VERMONT YANKEE
NUCLEAR POWER CORPORATION

Ferry Road, Brattleboro, VT 05301-7002

BVY 90-006

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

January 16, 1990

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, NVY 89-108, dated 5/18/89
c) Letter, VYNPC to USNRC, BVY 89-48, dated 6/2/89
d) Letter, USNRC to VYNPC, NVY 89-172, dated 8/21/89
e) Letter, VYNPC to USNRC, BVY 89-101, dated 10/30/89

Dear Sir:

Subject: Vermont Yankee Cable Vault CO2 Alternate Testing

The purpose of this letter is to provide the additional information you requested regarding the testing of our Cable Vault CO2 Suppression System during the period October 31 - November 2, 1989.

As described during our telecon with your Mr. C. Anderson and Mr. D. Notley on November 8, 1989, we performed alternate testing of this system. The testing was conducted with the support of RETROTEC Energy Innovations Limited and demonstrated that the installed Carbon Dioxide Suppression System will, if required, operate as designed. During the above referenced telecon, we forwarded preliminary test results and informed you that on this basis we would declare the subject system operable. In addition, as we agreed, a once per two hour "Fire Watch" has been implemented as a compensatory measure until a final test report was received from the vendor and the NRC had the opportunity to review this document and our assessment of the test results.

The final test report is provided as Attachment A to this letter. The preliminary test report and calculations for which our preliminary determination (and our November 8, 1989 telecon) was based is also provided as Attachment B. The test reports demonstrate that the pressures developed as a result of the dynamic discharge are low and that the structural integrity of the enclosure will not be compromised. It also demonstrates that the Carbon Dioxide System will satisfy the design bases by providing a 50% concentration of CO2 for greater than ten minutes throughout the room.

Based upon the testing performed and the attached supporting reports, we have confirmed that we have a fully operable Cable Vault CO2 Fire Suppression system that will operate as designed.

We trust this information responds to your concerns regarding the operability of our Cable Vault CO2 system; however, should you have any questions or require additional information concerning this matter, please do not hesitate to contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Warren P. Murphy
Vice President and
Manager of Operations

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