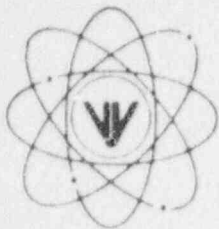


VERMONT YANKEE NUCLEAR POWER CORPORATION



P.O. Box 157, Governor Hunt Road
Vernon, Vermont 05354-0157
(802) 257-7711

March 1, 1996
BVY 96-22

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 96-004

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER 96-004.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Robert J. Wanczyk
Plant Manager

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

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NRC Form 366 (4-95) U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER)				APPROVED BY OMB NO. 3150-0104 EXPIRES 04/30/98 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.							
FACILITY NAME (1) VERMONT YANKEE NUCLEAR POWER STATION						DOCKET NUMBER () 05000271		PAGE (3) 01 OF 05			
TITLE (4) Discrepancies identified in the Appendix J Leak Rate Testing Program											
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 NAME	DOCKET NO.(S)	
02	02	96	96	-- 004 --	00	03	01	96	N/A	05000	
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: CHECK ONE OR MORE (11)									
N		20.2201(b)		20.2203(a)(2)(v)		X		50.73(a)(2)(i)		50.73(a)(2)(viii)	
POWER LEVEL (10)		100		20.2203(a)(1)		20.2203(a)(3)(i)		X		50.73(a)(2)(ii)	
				20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71	
				20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER	
				20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		(Specify in Abstract below or in NRC Form 366A)	
				20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)			
LICENSEE CONTACT FOR THIS LER (12)											
NAME ROBERT J. WANCZYK, PLANT MANAGER								TELEPHONE NO. (Include Area Code) 802-257-7711			
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
NA					.....	NA				
NA					.....	NA				
SUPPLEMENTAL REPORT EXPECTED (14)						EXPECTED SUBMISSION DATE (15)		MO	DAY	YEAR	
X	YES (If yes, complete EXPECTED SUBMISSION DATE)				NO			04	15	96	

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On 2/2/96 while operating at 100% power, a Vermont Yankee self-assessment identified that 10CFR50 Appendix J requirements were not being satisfied on certain containment penetrations. Penetrations X-23 and X-24 for the Reactor Building Closed Cooling Water System are not Type C leak rate tested due to an approved exemption which is no longer supported by the existing plant configuration. A exemption was never submitted documenting the agreed upon method of testing the Core Spray System Injection Line penetrations (X-16A & B). The method of testing the Inboard MSIV's does not meet the requirements of 10CFR50 Appendix J or the approved NRC exemption as documented in the Program SER and TER. The outboard MSIV's have been and continue to be tested appropriately. A Basis for Maintaining Operation evaluation was performed and determined that the plant can continue to operate safely until the concerns with the Appendix J testing are resolved. The root cause evaluation is in progress. Long term corrective actions will be provided in a supplement to this LER at the completion of the root cause analysis.

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

Item 1:

The loop inside of containment is seismically qualified and will remain intact post-LOCA. Even though not all of the RBCCW system was upgraded during the 1985/86 Seismic Reanalysis Program, the system was originally Seismic Class 1. A walkdown was performed on the RBCCW piping outside containment by structural engineers from Design Engineering on 2/14/96 & 2/15/96. The walkdown did not identify any issues that would make the original seismic qualification of the small or large bore RBCCW piping outside containment questionable. There is reasonable assurance that the portions not upgraded would withstand a seismic event. There is currently no identified leakage in the system. Thus the system could still maintain pressures greater than P_s at penetrations X-23 and X-24.

Item 2

It has been determined that due to the lack of test connections and ALARA concerns that testing of the inside containment isolation valves is not appropriate. Testing of the two in series outboard isolation valves provides an equivalent assurance of containment integrity for these penetrations. The valves are located close to the primary containment and there are limited potential leak paths between the valves and containment.

Item 3

The test method used for testing the inboard MSIV's is allowed by ANSI N45.4-74 which is the standard which the Vermont Yankee Appendix J program commits to. The test pressure is applied in the accident direction which while lower than P_s is the method allowed for testing of the outboard MSIV's. The Technical Specification criteria for leakage rate is based upon a test at 24 psig.

CORRECTIVE ACTIONS

An operability assessment was performed for the subject penetrations and testing methods. This assessment concluded that the plant could continue to operate safely until corrective actions were completed. Initial Corrective actions from the BMO are:

Item 1. RBCCW Penetration Test Exemption:

Short Term:

1. Operations will initiate an AP 4000 surveillance to require Operations to trend and evaluate the RBCCW Surge Tank make-up on a weekly basis. Increased makeup will require the water usage be identified by:
 - a. determining if any maintenance activities may have required makeup to the surge tank,
 - b. evaluating Drywell Sump totalizer readings for increased Drywell leakage, and/or
 - c. performing an inspection of the entire RBCCW system.

Conservative acceptance criteria for RBCCW system leakage has been established to insure that sufficient water is available in the surge tank for 30 days with no makeup.

