

YANKEE ATOMIC ELECTRIC COMPANY

Telephone (508) 779-6711
TWX 710-380-7619



580 Main Street, Bolton, Massachusetts 01740-1398

November 30, 1989

BVY 89-111
DCC 89-055

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

References: (a) License No. DPR-28 (Docket No. 50-271)
(b) Letter, VYNPC to USNRC, BVY 89-60, dated June 30, 1989 with
Topical Reports YAEC-1693 and YAEC-1694
(c) Letter, YAEC to USNRC, BVY 89-102 and DCC 89-049,
dated November 6, 1989

Subject: Submittal of "Application of One-Dimensional Kinetics to Boiling
Water Reactor Transient Analysis Methods" Report

Dear Sir:

In accordance with Reference (c), Yankee Atomic Electric Company submits the subject report which is a revised version of the report submitted with Reference (b). In Reference (c), we modified our request for review and approval of the Vermont Yankee One-Dimensional (1-D) kinetics topical reports (YAEC-1693 and YAEC-1694) to incorporate a generic topical review and approval. The enclosed minor administrative changes to this report should permit your generic review and approval of our 1-D kinetics methods to be finalized.

The report, "Application of One-Dimensional Kinetics to Boiling Water Reactor Transient Analysis Methods," YAEC-1693 (enclosed with Reference (b)), presents the methodology, verification, and justification for application of RETRAN-02 1-D kinetics option to the presently approved transient analysis methods. The report documents the method for analyzing boiling water reactor transients with RETRAN-02 with the 1-D kinetics option using Vermont Yankee results to verify the methods. The minor administrative changes to the report which properly identify the generic application of the methods occur in the Title Page, the Abstract (Page iv), Section 1.0 (Introduction, Page 1), Section 2.0 (Description of Current Licensing Method, Pages 2 and 3), Section 3.0 (Description of the Application of One-Dimensional Kinetics, Pages 7 through 9), Section 4.0 (Verification of One-Dimensional Kinetics Application, Pages 15 through 21), Section 5.0 (Licensing Approach and Treatment of Uncertainties, Pages 36, 38, and 39), Section 6.0 (Conclusions, Pages 40 and 41), and Appendix A (Determination of ACPR95 Through a Response Surface Approach, Page A-1).

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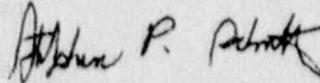
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The report, "Method for Generation of One-Dimensional Kinetics Data for RETRAN-02," YAEC-1694 (also enclosed with Reference (b)), does not require revision for generic application because it is already presented in the terminology of a generic topical report.

We trust that this information supports our request; however, should you have any questions on this matter, please contact us.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY



Stephen P. Schultz
Vice President

SPS/gjt/0939u

Enclosure

cc: USNRC Region I Administrator
USNRC Resident Inspector, VYNPS
USNRC Project Manager, VYNPC