



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATING TO AMENDMENT NO. 94 TO FACILITY OPERATING LICENSE NO. DPR-40

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

Introduction:

By letter dated July 11, 1985, the Omaha Public Power District (the licensee) requested a change to the Fort Calhoun Station, Unit No. 1 (FCS-1) reactor vessel materials surveillance capsule withdrawal schedule, which is contained in Table 3-7 of the FCS-1 Technical Specifications. The licensee's surveillance program must comply with requirements of Appendix H, 10 CFR Part 50.

By letter dated July 11, 1985, the licensee also requested other changes to the Technical Specifications. The other changes were addressed in our Amendment No. 93 which was issued on December 6, 1985.

The following safety evaluation completes our work on the licensee's July 11, 1985 application for amendment.

Evaluation:

According to Section II.B.1 of Appendix H, 10 CFR Part 50, the proposed withdrawal schedule must meet the requirements of ASTM E 185-82. The intent of these requirements is to provide material surveillance data throughout the life of the vessel. As a result of new core loading designs, the anticipated end-of-life (EOL) peak neutron fluence ($E > 1\text{MeV}$) at the inside surface of the FCS-1 reactor vessel is $3.3 \times 10^{19} \text{ n/cm}^2$. The removal sequence proposed by the licensee will provide for withdrawal of seven surveillance capsules, in which the range of neutron irradiation to be received by the capsules will be from 1.6 to $3.6 \times 10^{19} \text{ n/cm}^2$. This range of irradiation should be sufficient to characterize the effect of neutron irradiation on the FCS-1 reactor vessel throughout its design life, since it exceeds the EOL peak neutron fluence at the FCS-1 reactor vessel inside surface. Hence, the proposed capsule withdrawal schedule meets the requirements of Appendix H, 10 CFR Part 50 and may be incorporated into the FCS-1 Technical Specifications.

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ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(9). Pursuant to 10 CFR §51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: January 10, 1986

Principal Contributor:
B. Elliot