· VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

REPLYTO **ENGINEERING OFFICE** 580 MAIN. STREET BOLTON, MA 01740 (508) 779-6711

December 20, 1996 BVY 96-161

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 VYNPC. "Notice of Violation - NRC Integrated Inspection Report," NVY 96-181, dated 12/2/96

Subject: Reply to a Notice of Violation - Inspection Report No. 50-271/96-09

This letter is written in response to Reference (b) which documents that our activities were not in full compliance with NRC requirements. The violation, classified as Severity Level IV, was identified during an NRC inspection conducted from September 16-20, 1996. Our response to the violation is provided below.

Violation

10 CFR Part 50, Appendix B, Criterion XI, "Test Control," requires written test procedures which incorporate acceptance limits contained in applicable design documents. ANSI N18.7-1976, Section 5.2.19.3, "Test Associated with Plant Maintenance, Modifications or Procedure Changes," requires procedures to include appropriate quantitative or qualitative acceptance criteria (limits) contained in applicable design documents. The VY UFSAR, Section 1.9, states the VY Quality Assurance Program is in compliance with 10 CFR Part 50, Appendix B and ANSI N18.7-1976.

Contrary to the above, on and before September 20, 1996, the licensee's surveillance procedure, OP 4215, Rev. 6, "Main Station Battery Performance/Service Test," failed to incorporate any appropriate acceptance criteria for the battery service test. The acceptance criteria in the form of test shutdown voltage had no basis in any design document. The battery test acceptance criteria failed to consider the minimum battery terminal voltage used to determine the acceptable operation of safety related do equipment as documented in calculation VYC-1349, Rev. 0, dated January 23, 1995.

This is a Severity Level IV violation.

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Response:

1) Reason for the violation

Vermont Yankee does not contest this violation. The root cause of this violation was deficient communication between Design Engineering and the Maintenance Department, and within Design Engineering. The 125 VDC Voltage Drop Study, VYC-1349, was not referenced in the maintenance test procedure nor were the minimum battery voltages assumed in the study communicated to the Maintenance Department. Therefore, an appropriate acceptance criteria was not incorporated into the Main Station Battery Performance/Service Test procedure (OP 4215). Insufficient guidance provided to the preparer of the calculation, the need for enhanced procedural requirements and lack of ownership of VYC-1349 were identified as contributing causes.

2) Corrective steps that have been taken and the results achieved

- a) A review of the Main Station Battery service test data recorded during the past refueling outage was performed. As documented in the service test, the minimum voltage on Batteries A and B was approximately 111 Vdc and 113 Vdc, respectively. The 125 VDC Voltage Drop Study assumed a minimum voltage of 107 Vdc and 110 Vdc for Batteries A and B, respectively. Therefore, the assumptions in VYC-1349 envelope the test results and we conclude there are no operability concerns associated with the Main Station Batteries.
- b) The 125 VDC Voltage Drop Study, VYC-1349, was evaluated in light of changes to the Main Station Battery Sizing Calculation, VYC-298, and inspector comments. The evaluation confirmed that sufficient voltage is available to operate DC loads from both Batteries A and B.
- c) The procedure which requires the calculation originator to review applicable FSAR, Technical Specifications, Procedures (Operating, EOPs, Surveillance, Maintenance), Technical Programs and Prints for impact has been distributed for review to all Design Engineering staff to reinforce its requirements. This procedure was identified as a failed barrier in the root cause analysis.

3) Corrective Steps that will be taken to avoid further violations

- a) The 125 VDC Voltage Drop Study, VYC-1349, will be revised to be consistent with the latest revision of the Main Station Battery Sizing Calculation, VYC-298. This is expected to be complete by April 30, 1997.
- b) Appropriate acceptance criteria for battery minimum voltages will be incorporated into procedure OP 4215. This is expected to be complete by June 30, 1997.

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- c) Vermont Yankee will review and revise existing procedural requirements regarding changes to and ownership of design basis calculations. Specifically, the requirements for assessing the impact of calculation changes on pending changes, other calculations, procedures and other design basis documents and the requirements for communicating these changes will be reviewed. Training and implementation of the revised procedural guidance is expected to be complete by April 30, 1997.
- d) Surveillance procedures associated with the batteries defined in Vermont Yankee Technical Specifications will be reviewed against the applicable design bases calculations to ensure consistency. This is expected to be complete by April 30, 1997.

4) Date by which full compliance will be achieved:

Vermont Yankee will have achieved full compliance once the main station battery calculations and procedure OP 4215 are revised to include an acceptance criteria consistent with the design basis of the DC system. These revisions are expected to be completed by June 30, 1997, well before the next use of procedure OP 4215 during the Spring 1998 refueling outage.

We trust that the information provided is acceptable. However, should you have any questions or desire any additional information, please contact this office.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Donald A. Reid

Vice President, Operations

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