

Maine Yankee

RELIABLE ELECTRICITY SINCE 1972

EDISON DRIVE • AUGUSTA, MAINE 04330 • (207) 622-4868

January 24, 1994
MN-94-08 JRH-94-14

UNITED STATES NUCLEAR REGULATORY COMMISSION
Attention: Document Control Desk
Washington, DC 20555

References: (a) License No. DPR-36 (Docket No. 50-309)
 (b) Letter, Holtec International to USNRC, "Error Notices from Boeing Computer Services", dated December 28, 1993.
 (c) Letter, Maine Yankee to USNRC, "Proposed Technical Specification Change No. 177: Maine Yankee Spent Fuel Pool Reracking", MN-93-09, dated January 25, 1993.

Subject: Response to NRC Request: ANSYS® Error Notice 93-79.

Gentlemen:

Maine Yankee has been requested by the USNRC to provide an assessment of the impact of the computer code ANSYS® error notice 93-79 on the proposed reracking license amendment, Reference (c). The NRC request is based, in part, on the information contained in Reference (b). This letter responds to the NRC request.

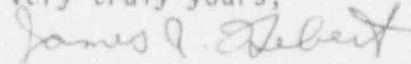
The Stone & Webster Engineering Corporation, as consultants to Maine Yankee on the reracking seismic analysis, routinely receives and reviews error reports for the ANSYS® Engineering Analysis System as applicable to their use of ANSYS®. Since completing the seismic analysis of the proposed fuel storage racks using this program, Swanson Analysis Systems, Inc., the generator of ANSYS®, has identified an error in the STIF38 Dynamic Fluid Coupling element (Error Notice 93-79). This error notice was reviewed and found not to be applicable to the analysis supporting the Maine Yankee proposed reracking.

The error occurs for the option KEYOPT(3)=0 (concentric circular cylinders). The proposed rack seismic analyses did not use this option, but rather used KEYOPT(3)=2 (arbitrary circular cylinders).

In addition, the error only affects the damping matrix associated with the ANSYS® Dynamic Fluid Coupling element. As noted in Section 3.2.4 of Reference (c), fluid damping was conservatively ignored in the seismic analysis. Therefore, since the damping was set to zero, the analysis results would not have been affected even if the option with the error had been selected.

We hope that this information clarifies the applicability of ANSYS® Error Notice 93-79. Please contact us if you have further questions.

Very truly yours,



James R. Hebert, Manager
Licensing and Engineering Support

c: Mr. Thomas T. Martin
Mr. J. T. Yerokun
Mr. E. H. Trottier
Mr. Patrick J. Dostie
Mr. Thomas R. Dignan, Esq.
Mr. Paul Stern, Esq.

310041

Aool
1/0