2. Assign a Design engineer to identify a plan for resolving this issue.

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

DESCRIPTION OF EVENT

On 2/2/96 while operating at 100% power, a Vermont Yankee initiated self-assessment identified that the local leak rate testing on several containment penetrations was not being conducted in accordance with 10CFR50 Appendix J.

Item 1 - Reactor Building Closed Cooling Water (RBCCW) Penetration Test Exemption

Penetrations X-23 and X-24 (EIS = PEN) are the containment inlet and outlet lines for the RBCCW (EIS = CC) System. These penetrations are not Type C leak rate tested due to an approved exemption. Our review has determined that, due to changes made in the seismic and safety classifications of portions of the RBCCW System, the approved exemption is no longer supported. The original Appendix J Testing Program stated that Type C testing of valves for penetrations X-23 and X-24 was not necessary based upon a note in the program that stated that "Type C testing is not required for valves which remain open with the system operating at pressures greater than the maximum peak accident pressure (P_a) throughout the 30-day post-accident period, considering possible single active failure." Due to changes in the seismic and safety classifications of the RBCCW System the design does not support this exemption because: 1) the piping directly outboard of the RBCCW System containment isolation valves V70-113/117 (EIS = ISV) is classified as Non-Nuclear Safety, and 2) the components necessary to maintain system pressure $> P_a$ have not been classified as seismically qualified.

Item 2 - Core Spray (CS) Injection Line Testing Exemption

Penetrations X-16A/B are the CS (EIS = BM) System injection line penetrations. Our reviews have determined that while there has been docketed correspondence between Vermont Yankee and the NRC as to the method of testing of these penetrations, an exemption for the Vermont Yankee proposed testing method was never submitted as required. The isolation valves for penetration X-16A/B are V14-12A/B, V14-13A/B and V14-30A/B. Docketed correspondence between Vermont Yankee and NRC show that Vermont Yankee proposed to alternately test V14-12A/B and V14-11A/B due to a lack of test connections and ALARA. Vermont Yankee intended to submit an exemption request for the alternative testing method however the exemption was never submitted.

Item 3 - Inboard Main Steam Isolation Valve (MSIV) Test Method

The method of testing the Inboard MSIV's (EIS = ISV) does not meet the requirements of 10CFR50 Appendix J or the approved NRC exemption as documented in the Program SER. The SER approving the reduced pressure testing states that the test pressure is to be applied between the inboard and outboard MSIV's. Contrary to this, when testing the inboard MSIV's the test pressure is applied upstream of the inboard MSIV's. This test method has been in place since initial testing and is consistent with the intent of the Technical Specifications.

CAUSE OF EVENT

The formal root cause investigation is in progress at this time. When complete a supplement LER will be provided.

ANALYSIS OF EVENT

A Basis for Maintaining Operability (BMO) was prepared and determined that the plant can continue to operate safely even though there are questions relative to the Appendix J testing performed.

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

Short Term action #1 is expected to be completed by Operations by March 15, 1996.

Short Term action #2 is expected to be completed by Design Engineering by April 26, 1996.

Long Term

The recommended long term corrective action is to implement the final identified option from Short Term Action #2 and implement it prior to start-up from the 1996 Outage.

Item 2. V14-13A/B and V14-30A/B Testing Exemption:

Short Term

The Operations Department will revise VYOPF 0150.07 to require performing a weekly inspection on the Core Spray sub-system piping from the pump discharge check valves to Primary Containment. The inspections will be performed while the system is pressurized by keep-fill. Any leakage identified by these inspections shall be repaired on an expedited basis.

Conservative acceptance criteria for Core spray system leakage has been established to provide sufficient margin for repair of any identified leakage.

This action is expected to be completed by March 15, 1996.

Long Term

The recommended long term corrective action is to submit an exemption to NRC to test valves V14-11A/B and V14-12A/B for Penetrations X-16A/B.

This exemption is expected to be submitted by June 15, 1996.

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Item 3. Inboard MSIV Test Method:

Short Term

None

Long Term

The long term corrective action is to test the Inboard and Outboard MSIVs in accordance with the approved NRC exemption.

This recommendation is expected to be completed prior to start-up from the 1996 Outage.

General

Short Term

1. Operations personnel will be trained as to the intent and content of this BMO.

This short term corrective action is expected to be completed by March 22, 1996.

Additional Corrective Actions:

Additional corrective actions resulting from the root cause investigation will be submitted as a supplement to this LER when the root cause investigation is completed. This is expected to be completed by 4/15/96.

ADDITIONAL INFORMATION

A review of the past five years License Event Reports did not reveal any similar occurrences where programmatic concerns with the Appendix J Program resulted in failure to perform required leak rate testing. Programmatic concerns have been identified in the IST, ISI, and Appendix R Programs. These were reported to the NRC in LER's 95-17, 95-14, 96-01, and 96-02. All of these programs are presently undergoing comprehensive reviews to address all identified deficiencies.