Mr. Donald A. Reid Vice President, Operations Vermont Yankee Nuclear Power Corporation Ferry Road Brattleboro, VT 05301

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE NAC ARCHITECT -ENGINEER TEAM INSPECTION - VERMONT YANKEE NUCLEAR POWER STATION

Dear Mr. Reid:

As a result of the NRC Architect - Engineer Team Inspection, we find that we need your responses to the enclosed request for additional information which is related to the operation of the residual heat removal pumps.

Please provide your responses as soon as possible. If you have any questions regarding this matter, please contact me at (301) 415-1496.

Sincerely,

Original signed by

Kahtan N. Jabbour, Sr. Project Manager Project Directorate I-3 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket No. 50-271

Enclosure: Request for Additional

Information

cc w/encl: See next page

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Vermont Yankee Nuclear Power Corporation

cc:

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## VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-271

Based on our review of Vermont Yankee Nuclear Power Station's (VYNPS's) Appendix R exemption request and the "Shutdown Using Alternate Shutdown Methods," OP 3126, Rev. 14, additional information is needed to ensure that the operators will not operate the low-pressure coolant injection (LPCI) pumps in the minimum flow configuration longer than what is currently recommended by the pump manufacturer.

Specifically, step 11.g of Appendix B to OP 3126 has the operator remove the LPCI pump from torus cooling mode (in which meeting the minimum LPCI flow is not an issue since the LPCI pump has maximum flow in the torus cooling mode) to an injection lineup for the purpose of raising reactor vessel level to a value of 127 to 177 inches. Once the reactor vessel level is restored, the LPCI system is reconfigured to the torus cooling mode.

The NRC staff has a concern in that the operators may begin to throttle LPCI flow below the recommended pump recirculation value as they approach the desired vessel level while they are operating in the injection lineup. Additionally, it appears that the possibility of operators running the LPCI pumps with less flow than what was required for a period of time greater than what was recommended is plausible because of the time constraint associated with the LPCI pumps operating below the minimum required flow value (4000 gpm) is very short (30 seconds) and because OP 3126 contained no warnings or precautions against operating the LPCI pumps below the minimum flow condition.

Therefore, the licensee should provide a discussion of how the operators were trained in the past to restore level using OP-3126. The response should state whether in the past operator training sessions have allowed throttling of LPCI pump flow while restoring reactor vessel level. Additionally, the response should include that, in the absence of any prohibitions against operations of the LPCI pumps below 4000 gpm being found in OP-3126, why the licensee can reasonably conclude that the operators will continue to maintain the LPCI pump flow above the recommended minimum flow value as they repeatedly transition from the torus cooling mode to the injection lineup.