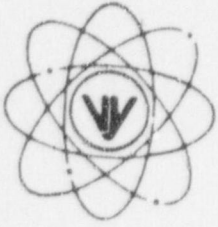


VERMONT YANKEE
NUCLEAR POWER CORPORATION



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March 31, 1999
BVY 99-44

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

Reference: (a) Letter, VYNPC to USNRC, "Fire Systems Out of Service Greater Than 14 Days" BVY 98-168, dated December 17, 1998

Subject: **Vermont Yankee Nuclear Power Station**
License No. DPR-28 (Docket No. 50-271)
CO₂ Fire Suppression System Modifications

On October 2, 1998 the Institute of Nuclear Power Operations (INPO) issued Significant Event Notification (SEN) 188. This SEN detailed an unexpected CO₂ fire suppression system discharge at the Idaho National Engineering and Environmental Laboratory (INEEL) on July 28, 1998. This event at INEEL resulted in multiple injuries and one fatality when the CO₂ system discharged without any warning alarm.

During the review of this SEN it was determined that there is a remote possibility that Vermont Yankee could have an event in which an unexpected CO₂ discharge could happen without any warning alarm. Based on the seriousness of an unexpected activation of a CO₂ fire suppression system to plant employees, the Cable Vault, East Switchgear Room, and West Switchgear Room CO₂ system automatic discharge capability was removed from service. Compensatory actions were established in accordance with Vermont Yankee Technical Specifications.

Modifications are currently underway to install mechanical delay timers and CO₂ powered sirens in series with the current electrical timers and bells. This modification will ensure that even with a complete fire alarm panel failure a pre-discharge warning alarm will activate allowing employees to safely exit these areas.

Vermont Yankee indicated to the NRC in Reference (a) that the CO₂ fire suppression systems would be returned to service by March 31, 1999. At the time of that letter the entire scope of the modification was not completely known. Extensive research was performed both in the nuclear and general industry to determine the best balance between fire safety and personnel safety. This letter is submitted to provide an update on the modification and to indicate that a completion and return to service date early in May 1999 is anticipated. Compensatory actions will remain in place until the modifications are complete and the respective systems are returned to service.

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We trust you will find this submittal satisfactory. However, should you desire additional information, please feel free to contact us.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION



Michael A. Balduzzi
Plant Manager

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