Entergy

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
Vermont Yankee
P.O. Box 0500
185 Old Ferry Road
Brattleboro, VT 05302-0500
Tel 802 257 5271

April 24, 2006

BVY 06-033

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852-2738

Subject: **Vermont Yankee Nuclear Power Station**
Docket No. 50-271, License No. DPR-28
Cycle 24 10 CFR 50.59 Report

References: (1) Letter, USNRC to VYNPC, "TMI Action Plan Item II.K.3.3, Reporting of Relief Valve and Safety Valve Failures and Challenges," NVY 82-44, dated March 30, 1982

In accordance with 10 CFR 50.59, attached is a copy of the Vermont Yankee (VY) Cycle 24 10 CFR 50.59 Report. This report contains a brief description of the 50.59 evaluations that supported changes, tests and experiments between May 4, 2004 and November 11, 2005.

Additionally, in accordance with Reference 1, VY reports that there were no Relief Valve or Safety Valve failures or challenges during this period.

Should you have any questions or require additional information, please contact me at (802) 258-4236.

There are no new commitments being made in this submittal.

Sincerely,

James M. DeVincentis
Manager, Licensing
Vermont Yankee Nuclear Power Station

Attachment:

Vermont Yankee Cycle 24 10 CFR 50.59 Report

IE47

cc:

Mr. Samuel J. Collins (w/o attachment)
Regional Administrator, Region 1
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Mr. James J. Shea, Project Manager
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O-8-G9A
Washington, DC 20555

USNRC Resident Inspector
Entergy Nuclear Vermont Yankee, LLC
320 Governor Hunt Road
P.O. Box 157
Vernon, Vermont 05354

Mr. David O'Brien, Commissioner
VT Department of Public Service
112 State Street, Drawer 20
Montpelier, Vermont 05620-2601

BVY 06-033
Docket No. 50-271

Attachment

Vermont Yankee Nuclear Power Station

Vermont Yankee Cycle 24 10 CFR 50.59 Report

Vermont Yankee Cycle 24 10 CFR 50.59 Report

Between May 4, 2004 and November 11, 2005, Vermont Yankee (VY) implemented one change requiring evaluation in accordance with 10 CFR 50.59. This report includes the 10 CFR 50.59 Evaluation Summary for that Vermont Yankee Engineering Request.

The following change did not require prior Nuclear Regulatory Commission approval. It was reviewed by the On-Site Safety Review Committee (OSRC) and approved by the OSRC Chairman.

10 CFR 50.59 Evaluation Number: 2005-01 Revision Number: 0

Engineering Request 04-1337, "24V DC Power Distribution Improvements"

This change involved modifying selected components and installing Appendix R blocking diodes in the output circuitry of the 24V DC ECCS Power Supplies. The component modifications included the internal power supply mounting, the ground fault monitor mounting, and replacing the power supply incandescent bulb with an LED. The blocking diodes eliminate the need for an operator to manually transfer power supplied to Appendix R equipment, thus improving Appendix R response times.

50.59 Evaluation Summary

This change did not result in more than a minimal increase in the frequency of occurrence of any previously analyzed accident because the 24V DC ECCS Power Supplies cannot malfunction in a manner that would initiate an accident. This change did not result in more than a minimal increase in the likelihood of occurrence of a malfunction of equipment important to safety because the modifications have been designed, installed and tested to ensure that they will not negatively affect the seismic or environmental qualifications of the power supplies. This change did not result in more than a minimal increase in the consequences of any previously analyzed accident or malfunction because the modifications have been designed, installed and tested to ensure that they will not negatively affect the seismic or environmental qualifications of the power supplies or their ability to perform their function in the mitigation of a previously analyzed accident or malfunction. This change did not create the possibility for an accident or malfunction of a different type than previously analyzed because no new failure modes are being introduced. This change did not result in a design basis limit for a fission product barrier being exceeded or altered because the response of ECCS instrumentation is unaffected. This change did not result in a departure from an existing method of evaluation because this was a physical modification and did not involve an evaluation methodology.