VERMONT YANKEE NUCLEAR POWER CORPORATION

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December 12, 1990
VYV #90-389

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 90-18

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER 90-18.

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

IE22

NRC Form 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMS NO.3150-0104
EXPIRES 4/30/92
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 20603.

FACILITY NAME (1)	DOCKET NO. (2)	PAGE (3)
VERMONT YANKEE NUCLEAR POWER STATION	0 5 0 0 0 2 7 1	0 1 OF 0 3

TITLE (4) PRIMARY CONTAINMENT ISOLATION SYSTEM SPURIOUS ACTUATION DUE TO AN INADEQUATE PROCEDURE

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQ. #	REV#	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NO.(S)
1 0	1 0	9 0	9 0	- 0 1 8	- 0 0	1 2	1 2	9 0		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO REQ'MTS OF 10CFR §: √ ONE OR MORE (11)					
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	x	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:
		20.405(a)(1)(III)	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 NO.
DONALD A. REID, 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	SYST	COMPNT	MFR	REPORTABLE TO NPRDS	CAUSE	SYST	COMPNT	MFR	REPORTABLE TO NPRDS
N/A					N/A				
N/A					N/A				

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MO	DA	YR
YES (If yes, complete EXPECTED SUBMISSION DATE)	x NO				

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

On 10/10/90 at 0015, with the reactor shutdown for refueling, during the performance of the once per cycle excess flow check valve functional test, a Primary Containment Isolation System (PCIS) (JM*) Group 1 Isolation signal was received due to differential pressure (dP) sensed across switches dPIS 2-116A, B, C, D. The differential pressure was caused by the incomplete isolation of the dP switches, as the procedure did not specifically cite the valve numbers or state that more than one instrument was affected by the test.

This event is being reported at this date as the event was not originally determined to be reportable under 50.73 (a)(2)(iv). Vermont Yankee was notified by USNRC Region 1 and the Resident Inspector that they disagreed with the determination and requested that the event be reported.

The root cause of this event has been determined to be an inadequate procedure. The procedure has been revised to include specific instructions to isolate and bypass all of the differential pressure switches during testing of the applicable excess flow check valve.

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

DESCRIPTION OF EVENT

On 10/10/90 at 0015, with the reactor shutdown for refueling, during the performance of the once per cycle excess flow check valve functional test, a Primary Containment Isolation System (PCIS) Group 1 Isolation signal was received due to differential pressure (dP) sensed across dP switches dPIS 2-116A, B, C, D. The excess flow check valve functional test is performed during the reactor vessel hydro. Reactor pressure (approximately 1000 psi) is developed utilizing the Control Rod Drive (CRD) Pumps. The excess flow check valves are located upstream of the dP switches and act to isolate the instrument tubing in the event of a line break. The differential pressure was caused by the incomplete isolation of the dP switches from reactor pressure while the excess flow valves were being checked. The procedure contained a general precaution to isolate differential pressure switches when testing of the associated instrument sensing line was being conducted, however the procedure did not specifically cite the valve numbers or state that more than one instrument was affected by the test. In this system configuration, five differential pressure switches and one differential pressure transmitter need to be prepared for the test. When reactor pressure was relieved downstream of the excess flow check valves, the dPIS switches experienced a large dP indicative of a steam line break and initiated a Group 1 isolation. The same situation occurred during the testing of the B and C Main Steam Line Instrumentation configurations, however the Control Room had anticipated these actuations, based upon the response from the A Main Steam Line differential pressure switches.

This event is being reported at this date as the event was not originally determined to be reportable under 50.73(a)(2)(iv). This determination was based upon guidance provided in NUREG 1022, Supplement 1, section 6.9. The NUREG states that spurious actuations of ESF equipment not required to be operable and that has been properly removed from service, such that the system cannot perform its intended function, are not reportable. Vermont Yankee management took the position that the event paralleled the condition discussed in the NUREG and was not reportable. This decision was based upon the following:

1. The PCIS System was not required to be operable.

2. The components (isolation valves) within that system had outstanding work documents open, therefore the equipment had not been declared operable.

3. At the time of the isolation the PCIS Group 1 outboard isolation valves were closed and controlled under the reactor vessel hydro procedure. Therefore, the closure of the second isolation valve in the same Main Steam Line did not perform its intended function (i.e., isolate the line) because the line was already isolated via the outboard isolation valve. A similar example is referenced in the NUREG.

NRC Form 366A U.S. NUCLEAR REGULATORY COMMISSION (6-89).	APPROVED OMS NO.3150-0104 EXPIRES 4/30/92 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 20603.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

UTILITY NAME (1)	DOCKET NO. (2)	LER NUMBER (6)			PAGE (3)
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VERMONT YANKEE NUCLEAR POWER STATION	0 5 0 0 0 2 7 1	9 0	- 0 1 8	- 0 0	0 3 OF 0 3

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

On 11/16/90, Vermont Yankee was notified by USNRC Region 1 and the Resident Inspector that they disagreed with the determination of not reportable and requested that the event be reported.

CAUSE OF EVENT

The root cause of this event has been determined to be an inadequate procedure. The procedure was general in stating the requirements for differential pressure switch isolation during the excess flow check valve functional test.

ANALYSIS OF EVENT

This event did not pose any adverse safety implications.

1. At the time of the event the reactor was shutdown and undergoing the pre-startup hydrostatic test.

2. The Group 1 Outboard Isolation valves were in the isolated position and procedurally controlled at the time of this event, therefore no significant change in the reactor vessel pressure boundary occurred when the inboard valves cycled closed.

CORRECTIVE ACTIONS

The applicable procedure has been revised to include specific instructions to isolate and bypass all of the differential pressure switches during testing of the applicable excess flow check valve. This action is considered sufficient to prevent a similar occurrence in the future.

ADDITIONAL INFORMATION

No similar events have been reported to the commission in the past five years.