



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 62 TO FACILITY OPERATING LICENSE NO. DPR-28

VERMONT YANKEE NUCLEAR POWER CORPORATION

VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-271

Introduction

By letter dated September 5, 1980, Vermont Yankee Nuclear Power Corporation, the licensee, proposed changes in the limiting conditions of operation governing the reactor vessel pressure/temperature limitations. The proposed change included pressure/temperature curves calculated on two different bases. The first curve was based on Appendix G to 10 CFR 50. The second curve was based on a revised Appendix G which has not yet become effective. We have reviewed and approved the use of the first proposed curve. We will review the second curve after the revised Appendix G on which it was based becomes effective.

Evaluation

In letter dated September 5, 1980, the licensee proposed a revision to Figure 3.6.1 (Reactor Vessel Pressure Temperature Limitations for Operation through 8.0E7 MWH (t)) of the Vermont Yankee Technical Specifications. The proposed operating limits were calculated in accordance with Appendix G, 10 CFR 50 and Standard Review Plan 5.3.2 which includes Branch Technical Position MTEB 5-2. These new operating limits were based on a fluence at the vessels inner wall of  $3.83 \times 10^{17}$  n/cm<sup>2</sup>, calculated for operation through 1.15 E8 MWH (t) (which is estimated to occur late in 1983). At this point in time, the limiting material in the beltline with an original RTNDT of 60°F was calculated by the licensee to have an RTNDT shift of 30°F based upon recent dosimetry data (showing an increase at Vermont Yankee of 4.3 times that reported in the FSAR). We have reviewed with the licensee the analysis by which an inner vessel wall fluence was calculated to produce the 30°F RTNDT shift for the limiting material. In order to complete our records for reference in reviewing future RTNDT shift calculations for Vermont Yankee, the licensee has agreed to forward the details of the most recent analysis to the USNRC including determination of limiting material, redetermined fluence, and RTNDT shift calculations.

We have reviewed the proposed changes to the pressure-temperature operating limits and conclude that they are in accordance with Appendix G, 10 CFR 50 and Standard Review Plan 5.3.2. The use of Appendix G for establishing safe operating limitations will ensure adequate safety margins during operation, testing, maintenance and postulated accident conditions and constitute an acceptable basis for satisfying the requirements of NRC General Design Criterion 31, Appendix G, 10 CFR 50.

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Environmental Considerations

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: January 14, 1981