



# VERMONT YANKEE NUCLEAR POWER CORPORATION

SEVENTY SEVEN GROVE STREET

RUTLAND, VERMONT 05701

B.4.2.1

WVY 79-86

REPLY TO:

ENGINEERING OFFICE

TURNPIKE ROAD

WESTBORO, MASSACHUSETTS 01581

TELEPHONE 617-366-9011

August 2, 1979

United States Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Attention: Mr. Boyce H. Grier

References: (a) License No. DPR-28 (Docket 50-271)  
(b) USNRC letter to VYNPC dated July 2, 1979; IE Bulletin 79-14

Dear Mr. Grier:

Subject: IE Bulletin 79-14; Seismic Analysis for As-Built Safety Related  
Piping Systems

Approximately one year ago, Vermont Yankee initiated a program to update the seismic design documentation for safety related piping. This program was initiated because we were unable to extract usable information from the archive files.

Our program plan was as follows:

1. Take design record piping isometrics and code them into the computer as a geometry input;
2. Verify as-built geometries and support location;
3. Re-analyze critical piping systems using actual amplified response spectra input rather than using "Robinson Fix" multipliers to static analyses upon which plant design is based;
4. Issue new design data books for critical systems;
5. With the issuance of IE Bulletin 79-02 the program was expanded to include re-analysis of baseplates for flexibility using the newly calculated support loads.

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At the completion of plant construction and prior to startup of the facility in 1971, the architect-engineer for Vermont Yankee conducted a complete hanger verification program in which as-built support locations and design were compared with design drawings. In addition, an independent third party review by an independent consultant was conducted of selected safety related piping. This review consisted of a geometry check, independent stress analysis, support design review and support location check.

Thus, although the review was not conducted within the past twelve months, a review was, nevertheless, conducted after plant construction was completed.

We believe this satisfies the intent of the subject Bulletin.

Recently, additional checking (in the Bulletin 79-02 effort) of seismic support locations and piping geometry against drawings, has revealed that minor variances in seismic support locations exist. These differences between hardware and drawings were reviewed by the architect-engineer before plant start-up and, in his judgement, had no impact on plant design safety factors or safety operation. Since we have found these minor discrepancies in piping and hanger configurations, we are accelerating our efforts of re-checking all systems and plan to up-date isometrics to the current as-built condition to be used in our re-analysis of critical piping systems at Vermont Yankee.

Vermont Yankee will shutdown in mid-September for a six week refueling outage. By the end of that outage we will have completed our inspection of all safety related piping for support location, drilled-in anchor bolt installation and piping geometry. We will submit a written report within thirty days after plant startup.

We believe the previous inspection efforts, as well as our planned program, satisfies the intent of the subject Bulletin. Should you have any questions, or require additional information, please feel free to contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

*Rg Wanczyk*  
for D. E. Moody  
Manager of Operations

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