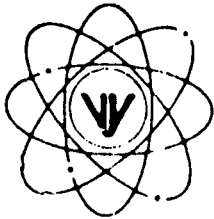


# VERMONT YANKEE NUCLEAR POWER CORPORATION



RD 5, Box 169, Ferry Road, Brattleboro, VT 05301

FVY 85-57

REPLY TO:  
ENGINEERING OFFICE  
1671 WORCESTER ROAD  
FRAMINGHAM, MASSACHUSETTS 01701  
TELEPHONE 617-872-8100

June 19, 1985

U.S. Nuclear Regulatory Commission  
Office of Inspection & Enforcement  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Attention: Dr. Thomas E. Murley  
Regional Administrator

Reference: a) License No. DPR-28 (Docket No. 50-271)

Dear Sir:

Subject: Notification of Potential Existence of a Defect in  
Accordance with 10CFR21.21

In accordance with the provisions of 10CFR Part 21, Section 21, we are hereby notifying you that we have obtained information indicating that a defect may exist with respect to electrical penetrations supplied by Conax Buffalo Corporation.

Enclosure I to this letter documents the details of this notification. Should you have any questions regarding this matter, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

cc

Warren P. Murphy  
Vice President and  
Manager of Operations

/dm

8506240406 850619  
PDR ADOCK 05000271  
S PDR

JE 19 11

VERMONT YANKEE NUCLEAR POWER CORPORATION

U.S. Nuclear Regulatory Commission

June 19, 1985

Page 2

- cc: (3) U.S. Nuclear Regulatory Commission  
Director, Office of Inspection & Enforcement  
Washington, D.C. 20555
- (3) Chairman, Vermont Yankee Nuclear  
Safety Audit and Review Committee
- (1) Manager, Operational Quality Assurance Dept.  
Yankee Atomic Electric Company
- (1) Institute of Nuclear Power Operations (INPO)

ENCLOSURE I

CONAX PENETRATION PART 21 REPORT

COMPANY INFORMING  
THE COMMISSION

Vermont Yankee Nuclear Power Corporation  
RD #5, Box 169  
Ferry Road  
Brattleboro, VT 05301

FACILITY

Vermont Yankee Nuclear Power Station  
PO Box 157  
Governor Hunt Road  
Vernon, Vermont 05354

FIRM SUPPLYING  
COMPONENT

Conax Buffalo Corporation  
2300 Walden Avenue  
Buffalo, New York 14225

NATURE OF DEFECT

During conversations with Conax Buffalo Corporation, it was learned that some electrical penetrations supplied by Conax and installed at Vermont Yankee contained teflon insulation and sealant materials. Teflon is highly susceptible to damage from radiation and failure of the teflon insulation or teflon sealant material could lead to a significant safety hazard.

At Vermont Yankee, the subject penetrations are installed in the outboard bulkhead of the containment personnel airlock.

It was determined that failure of teflon material in the penetrations would not create a significant safety hazard because the penetration does not contain any safety class electric circuitry and that a failure of the sealant material in the penetration would not result in any additional release of radioactivity to the public because the inner airlock seal would act as the containment boundary.

However, company Technical Administrative Guidelines require reporting defects which could create a significant safety hazard at other facilities.

DATE ON WHICH  
DEFECT WAS DETECTED

A potential Part 21 Report Evaluation was initiated on May 16, 1985.

NUMBER OF COMPONENTS  
AT FACILITY

Vermont Yankee has four penetrations which contain teflon. All four penetrations are installed in the outboard bulkhead of the containment personnel airlock.

CORRECTIVE ACTIONS

Although the potential for a significant safety hazard is not created by the use of the penetrations containing teflon insulation and sealant material, Vermont Yankee intends to replace the penetrations with ones which contain materials which are more radiation resistant.

RELATED ADVICE

We recommend that any nuclear installation utilizing Conax penetrations investigate the construction of those penetrations to determine if they contain teflon. Both safety class and non-safety class electrical penetrations should be examined. Failure of the teflon material could create a safety hazard by creating an electrical failure of the insulation material and a mechanical failure of the containment pressure boundary.