VERMONT YANKEE
NUCLEAR POWER CORPORATION

Ferry Road, Brattleboro, VT 05301-7002

REPLY TO
ENGINEERING OFFICE
580 MAIN STREET
BOLTON, MA 01740
(508) 779-6711

February 3, 1995
BVY 95-17

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

References:
(a) License No. DPR-28 (Docket No. 50-271)
(b) Letter, USNRC to All Holders of Operating Licenses or Construction Permits for Nuclear Power Plants, NVY 89-156, Generic Letter 89-13, dated 7/18/89
(c) Letter, VYNPC to USNRC, BVY 90-007, Response to Generic Letter 89-13, dated January 22, 1990
(d) NRC Information Notice 94-03, Deficiencies Identified During Service Water Operational Performance Inspections, dated January 11, 1994
(e) Letter, VYNPC to USNRC, BVY 94-37, Review of Generic Letter 89-13 Implementation, Vermont Yankee Service Water Self Assessment, dated March 29, 1994

Subject: Updated Status of Vermont Yankee Program to Address Generic Letter 89-13

By letter dated March 29, 1994 [Reference (e)] Vermont Yankee provided a description of weaknesses identified in our program to implement actions recommended by Generic Letter 89-13 [Reference (b)]. These weaknesses were identified during a Self Assessment of our Service Water System. To address these weaknesses, a dedicated project team was assembled to provide timely resolution of the issues identified in the Self Assessment and to ensure a robust program was developed to fully address the concerns of Generic Letter 89-13 and Information Notice 94-03.

Attachment 1 to this letter provides an updated status of our program to address the actions recommended in Generic Letter 89-13, and supersedes our original response [Reference (c)]. In addressing the issues identified in the Self Assessment, significant engineering resources were expended to reconstitute the design basis and supporting design information for the Service Water and Alternate Cooling Systems. Based on this effort, formal maintenance and testing procedures have been prepared to ensure these systems will continue to be operated and maintained within their design bases.

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We trust that the information contained in this letter is satisfactory; however, should you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

VT YANKEE NUCLEAR POWER CORP.

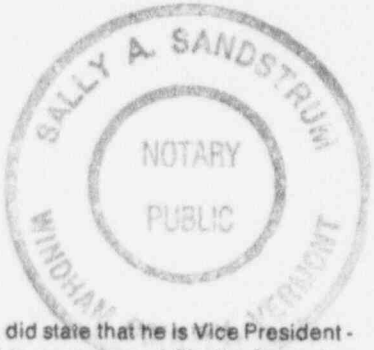
James P Pelletier

James P. Pelletier
Vice President, Engineering

JPP/gmv

Attachment

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



STATE OF VERMONT)
)ss
WINDHAM COUNTY)

Then personally appeared before me, James P. Pelletier, who, being duly sworn, did state that he is Vice President - Engineering, 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.

Sally A. Sandstrum

Sally A. Sandstrum, Notary Public
My Commission expires February 10, 1995

ATTACHMENT 1

SUMMARY OF NRC RECOMMENDED ACTION I:

For open cycle Service Water systems, implement and maintain an ongoing program of surveillance and control techniques to significantly reduce the incidence of flow blockage events caused by biofouling.

Response:

Vermont Yankee performs river water and substrate sampling annually to detect the presence of both Asiatic clams and zebra mussels. If sampling detects their presence, system chlorination or an equally effective treatment program will be instituted.

Routine testing and inspection of Service Water components are conducted to ensure the system is maintained in an acceptable condition. Planned replacement of small diameter piping with materials not susceptible to microbiological corrosion has been completed which has reduced the incidence of flow blockage. Flushing of instrument tubing is also performed to reduce the incidence of flow blockage.

SUMMARY OF NRC RECOMMENDED ACTION II:

Establish an initial and periodic retest program to verify that safety-related heat exchangers will meet their design/functional requirements.

Response:

While these components have been tested in the past, formal detailed acceptance criteria were not available. Vermont Yankee has developed draft testing procedures to monitor the performance of applicable safety-related heat exchangers, including appropriate acceptance criteria. Previous heat exchanger performance data has been compared to the new acceptance criteria, and acceptable performance has been demonstrated. Based on this review, we conclude that the heat exchangers have been properly maintained. It is expected that formal procedures to monitor the applicable heat exchangers will be issued prior to the scheduled 1995 Refueling Outage for use during and following this outage.

SUMMARY OF NRC RECOMMENDED ACTION III:

Establish a routine inspection and maintenance program which will ensure that the performance of safety-related systems serviced by the SW system will not degrade due to corrosion, erosion, protective coating failure, silting and biofouling in the SW system. Maintenance activities should include at least the removal of excessive accumulations of biofouling agents, corrosion products and silt and the repair of defective coatings and corroded parts which may affect safety system performance.

Response:

Vermont Yankee has established preventative maintenance programs for the SW system; however, detailed acceptance criteria were not previously available. Formal written inspection and acceptance criteria to address all critical attributes have now been developed for each component type and are expected to be incorporated into a formal procedure prior to the scheduled 1995 Refueling Outage. Although these acceptance criteria were not previously applied, overall system performance has demonstrated that components have been properly maintained.

SUMMARY OF NRC RECOMMENDED ACTION IV:

Confirm that the as-built SW system meets its design requirements and will perform its intended function in accordance with the applicable licensing basis of the plant; including confirmation of its ability to perform its required safety function in the event of a single active failure.

Response:

Vermont Yankee has reconfirmed the ability of the Service Water and Alternate Cooling systems to meet their design requirements. Recent actions include a complete system walkdown to ensure plant drawings are accurate, and a complete single failure analysis for the SW system. An updated computerized flow model has been developed, and a design basis reconstitution effort has been completed. This information is currently being documented in a Design Basis Document which should receive final approval early in 1995.

SUMMARY OF NRC RECOMMENDED ACTION V:

Establish and implement maintenance practices, operating procedures and effective training programs which will ensure that safety-related equipment cooled by the SW system will perform its intended function and that plant staff responsible for this equipment will reduce the incidence of human errors that frequently occur in operation, repair, and maintenance of SW systems.

Response:

Development of formal procedures for testing of SW system components along with formal procedures providing inspection and acceptance criteria for SW components will strengthen the Vermont Yankee programs to ensure the system will operate as intended. As noted above, these enhancements are expected to be in place prior to the 1995 Refueling Outage scheduled for March 1995. Existing training programs specifically address methods to reduce human errors.