



VERMONT YANKEE NUCLEAR POWER CORPORATION

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

March 13, 1991  
VYV #91-082

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 91-02

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER 91-02.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Donald A. Reid  
Plant Manager

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

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PDR ADUCK 05000271  
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ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3160-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) VERMONT YANKEE NUCLEAR POWER STATION	DOCKET NO. (2) 0 5 0 0 0 2 7 1	PAGE (3) 0 1 OF 0 3
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TITLE (4)  
FIRE PROTECTION SYSTEM SURVEILLANCE NOT COMPLETED WITHIN THE REQUIRED INTERVAL

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQ. #	REV#	MONTH	DAY	YEAR	FACILITY NAMES		
0 6	1 8	8 6	5 1	- 0 0 2	- 0 0	0 3	1 3	9 1	0 5 0 0 0		

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO REQ'MTS OF 10CFR 5: <input checked="" type="checkbox"/> ONE OR MORE (11)											
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.405(a)(1)(vi)	20.405(a)(1)(vii)	20.405(a)(1)(viii)	20.405(a)(1)(ix)	20.405(a)(1)(x)
					X							

LICENSEE CONTACT FOR THIS LER (12)

NAME DONALD A. REID, PLANT MANAGER	TELEPHONE NO. 8 0 2 2 5 7 1 - 7 7 1 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYST	COMPNT	MFR	REPORTABLE TO NPRDS	CAUSE	SYST	COMPNT	MFR	REPORTABLE TO NPRDS
					N/A				
					N/A				

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

MO	DA	YR

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

On February 15, 1991 it was discovered that a Technical Specification required surveillance test had exceeded the specified test interval. The plant was operating at 100 percent power and was unaffected by this occurrence.

Technical Specification 4.13.D.1.b requires that high pressure carbon dioxide extinguishing systems be demonstrated operable at least once per 18 months. In 1986, even though the test interval was exceeded, the tests were completed successfully. This occurrence was discovered during a routine review of surveillance test completion dates. The root cause of this occurrence was an incorrect interpretation of the surveillance interval for this item.

No other discrepancies were identified as a result of this review. Modifications and revisions to the surveillance program since this event, have served to correct this issue.

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LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

UTILITY NAME (1)	DOCKET NO. (2)	LER NUMBER (3)			PAGE (4)
		YEAR	SEQ. #	REV#	
VERMONT YANKEE NUCLEAR POWER STATION	050002719	1	002	00	02 OF 03

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

DESCRIPTION OF EVENT

On February 15, 1991, while performing a review of surveillance test completion dates, it was discovered that a surveillance interval had been exceeded. The deficiency identified, occurred in June of 1986 while the plant was in a shutdown mode for the replacement of recirculation piping.

The surveillance test is the 18 month demonstration of operability for the high pressure carbon dioxide fire extinguishing systems. The surveillance test was completed successfully in July of 1984 and again in June of 1986. This interval exceeded the 18 month plus 25% surveillance interval specified by Technical Specifications.

CAUSE OF EVENT

The root cause of this event was a misunderstanding of the test interval specified. The surveillance requirement for operability testing of the high pressure carbon dioxide extinguishing systems was incorrectly interpreted as an operating cycle surveillance interval. The operating cycle interval was further mis-interpreted as being limited only by the dates of start-up following a refuel outage and start-up following the next refuel outage. The surveillance interval is actually based on the calendar period between performance of the surveillance tests, and in this case is specified as 18 months.

ANALYSIS OF EVENT

During the period of late 1985 and early 1986, Vermont Yankee was in a maintenance outage. The purpose of this outage was the replacement of recirculation piping. The outage was of a longer duration than a routine refueling outage.

This occurrence involves the 18 month testing of the high pressure carbon dioxide extinguishing systems. Tech. Spec. section 4.13.D.1.b specifies that:

"The CO<sub>2</sub> system located in the cable vault, switchgear room, and diesel fire pump day tank room shall be demonstrated operable: b) At least once per 18 months by verifying that the system, including associated ventilation dampers, will actuate automatically to a simulated actuation signal."

Testing of the carbon dioxide systems at Vermont Yankee is normally conducted during refueling outages. Routine refuel outages occur at an interval of approximately 18 months. As a result of the recirculation piping replacement effort, the outage was extended and the required 18 month interval for testing of the carbon dioxide systems was exceeded.

Due to the scheduling of the surveillance test during refueling outages, it was mistakenly assumed that the test was required on an operating cycle basis. The problem was further complicated by the mistaken application of the incorrect definition for an operating cycle test interval.

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CORRECTIVE ACTIONS

Immediate Corrective Actions

The review of surveillance test completion dates verified that no other surveillance intervals had been exceeded. This review was completed on February 15, 1991.

Subsequent Corrective Actions

In the period since this occurrence, a number of improvements have been made to the Surveillance Testing Control program at Vermont Yankee. The Surveillance Testing Control procedure has been revised to include specific information regarding surveillance test intervals and allowable tolerances. Training has been provided, in conjunction with the Technical Training Department, for departmental surveillance scheduling coordinators. The training emphasized the importance of the surveillance test intervals and interval tolerance. Additional controls have been established within the procedure for the tracking of surveillance test scheduling and completion.

These efforts have adequately addressed this issue to prevent recurrence, and no further actions are required.

ADDITIONAL INFORMATION

There have been no similar events reported in the last five years.