduced by VF exhaust. The VF system is required to be tested at least once per 18 months.

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TEXT (If more space is required, use additional NRC Form 368A's) (17)

DESCRIPTION OF EVENT:

On January 1, 1986, while reviewing the computer printouts, Engineer A noticed that the VF PT apparently had not been performed. The printout showed that the PT was required to be performed by November 28, 1985, with a grace period extending up to December 10, 1985. The schedule showed that the PT had been scheduled to be performed on November 13, 1985. Upon further investigation, Engineer A verified that the VF PT had not been performed. He immediately notified the Shift Engineer who declared the Unit 1 VF system inoperable at 1400. Engineer A and the duty engineer then proceeded to perform the VF PT. The test was performed successfully running VF exhaust fan 1A. However, when exhaust fan 1B was started, it blew a fuse. A work request was written to investigate the problem. The VF system was declared operable at 1725.

As the result of the work order in question, the subject fuse in exhaust fan 1B was replaced on January 17, 1986, and exhaust fan 1B was successfully run. On January 27, 1986, it was discovered that the Unit 1 VF PT had not been performed for exhaust fan 1B after the subject work had been completed on January 17, 1986. A second VF PT was performed on January 27, 1986 which reestablished system operability. This second part of the event (missed surveillance for Unit 1 Spent Fuel Pool Ventilation Performance Test from January 17, 1986, to January 27, 1986) will be covered in a supplemental report after the investigation is completed.

In the past, the VF PT has been performed by either of two responsible station groups. Surveillance responsibility of this test has not been assigned to either group. Engineer A simply ensured one of the groups performed the test. In this instance, engineer A believed he assigned one of the subject station groups to perform the test. However, the responsible engineer in the station group in question does not remember the assignment being made, and no documentation exists to confirm the assignment.

There is a new Technical Specification surveillance scheduling computer program under development which will replace the current computer program. This new program will require each group responsible for PTs to directly input their own surveillance information and retrieve it at any time. The Integrated Scheduling group will oversee the scheduling of the PTs.

A review of past Licensee Event Reports indicates that this type of event is a recurring one. Three Licensee Event Reports (369/82-8, 369/82-73, and 369/85-02) involve cases of missed surveillances because of scheduling problems. However, Duke Power Company believes the new surveillance program will prevent such incidents in the future.

CORRECTIVE ACTIONS:

Immediate: Engineer A notified the Shift Engineer of the missed surveillance.

Subsequent: 1) The VF PT was successfully performed for VF exhaust fan 1A.  
2) A work request was submitted to repair VF exhaust fan 1B.

Planned: Personnel responsibility will be assigned for each PT.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

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SAFETY ANALYSIS:

Technical Specification 3.9.11 requires the VF system to be operable during movement of fuel within the storage pool or during crane operation with loads over the storage pool. When the VF system was not tested by midnight December 10, 1985, it technically became inoperable and was not determined to be operable until January 1, 1986. During this period, work was taking place in the spent fuel building which included moving loads over the storage pool and moving spent fuel. The VF system was operating during these times, as required. If an incident had occurred releasing radioactive airborne particles, the VF system would have been able to reduce these releases as required using exhaust fan 1A. If VF exhaust fan 1A had also been inoperable, fuel movement and moving loads over the storage pool would not have taken place. No incidents occurred which resulted in radioactive airborne releases.

The health and safety of the public were not affected by this incident.



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January 27, 1986

**Document Control Desk**

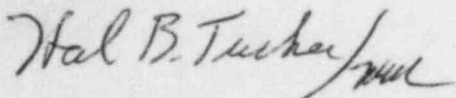
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: McGuire Nuclear Station, Unit 1  
Docket No. 50-369  
LER 369/85-39

Gentlemen:

Pursuant to 10CFR50.73 Section (a) (2) (i), attached is Licensee Event Report 369/85-39 concerning a missed surveillance for Unit 1 Spent Fuel Pool Ventilation Performance Test. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,



Hal B. Tucker

JGT/jgm

Attachment

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