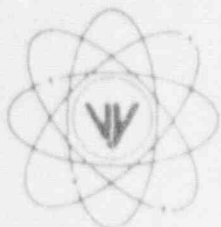


# VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

BVY 91-54

REPLY TO  
ENGINEERING OFFICE  
580 MAIN STREET  
FOLTON, MA 01740  
(508) 779-6711

May 15, 1991

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Document Control Desk

References:

- a) License No. DPR-28 (Docket No. 50-271)
- b) Letter, USNRC to VYNPC, dated 9/22/89; Inspection Report 50-271/89-13
- c) Letter, USNRC to VYNPC, dated April 12, 1991; Inspection Report 50-271/91-09
- d) Letter, VYNPC to USNRC, BVY 90-100 dated October 12, 1990

Dear Sir:

**Subject: Reply to Outstanding Item; Inspection Report 91-09**

This letter is written in response to an outstanding item described in section 7.0 of Inspection Report 91-09 (Reference c), concerning the turbine building roof vent radiation monitoring system.

Background

In response to NRC followup item 84-11-05, Vermont Yankee established procedures for appropriate monitoring of post accident releases through the turbine roof vents using existing area radiation monitors. In a subsequent Inspection Report, 89-13 (Reference b), we were requested to submit our procedures to NRR for their review. During preparation of our submittal we decided that relocation of two ARM's would enhance our ability to perform post accident monitoring of the roof vents. These were relocated during the 1990 refueling outage, and Reference d) was submitted on October 12, 1990.

We were recently informed by Reference c) that NRR has determined that our present method of monitoring the turbine building roof vent releases in a post-accident condition is inadequate to satisfy the regulatory position stated in NUREG 0737.

Concurrent with our actions in preparation for submittal of our procedures for post accident monitoring to NRR, we periodically sampled the roof vents to reassess the need for monitoring of these vents during normal operations.

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These samples showed that the releases out of the turbine building roof vents were very low but detectable. Using conservative assumptions and ground level dispersion factors the maximum additional infant thyroid dose is calculated to be about 0.5 mrem/yr. The maximum beta and gamma air doses are calculated to be about  $8E-4$  mRad/yr and  $4E-3$  mRad/yr respectively.

#### Proposed Actions

As a result of the determination by NRR that our post accident monitoring is inadequate, our analysis of release data taken at the roof vents during plant operation, and our desire to fully resolve this issue, we propose the following actions.

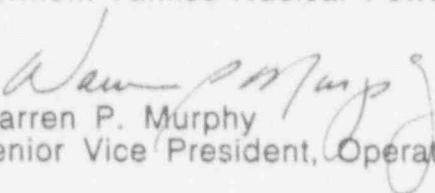
1. We will install a hardware change that will either eliminate the release, reroute it via a monitored discharge path or provide local monitoring for the turbine building roof vents.
2. We will perform an engineering evaluation of viable hardware alternatives and advise you of our course of action by 12/1/91.
3. We will implement the appropriate hardware changes no later than the end of the refueling outage in the fall of 1993.

Until the implementation of the permanent hardware changes, we propose to continue to use our existing procedures for monitoring post accident releases through the roof vents and will revise the FSAR to ensure consistency with the operating procedures. We will also revise our Off-Site Dose Calculation Manual (ODCM) and appropriate procedures to include periodic grab samples and calculations to quantify releases through the roof vents during operation. We will include these releases in our semiannual effluent release reports. These interim provisions will be implemented by October 1, 1991.

We trust that the information provided adequately addresses your concerns; however, should you have any questions or desire additional information, please do not hesitate to contact us.

Very truly yours,

Vermont Yankee Nuclear Power Corporation

  
Warren P. Murphy  
Senior Vice President, Operations

cc: USNRC Regional Administrator, Region I  
USNRC Resident Inspector, VYNPS  
USNRC Project Manager, VYNPS