VERMONT YANKEE
NUCLEAR POWER CORPORATION

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June 15, 2000
BVY 00-59

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

References:
(a) Letter, USNRC to VYNPC, "Modification of Vacuum Breakers on Mark-1 Containments (Generic Letter 83-08)," NVY 83-23, dated February 2, 1983.
(b) Letter, VYNPC to USNRC, "Modification of Vacuum Breakers on Mark-1 Containments," FVY 83-36, dated May 11, 1983.
(c) Letter, USNRC to VYNPC, "Modification of Vacuum Breakers on Mark-1 Containments (Generic Letter 83-08)," NVY 86-10, dated January 17, 1986.
(d) Letter, VYNPC to USNRC, "Modifications of Vacuum Breakers on Mark-1 Containments (Generic Letter 83-08)," FVY 86-19, dated March 10, 1986.
(e) Letter, USNRC to VYNPC, "Mark-1 Containment Drywell Vacuum Breakers," NVY 86-236, dated November 24, 1986.

Subject: **Vermont Yankee Nuclear Power Station**
License No. DPR-28 (Docket No. 50-271)
Clarification to SER for GL 83-08, Containment Vacuum Breakers

In Reference (e) Vermont Yankee received a Safety Evaluation Report (SER) confirming the adequacy of our vacuum breakers in relation to Generic Letter (GL) 83-08. The concern specified in the GL (Reference a) was related to the potential for excessive stress on the vacuum breaker components during chugging and oscillation phases of a blowdown to the torus during a loss of coolant accident.

During preparation of our Design Basis Documents (DBDs) for these systems, it was noted that the wording in the SER did not accurately characterize our facility configuration and operation. Specifically, the SER identifies "..two 18″ external type vacuum breakers made by Atwood – Morrill mounted on two 18″ external lines connecting the drywell and the wetwell." The configuration of our facility is in fact ten vacuum breakers mounted on eight external lines. Additionally, the Technical Evaluation Report attached to the SER states in sections 5 and 6 that the vacuum breakers will not open during chugging transients. The reference supporting the conclusion that the vacuum breakers would not open was a 1983 report by Continuum Dynamics Inc. (CDI). In a later report, January 1985, General Electric (GE) had the same contractor (CDI) perform further analysis of VY vacuum breaker loads. This analysis concluded that the vacuum breakers would open and determined actuation velocities of the valve discs. This later report was listed as Reference (2) in the attachment to our March 10, 1986 letter (Reference d). The valve stress levels under the maximum impact velocity from this evaluation were well below yield and acceptable without valve modifications. Thus, the conclusion of no modifications is correct,

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however, the vacuum breakers are predicted to open, contrary to the SER/TER statements, which were based upon the earlier evaluation.

As previously stated, this inconsistency, discovered during DBD development, is provided as a clarification of our system configuration and operation with regard to your SER (Reference e). We request that a revision/clarification to the SER be issued to accurately reflect our installed drywell to torus vacuum breaker configuration and operation to eliminate any confusion.

Should you have any questions concerning this matter, please contact Mr. Jeffrey T. Meyer at (802) 258-4105.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Gautam Sen

Gautam Sen
Licensing Manager

cc: USNRC Region 1 Administrator
USNRC Project Manager – VYNPS
USNRC Resident Inspector – VYNPS
Vermont Department of Public Service

SUMMARY OF VERMONT YANKEE COMMITMENTS

BVY NO.: __00-59__

The following table identifies commitments made in this document by Vermont Yankee. Any other actions discussed in the submittal represent intended or planned actions by Vermont Yankee. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Licensing Manager of any questions regarding this document or any associated commitments.

COMMITMENT	COMMITTED DATE OR "OUTAGE"
None	N/A