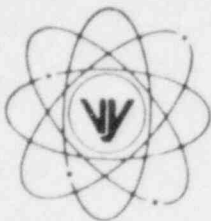


VERMONT YANKEE NUCLEAR POWER CORPORATION



RD 5, Box 169, Ferry Road, Braintree, VT 05301

September 10, 1982

2.C.2.1
FVY 82-102

REPLY TO:

ENGINEERING OFFICE

1671 WORCESTER ROAD
FRAMINGHAM, MASSACHUSETTS 01701

TELEPHONE 617-872-8100

United States Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Office of Nuclear Reactor Regulation
Mr. Domenic B. Vassallo, Chief
Operating Reactors Branch No. 2
Division of Licensing

References: (a) License No. DPR-28 (Docket No. 50-271)
(b) Letter, VYNPC to USNRC, FVY 82-93, Proposed Change 98,
Supplement (2), dated August 19, 1982

Subject: Supplement (2) to Reload 8 Licensing Submittal

Dear Sir:

The purpose of this letter is to provide additional information requested during a telecon on September 9, 1982, with Dr. Gene Hsli of your staff. This information is provided in support of Supplement (2) to the Vermont Yankee Reload 8 Licensing Submittal, forwarded to you via Reference (b).

Specifically, Dr. Hsli requested information regarding the use of a constant value of gap conductance versus an axially dependent value in the hot channel model. Dr. Hsli requested that a study be performed to determine the impact of using an axially dependent value of the gap conductance on the transient critical power ratio (Δ CPR). It should be noted that a constant value (axially) of the gap conductance was used to determine Δ CPR's for Vermont Yankee.

A study was conducted to evaluate the impact of using axially varying gap conductance on Δ CPR. The results of this study show that the Δ CPR calculated by using axially varying gap conductance is slightly less than the one calculated by using an axially constant value. The most limiting transient, Generator Load Rejection Without Bypass, at EOC conditions, was selected to perform this study.

We trust this information is satisfactory; however, should you have any questions, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

J. B. Sinclair
J. B. Sinclair
Licensing Engineer

8209160225 820910
PDR ADOCK 05000271
P PDR

A001