NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO 3150-0104
EXPIRES 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1): VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NUMBER (2): 0 5 0 0 0 2 7 1

PAGE (3): 1 OF 0 3

TITLE (4): FAILURE TO ESTABLISH FIRE WATCH FOR INOPERABLE FOAM SUPPRESSION SYSTEM

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 9	2 1	8 8	8 8	0 1 1	0 0	1 0	1 7	8 8	N/A	0 5 0 0 0
									N/A	0 5 0 0 0

OPERATING MODE (9)	N	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)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
JAMES P. PELLETIER, PLANT MANAGER	AREA CODE 8 0 2 — 2 5 7 - 7 7 1 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
					N/A					
					N/A					

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

ABSTRACT:

On September 21, 1988 shift personnel identified that the Recirculation Motor Generation Foam Suppression System (EIIS Identifier = KP) had been made inoperable without establishing the required once per hour fire watch for the affected area. Upon discovery, the Foam Suppression System was immediately made operable and returned to service.

It was determined that shift personnel failed to identify that the system was inoperable when the system control switch was placed in the "ABORT" position. Placing the system in "ABORT" defeats the system automatic initiation function. A review of previous records revealed that this identical error was made numerous times over the last four years.

The root cause of this event was determined to be insufficient training of shift personnel in Fire Protection Technical Specifications.

The operator training programs will be modified to provide enhanced Tech. Spec. training and will be supported by including design bases and system details.

This event occurred while the plant was operating under normal conditions at 100% power.

1022

NRC Form 366 (9-83)

NRC Form 366A
(9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Vermont Yankee Nuclear Power Station	0 5 0 0 0 2 7 1	8 8	— 0 1 1	— 0 0	0 2 OF 0 3

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

DESCRIPTION OF EVENT:

On September 21, 1988 with the plant at 100% power, shift personnel identified that a once per hour fire watch was not established on 09/20/88 when the Recirculation Motor Generation Foam Supression System control switch was placed in the "ABORT" position. Placing the system in "ABORT" defeats the system automatic initiation function. A subsequent review of plant records revealed numerous (9) other identical events during the last four years. These events were perpetuations of earlier errors.

Technical Specification 3.13.G.2 requires that from and after the date that this system is inoperable, a fire watch shall be established to inspect the affected location at least once every hour.

Shift personnel failed to determine that the system was out of service due to a misunderstanding of the system design and [its] operability requirements. The original system design included a three minute time delay in the initiation circuit to provide the operator an opportunity to prevent system operation (via the "ABORT" switch) if not actually required. The operations staff incorrectly assumed that the converse of this design feature was true (i.e. The system could be considered operable if it could be manually initiated within three minutes). There were fifty seven (57) times within the last five years that this system was placed in "ABORT". As a result of the above incorrect assessment, ten (10) times the control switch was placed in "ABORT" without establishing the Tech. Spec. LCO requirement for a once per hour fire watch. The three minute time delay was removed from the initiation circuit during the 1987 refueling outage.

Upon discovery of this discrepancy on 9/21/88, the system was immediately made operable and returned to service as specified by Technical Specification. During the period that this system was placed in "ABORT", without the requisite fire watches, the associated fire detection system was at all times operable and the foam suppression system manually operable. During these events a fire watch was also frequenting this specific area every two hours to satisfy other fire protection program commitments.

CAUSE OF EVENT:

The immediate cause of this event(s) was shift personnel failing to determine that the subject foam supression system was inoperable as a result of placing the control switch in "ABORT" and thus defeating the automatic trip function of the system.

The root cause of this event(s) is inadequate training relative to Vital Fire Protection Systems Technical Specifications. The Operations staff does not receive the same level of Tech. Spec. training for the Vital Fire Protection Systems as is provided for other plant systems. This training is significant since unlike most safety systems, the Fire Protection Systems are not "operating systems" and are relegated to a standby role and rarely operated by Control Room personnel.

NRC Form 366A

NRC Form 366A (9-83)

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Vermont Yankee Nuclear Power Station	0 5 0 0 0 2 7 1	8 8	— 0 1 1	— 0 0	0 3 OF 0 3

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

ANALYSIS OF EVENT:

Tech. Spec. Section 3.13.G.2 requires that from and after the date that the Recirculation Motor Generation Foam System is inoperable, a fire watch shall be established to inspect the location at least once every hour. This action was not taken on September 20, 1988 and on numerous (9) other occasions from 1985 through 1988.

During these periods, the automatic initiation function of the Recirc. M-G Foam System was not available and therefore, by definition, the system was inoperable. In the event of a fire in this area, an alarm would be received in the Control Room and the fire brigade dispatched to the scene. The system deluge valve, if needed, would be manually operated and the foam suppression system initiated. Although this response would be delayed, relative to the automatic actuation of the system, an effective response to a fire was available.

During these periods a fire watch was also frequenting this area every two hours to satisfy other fire protection program commitments.

Based on the above information and since there was no need for a fire supression response, it is determined that there was no potential adverse effects on the health and safety of the public as a result of this event.

CORRECTIVE ACTIONS:

Immediate:
The Recirculation Motor Generator Foam Suppression System was immediately made operable and was returned to service.

Intermediate:
This issue and specifically this LER and LER 88-10 will be discussed in detail with all operating shifts as soon possible but no later than November 1, 1988. The discussions will detail this event(s) and provide guidance and caution in future operability determinations.

Long Term:
The 1989 Requalification Training Programs will be modified to provide enhanced Fire Protection System Tech. Spec. training and will include, as necessary, design details and design bases. Appendix R and supporting documentation shall also be included, as necessary, to provide a level of training and familiarity consistent with other plant Tech. Spec. training.

ADDITIONAL INFORMATION:

A similar event was reported as LER 88-10.

VERMONT YANKEE NUCLEAR POWER CORPORATION

P. O. BOX 157
GOVERNOR HUNT ROAD
VERNON, VERMONT 05354

October 17, 1988
VYV 88-219

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

REFERENCE: Operating License DPR-28
Docket No. 50-271
Reportable Occurrence No. LER 88-11

Dear Sirs,

As defined by 10CFR50.73, we are reporting the attached Reportable Occurrence as LER 88-11, Rev. 0.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

James P. Pelletier
Plant Manager

cc: Regional Administrator
USNRC Office of Inspection and Enforcement
Region I
475 Allendale Road
King of Prussia, PA 19406

IE22
1/1