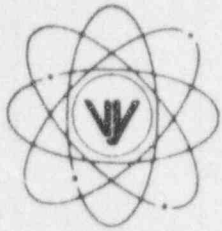


VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

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

June 11, 1996
BVY 96-77

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

References: (a) License No. DPR-28 (Docket No. 50-271)
(b) Report, "Vermont Yankee Loss-of-Coolant Accident Analysis," YAEC-1772,
June 1993
(c) Letter, VYNPC to USNRC, BVY 95-141, dated December 29, 1995

Subject: Additional Information Requested at Inspection of Vermont Yankee RELAP5YA
(BWR) Implementation

The purpose of this letter is to provide information requested by the NRC during the subject inspection held at Yankee Atomic Electric Company on May 30 and May 31, 1996. Specifically, Vermont Yankee is providing the individual effects on peak clad temperature (PCT) of changes in our LOCA model as analyzed in our Cycle 17 and 18 LOCA calculations.

The limiting Cycle 17 single failure case with one core spray pump and one low pressure coolant injection pump operable resulted in a maximum PCT of 1778.1°F under the old UNIX operating system. Installation of the new UNIX operating system changed the results of this case to 1764.0°F, a decrease of 14.1°F. This decrease was due to the different time steps selected automatically by RELAP5YA with the new operating system. This change is consistent with the time step sensitivity study performed for Cycle 17 and documented in Reference (b).

The Cycle 18 core-specific changes in density, scram and doppler reactivity changed the results of this case to 1788.9°F, an increase of 24.9°F above the UNIX only change.

The combination of operating system and Cycle 18 core-specific changes resulted in an increase of 10.8°F above the original maximum PCT for Cycle 17. Also, for Cycle 18, an error in the RELAP5YA fuel behavior model resulted in a PCT of 1778.1°F, a decrease of 10.8°F. These changes were reported to the NRC in Reference (c).

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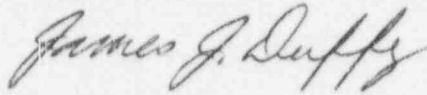
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United States Nuclear Regulatory Commission
June 11, 1996
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We trust that the information provided satisfies your request; however, should you have any questions, please contact this office.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

A handwritten signature in cursive script, reading "James J. Duffy".

James J. Duffy
Licensing Engineer

c: USNRC Region I Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS