



November 18, 2002 BVY 02-91

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

References:

- (a) Report, 0000-0006-1823-SRLR, Rev. 0, Supplemental Reload Licensing Report for Vermont Yankee Nuclear Power Station, Reload 22 Cycle 23, October 2002
- (b) NEDC-32814P, "Vermont Yankee Nuclear Power Station, SAFER/GESTR LOCA, Loss of Coolant Accident Analysis," March 1998
- (c) The GESTR-LOCA and SAFER Models for the Evaluation of the Loss of Coolant Accident, Volume III, SAFER/GESTR Application Methodology, NEDE-23785-1-P-A, Revision 1, General Electric Company, October 1984
- (d) Letter, S.A. Richards (USNRC) to J.F. Klapproth (GE), Review of NEDE-23785P, Volume III, Supplement 1, Revision 1, "GESTR-LOCA and SAFER Models for Evaluation of Loss of Coolant Accident, Volume III, Supplement 1, Additional Information for Upper Bound PCT Calculation," February 2002

Subject:

Vermont Yankee Nuclear Power Station License No. DPR-28 (Docket No. 50-271)

10CFR50.46 (a) (3) (ii) Report of Changes to Calculated Peak Clad Temperature

This letter is to report, in accordance with 10 CFR 50.46(a)(3)(ii), a change in emergency core cooling system (ECCS) evaluation due to changes in fuel assembly type in use at Vermont Yankee (VY) and analysis modeling.

VY recently completed a refueling outage and has begun operation with GE14 fuel type. The three previous reloads used GE13 and GE9 fuel types. The Licensing Basis peak clad temperature (PCT) calculated for GE14 fuel is 1950°F [Reference (a)] and this result exceeds the previously reported limiting GE13 fuel type PCT [Reference (b)] by 100°F. PCT results for both fuel types are based on the same approved GE methods [References (c) and (d)]

The GE-14 fuel type PCT increase is due to a combination of effects. The fuel type effect is related to a higher Linear Heat Generation Rate for GE14 fuel leading to a higher PCT for this fuel type. Other effects are related to modeling changes. The GE-14 LOCA analysis was performed with two modeling changes; (1) the recirculation line discharge valve was credited to close, and (2) the LPCI injection temperature was lowered. The net effect of all these changes results in a Licensing Basis PCT increase of 100°F.



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Since the PCT for GE14 fuel is well within the acceptance criterion of 50.46(b)(1), there is no need for reanalysis or other action per 50.46(a)(3)(ii). All other 50.46(b) criteria are met for GE14 as well.

If you have any questions concerning this report, please contact Mr. Jim DeVincentis at (802) 258-4236

Sincerely,

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Manager, Licensing

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cc: USNRC Region 1 Administrator

USNRC Resident Inspector

USNRC Project Manager

Vermont Department of Public Services

## SUMMARY OF VERMONT YANKEE COMMITMENTS

## BVY NO.: 02-91 10CFR50.46 (a) (3) (ii) Report of Changes to Peak Clad Temperature

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

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