VERMONT YANKEE
NUCLEAR POWER CORPORATION

185 Old Ferry Road, Brattleboro, VT 05301-7002
(802) 257-5271

October 25, 1999
BVY 99-124

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

References: (a) Letter, VYNPC to USNRC, "Technical Specification Proposed Change No. 218 – Enhancements to Support Implementation of Increased Core Flow," BVY 99-82, dated July 20, 1999.
(b) Licensing Topical Report, NEDE-24011-P-A-13, "General Electric Standard Application for Reactor Fuel," August 1996, as amended.

Subject: **Vermont Yankee Nuclear Power Station**
License No. DPR-28 (Docket No. 50-271)
Technical Specification Proposed Change No. 218 (Supplemental Information)
Enhancements to Support Implementation of Increased Core Flow

By Reference (a), Vermont Yankee (VY) requested that Facility Operating License DPR-28 be amended to incorporate certain changes such that the Technical Specifications and Bases reflect the plant configuration following implementation of increased core flow. Per the Staff's request, this letter provides additional background information in support of Reference (a).

As discussed in Reference (a), VY has implemented a design change to increase the maximum allowable core flow. The design change documentation contains descriptions and analysis results pertaining to the mechanical, thermal-hydraulic, and reactor physics analyses to support operation at up to 107%[1] increased core flow. Primarily these analyses include recirculation system capability, flow induced vibration impacts, transient analyses, accident analyses, stability analysis, reactor vessel internals structural evaluations, scoop tube setpoints, and the core shroud tie rod tensioning design. The design change was evaluated and implemented per 10CFR50.59.

The analyses of the VY reactor core, recirculation system, and reactor internals under the condition of increased core flow were performed by General Electric. Included were the core steady-state thermal-hydraulic analyses, including increased core flow for Cycle 20 as described in Reference (b).

The change proposed in Reference (a) is appropriate regardless of the implementation of increased core flow. Since VY has implemented increased core flow, the specific proposed change regarding the

[1] For the purposes of Technical Specifications, the term "W" (e.g.: TS 2.1.A.1.a and TS Table 3.1.1) shall remain equal to the percent rated two loop drive flow where 100% rated drive flow is that flow equivalent to 48×10^6 lbs/hr core flow.

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clamping of the Rod Block Monitor Upscale (Flow Bias) Trip Setting is appropriate such that the Technical Specifications and the Bases reflect the current plant configuration. For this reason, Reference (a) was written to be independent of the decision to implement increased core flow. It is also important to note that the proposed change to the Technical Specifications and Bases is not a prerequisite to implementing increased core flow.

If you have any questions on this transmittal, please contact Mr. Thomas B. Silko at (802) 258-4146.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Robert J. Wanczyk
Director of Safety and Regulatory Affairs

STATE OF VERMONT)
)ss
WINDHAM COUNTY)

Then personally appeared before me, Robert J. Wanczyk, who, being duly sworn, did state that he is Director of Safety and Regulatory Affairs of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing document in the name and on the behalf of Vermont Yankee Nuclear Power Corporation, and that the statements therein are true to the best of his knowledge and belief.

Thomas B. Silko, Notary Public
My Commission Expires February 10, 2003

cc: USNRC Region 1 Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS
Vermont Department of Public Service