VERMONT YANKEE NUCLEAR POWER CORPORATION



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April 15, 1994 BVY 94 - 43

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

a.

References:

- License No. DPR-28 (Docket No. 50-271)
- b. Letter, VYNPC to USNRC, BVY 93-40, dated April 14, 1993
- c. Letter, USNRC to VYNPC, NVY 91-134, dated November 14, 1991
- d. Letter, VYNPC to USNRC, BVY 91-29, dated March 20, 1991

Subject:

Additional Information Pertaining to Alternate Rod Injection (ARI) Diversity per 10CFR50.62 (ATWS Rule) at Vermont Yankee Nuclear Power Station

The purpose of this letter is to formally provide additional information pertaining to our commitment to implement modifications during the planned 1995 refueling outage to meet the instrument diversity requirements of the ATWS Rule as indicated in Reference (b). The planned design was discussed with members of your Staff in a telephone conversation on April 1, 1994. Participants in this telecon were as follows:

<u>YNSD/VY</u> Roger Vibert, Lead I&C Engineer James Duffy, I&C Engineer Len Tremblay, Sr. Licensing Engineer <u>NRC/NRR</u> Jerry Mauck, I&C Branch Chief Cliff Dowd, I&C Branch Jeff Harold, Acting VY Project Manager

Vermont Yankee intends to implement the modification described below:

The new Alternate Rod Insertion / Recirculation Pump Trip (ARI/RPT) System to be implemented at Vermont Yankee will consist of redundant safety class and seismic instrument loops. New dedicated Rosemount Model 1152 transmitters with Acromag trip modules are to be installed in order to diversify from the Rosemount 710 trip cards presently utilized for the Reactor Trip System (RTS). Power feeds to the loops will be provided by the station safety class 120 vac Vhal and Instrument Buses which are independent from Reactor Trip System (RTS) power supplies. This arrangement will provide reliable power sources to the instruments for all conditions. As discussed with your Staff during our April 1st telecon, following a loss of normal power the instrumentation powered from the 120 vac Instrument Bus will be unavailable for the approximate 13 seconds required for the Emergency Diesel Generators to start and come up to power. However, the ARI instrument loop fed from Vital Instrument power will be available during any loss of normal power event.

This design as described above will implement modifications for reactor vessel pressure loops which are similar to modifications for reactor vessel level proposed in Reference (d) and approved by the NRC in Reference (c).

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Based on the NRC's indication during the April 1st telecon of the acceptability of this design, VY is proceeding with the engineering and design work for this modification.

We trust that the information provided above is deemed acceptable; however, if you should have any questions, please contact us.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Kennand O. Siemblay A.

Leonard A. Tremblay, Jr., P.E. Senior Licensing Engineer

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