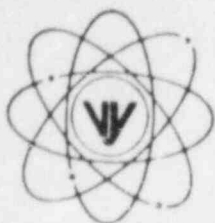


VERMONT YANKEE NUCLEAR POWER CORPORATION

PROPOSED CHANGE NO. 105



RD 5, Box 169, Ferry Road, Brattleboro, VT 05301

2.C.2.1

REPLY TO: FVY 83-88

ENGINEERING OFFICE

1671 WORCESTER ROAD
FRAMINGHAM, MASSACHUSETTS 01701
TELEPHONE 617-872-8100

August 5, 1983

United States Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Office of Nuclear Reactor Regulation
Mr. D. G. Eisenhut, Director
Division of Licensing

References: (a) License No. DFR-28 (Docket No. 50-271)
(b) Letter, USNRC to VYNPC, NVY 82-124, dated August 2, 1982
(c) Letter, VYNPC to USNRC, FVY 81-15, dated January 27, 1981
(d) Letter, VYNPC to USNRC, FVY 81-149, dated October 27, 1981

Subject: RPS Power Protection Panel Specifications

Dear Sir:

Pursuant to Section 50.59 of the Commission's Rules and Regulations, Vermont Yankee Nuclear Power Corporation hereby proposes the following modifications to Appendix A of the Operating License.

PROPOSED CHANGE

Replace existing pages 175, 177, and 178 with revised pages 175, 175a, 177, 177a, 178 and 178a using the attached pages. These pages propose limiting conditions for operation and surveillance requirements for the power protection equipment added to our Reactor Protection System during the 1983 refueling outage.

REASON FOR CHANGE

Prior to the issuance of the Edwin I. Hatch Unit 2 operating license, the Nuclear Regulatory Commission (NRC) identified a concern that the system output voltage of 120 volts alternating current (V ac) could be varied sufficiently by a seismic event to cause a failure of the RPS.

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Rec'd w/o check

Normally, the MG set's output voltage is maintained virtually constant by means of a voltage regulator. Additionally, overvoltage and undervoltage protective devices isolate the MG's output from the RPS if the voltage exceeds + 10% of nominal value. Isolation also occurs if output voltage frequency drops by more than 5%.

The NRC's concern was that the overvoltage, undervoltage, and underfrequency devices were not seismically qualified and could become inoperable, along with the voltage regulator, as a result of a seismic event. The RPS could then receive an out-of-limits voltage supply and thereby sustain damage to the RPS which could prevent a required reactor scram.

In Reference (c), we committed to install power protection panels which would alleviate the NRC's concerns; additional design details on our system were forwarded in Reference (d).

This letter transmits proposed Technical Specifications requested by the NRC in Reference (b). Model Technical Specifications provided as an Enclosure to Reference (b) were considered in the preparation of this change.

SAFETY CONSIDERATIONS

The addition of two redundant, Class 1E, seismically qualified, power protection panels connected in series with each ac power source, including the alternate power source, will provide an enhanced level of overvoltage, undervoltage, and underfrequency protection for the Reactor Protection System.

With the protective packages installed, any random undetectable or seismically-induced abnormal voltage or frequency conditions in the outputs of the MG sets or alternate power supply would trip either one or both of the protective panels thereby producing a half scram.

This proposed change has been determined not to involve a significant hazards consideration. The probability of accidents previously evaluated is not increased, the possibility of a different type of accident is not created, nor are the margins of safety as defined in the basis of the Technical Specification reduced by this proposed change.

This change has been reviewed by the Vermont Yankee Nuclear Safety Audit and Review Committee (NSARC).

FEE DETERMINATION

This proposed change requires an approval that involves a single safety issue and is deemed not to involve a significant hazards consideration. For these reasons, Vermont Yankee Nuclear Power Corporation proposes this change as a Class III Amendment. A payment of \$4,000.00 is enclosed.

SCHEDULE OF CHANGE

This change to the Vermont Yankee Technical Specifications will be implemented as soon as practicable following NRC approval.

We trust that you will find this submittal satisfactory; however, should you desire additional information, feel free to contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

L. H. Heider
Vice President

LHH/ds

Enclosure

COMMONWEALTH OF MASSACHUSETTS)
) ss
MIDDLESEX COUNTY)

Then personally appeared before me, L. H. Heider, who, being duly sworn, did state that he is a Vice President of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing request 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.

J. B. Sinclair
J. B. Sinclair Notary Public
My Commission Expires June 1, 1984

