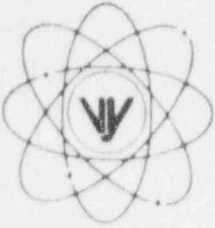


# VERMONT YANKEE NUCLEAR POWER CORPORATION



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

May 3, 1996  
BVY 96-60

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 96-009

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER 96-009.

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 U.S. NUCLEAR REGULATORY COMMISSION (4-95)				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 20566-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.											
<b>LICENSEE EVENT REPORT (LER)</b>															
<b>FACILITY NAME (1)</b> VERMONT YANKEE NUCLEAR POWER STATION						<b>DOCKET NUMBER ( )</b> 05000271				<b>PAGE (3)</b> 01 OF 03					
<b>TITLE (4)</b> Combustible Material in Building Joints between Turbine, Radwaste, Reactor and Control Buildings which Degrades the Three Hour Fire Barrier Requirement for the Cable Vault due to Personnel Error															
<b>EVENT DATE (5)</b>			<b>LER NUMBER (6)</b>				<b>REPORT DATE (7)</b>			<b>OTHER FACILITIES INVOLVED (8)</b>					
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME		DOCKET NO.(S)				
04	04	96	96	-- 009 --	00	05	03	96	N/A		05000				
<b>OPERATING MODE (9)</b>		N		<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: CHECK ONE OR MORE (11)</b>											
				20.2201(b)				20.2203(a)(2)(v)		50.73(a)(2)(i)		50.73(a)(2)(viii)			
<b>POWER LEVEL (10)</b>		100		20.2203(a)(1)				20.2203(a)(3)(i)		X 50.73(a)(2)(ii)		50.73(a)(2)(x)			
				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)					
<b>LICENSEE CONTACT FOR THIS LER (12)</b>															
<b>NAME</b> ROBERT J. WANCZYK, PLANT MANAGER										<b>TELEPHONE NO. (Include Area Code)</b> 802-257-7711					
<b>COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)</b>															
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD	.....	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD	.....				
NA					.....	NA					.....				
NA					.....	NA					.....				
<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>										<b>EXPECTED SUBMISSION DATE (15)</b>		MO	DAY	YEAR	
YES (If yes, complete EXPECTED SUBMISSION DATE)					X	NO									

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

On 4/4/96 with the plant at 100% power, during a review of the building construction drawings, Vermont Yankee (VY) determined that a combustible polystyrene material is present in the joints between the Turbine, Radwaste, Reactor and Control Buildings. A more detailed assessment of this area was prompted by an earlier report regarding the discovery of this material between the Reactor Building and Cable Vault Penetration Blockouts in the Control Building. The Control Building Cable Vault contains unsealed cable penetration blockouts, the cables being sealed at the Reactor and Turbine Building walls, which, with the presence of the combustible material could provide a path for a fire to spread to or from the Cable Vault. This degrades the south and west walls of the Cable Vault which are required to be three-hour-rated fire barriers in accordance with the Fire Hazards Analysis. Therefore this event is reportable under 10CFR50.73(a)(2)(ii)(B) as a condition outside the design basis. The apparent cause of this event is personnel error. Personnel involved in the initial Fire Hazards Survey failed to recognize that the polystyrene material exists between these buildings and is directly accessible from the Cable Vault Blockouts. Immediate corrective action was to station a two-hour roving fire watch in the Radwaste Building, in the Heating Ventilating and Air Conditioning Room and in the general area of the Turbine Building. A continuous fire watch had already been established in the cable vault for a previously identified problem. Long-term corrective action will include bounding the areas of concern with a rated fire barrier configuration. No fires have occurred in these areas, as a result of the degraded fire barriers, and therefore there was no danger to the health and safety of the public.

NRC Form 366 U.S. NUCLEAR REGULATORY COMMISSION (4-95)		APPROVED BY OMB NO. 3150-0104 EXPIRES 04/30/98	
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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	
		YEAR	SEQUENTIAL NUMBER
VERMONT YANKEE NUCLEAR POWER CORPORATION	05000271	96	-- 009 --
		REV #	00
		02 OF 03	

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

DESCRIPTION OF EVENT

On 4/4/96, with the plant at 100% power, a detailed assessment determined that a combustible polystyrene material is present between the joints of the Turbine(EIIS =NM), Radwaste(EIIS =NE), Reactor (EIIS =NG), and Control Buildings (EIIS =NA). This detailed assessment was prompted as a result of an earlier report regarding the discovery of this polystyrene material between the Reactor Building and a Cable Vault Penetration in the Control Building.

The south and west walls of the Control Building are required to be three-hour-rated fire barriers in accordance with the Fire Hazard Analysis. However, the three hour fire rating of these walls may be degraded due to the unsealed cable penetrations blockouts in the Cable Vault and the presence of the combustible polystyrene material in the joint.

This type of filler material was a common construction practice that was utilized when the plant was built.

CAUSE OF EVENT

The root cause of this event is under investigation. The apparent cause of this event is a personnel error. This was a cognitive type error in that personnel performing the initial Fire Hazards Survey failed to recognize that the joints between the buildings contained the combustible polystyrene material and that the Cable Vault penetration blockouts directly access the joint.

If the root cause is determined to be different from the apparent cause, it will be submitted as a supplemental LER.

ANALYSIS OF EVENT

The Control Building, which contains the Cable Vault, is a Seismic Class I building with walls that provide a three hour fire barrier. The Cable Vault uses penetration blockouts to accommodate various control and power cables which breach the walls but are sealed penetrations in the Reactor and Turbine Building walls. The Control building is separated from adjoining buildings by an approximately two inch space to accommodate seismic movement. This space is filled with the combustible polystyrene material .

It is postulated that if a fire were to occur in one building it could propagate to an adjoining building through this material. If a fire had occurred in the Cable Vault, it would have been detected and suppressed in the early stages as the Cable Vault is protected with a smoke detection system and an installed CO2 fire suppression system. Although there is no fire detection system installed in the Turbine Building near the Cable Vault walls, areas of the Turbine Building with significant fire hazards are equipped with both fire detection and suppression systems. Additionally, the plant is staffed twenty-four hours a day and operators and other personnel make frequent rounds such that any fire would likely be detected and suppressed in its early stages

Due to the installed detection and suppression systems and the additional scrutiny of shift personnel any fire would likely be detected and suppressed with little impact on the safe operation of the facility.

CORRECTIVE ACTIONS

At the time of the event, a continuous fire watch was in place in the Cable Vault to compensate for a previously identified problem. This fire watch addresses the compensatory actions for the Cable Vault for this event.

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		REV #	PAGE (3)
		00	03 OF 03

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

#### IMMEDIATE CORRECTIVE ACTIONS

A two hour roving Fire Watch was established in the adjoining Radwaste Building, in the Heating Ventilating and Air Conditioning Room and in the general area of the Turbine Building.

#### LONG TERM CORRECTIVE ACTIONS

Long term corrective action will include bounding the areas of concern with a rated fire barrier configuration. This will be completed prior to startup from the 1996 refueling outage.

#### ADDITIONAL INFORMATION

Similar events, dealing with fire barrier issues, have been reported as LER's 93-01, 94-18 and 95-04.