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2.C.2.1
FVY 81-111

August 5, 1981

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

Attention: Office of Nuclear Reactor Regulation
Mr. T. A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

References: (a) License No. DPR-28 (Docket No. 50-271)
(b) Letter, USNRC to All Licensees of Operating Plants, dated October 31, 1980
(c) Letter, VYNPC to USNRC, WVY 80-170, dated December 15, 1980

Subject: NUREG-0737 Item II.K.3.15, HPCI/RCIC Steamline Break Detection Logic

Dear Sir:

The purpose of this letter is to provide certain information regarding the implementation of the subject NUREG item as requested by your staff in recent telephone conversations. This item requires modifications to the break detection logic for the steamlines supplying the HPCI and RCIC systems. These modifications would eliminate the possibility of spurious isolation of these systems should pressure spikes be encountered during system startup.

In Reference (c), Vermont Yankee committed to install modifications to minimize inadvertent HPCI/RCIC isolation due to pressure transients during system initiation. Because it was undesirable to perform these modifications at power, Vermont Yankee committed to install them during the first scheduled outage of sufficient duration following receipt of materials. It now appears that the first such outage will be our 1981 refueling outage, scheduled to begin in October. Our current plans are to complete the necessary modifications during that outage. The proposed modifications to each of the subject systems are described below.

RCIC

A time delay will be installed in the break detection logic for this system. This will ensure that the system will only be isolated if a high differential pressure is sensed for a long enough time period to indicate that it is not merely a result of the system starting transient, but in fact, an indication of a line break. This modification is in accordance with the recommendation of the BWR Owner's Group.

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HPCI

A modification will be made to the HPCI turbine governor control system such that the governor valves will be partially shut when steam is admitted, thereby reducing the system startup transient. This will serve to eliminate the high differential pressure which might cause a spurious isolation. Testing will be performed during the installation to verify that adequate system performance is maintained.

We trust the information presented above is acceptable; however, should you have any further questions, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

R L Smith

R. L. Smith
Licensing Engineer

RLS/kab