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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 95 TO FACILITY OPERATING LICENSE NO. DPR-40

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

1.0 Introduction

By letter dated March 30, 1977, the Omaha Public Power District, the licensee, submitted proposed changes to the Fort Calhoun Station, Unit No. 1 technical specifications (TS) regarding containment leakage rate testing. The purpose of the proposed changes was to bring the facility into conformance with the requirement of Appendix J to 10 CFR Part 50. By letter dated April 4, 1980, the staff requested additional information in order to continue the review. The licensee responded by letter dated May 15, 1980. On July 23, 1982, the staff forwarded to the licensee a Safety Evaluation (SE) concerning the staff's review of the proposed changes. In the SE, the staff concluded that, with the exception of three open items, the proposed changes to the TS were acceptable. The open items dealt with the valves associated with penetrations M-3 and M-44, and the containment personnel airlock. By letters dated September 3 and November 5, 1982, the licensee responded to the three open items.

By letter dated January 26, 1983, the licensee completely updated the March 30, 1977 application and requested additional changes. The additional changes consisted of doubling the allowable containment leakage rate, moving the recirculation heat removal system surveillance requirements to a separate part of the TS, and deleting surveillance requirement which were in effect during early plant life. The doubling of the allowable containment leakage rate affected the Appendix J TS because the leak rate is an integral part of the Appendix J TS.

By letter dated November 27, 1985, the licensee withdrew the request to increase the allowable containment leak rate on the basis that the results of the Fort Calhoun Control Room Habitability study would not support an allowable containment leak rate of 0.2% by weight. In addition, the Appendix J related proposed technical specifications were resubmitted to reflect the currently approved 0.1% by weight containment leak rate.

This safety evaluation addresses the Appendix J related TSs. We acted on the licensee's request for exemption from Appendix J on January 10, 1986. We granted an exemption on the personnel air lock and concluded that an exemption was not needed for the valve associated with penetration M-3.

As described above, the licensee withdrew the request for a higher allowable containment leak rate. Therefore, this evaluation of the proposed TS reflects the currently allowed 0.1 w/o containment leak rate. Our evaluation of the proposed TS changes dealing with (1) moving the recirculation heat removal system surveillance requirements to a separate part of the technical specifications and (2) deletion of surveillance requirements in effect during early plant life, will be the subject of a separate evaluation.

2.0 Evaluation

Although the licensee resubmitted the Appendix J TS by letter dated November 27, 1985, they are essentially the same proposed TS previously submitted in the March 30, 1977 application and our evaluation of July 23, 1982 remains valid. Therefore, based upon our July 23, 1982 evaluation, the following TS sections are acceptable:

- Containment Building Leak Rate Tests (TS 3.5(1))
- Integrated Leak Rate Test (Type A Test) (TS 3.5(2))
- Containment Penetrations Leak Rate Tests (Type B Tests) (TS 3.5(3))

  (except certain requirements for personnel air lock - see evaluation that follows)
- Containment Isolation Valves Leak Rate Tests (Type C Tests)(T.S. 3.5(4))

  (except valves associated with penetrations M-3 and M-44, and surveillance requirements for the containment air purge isolation valves - see evaluation that follows)
- Special Testing Requirements (TS 3.5(5))
- Report on Test Results (TS 3.5(6))

Our July 23, 1982 evaluation contained three open item which deal with the personnel air lock and the valves associated with penetrations M-3 and M-44. In regard to the air lock, we did not believe that the licensee's correlation to extrapolate leakage rates at 5 psig to 60 psig sufficiently conservative. In regard to the valves associated with penetrations M-3 and M-44, we felt that they should be tested. Our disposition of these items follows.

The licensee agreed that the valves associated with penetration M-44 should be tested. The valves associated with penetration M-44 are included in the licensee's proposed technical specifications of November 27, 1985 and, therefore, this open item is resolved. The licensee requested an exemption for the valve associated with penetration M-3 in the January 26, 1983 submittal . We reevaluated the licensee's request and concluded that an exemption to Appendix J was not needed, and that the valve associated with this penetration need not be tested. Our evaluation of this matter was contained in a letter sent to the licensee on January 10, 1986. Therefore, this open item is resolved.

In connection with the open item dealing with the personnel air lock, we granted an exemption from paragraph III.D.2(b)(ii) of Appendix J on January 10, 1986 and the exemption is reflected in the licensee's proposed technical specifications. See our letter of January 10, 1986 for supporting safety evaluation. In addition, the licensee proposed as acceptance criteria such that the results of personnel air lock door seal test at 5 psig shall not exceed $0.01L_a$. The staff considers this leakage limit to be sufficiently conservative to confirm door seal integrity, and this limit has been used in technical specifications for other nuclear power plants. Therefore, this is acceptable and the personnel air lock open item is considered resolved.

By letter dated Febr ary 24, 1983, we issued Amendment No. 68 which approved, in part, su veillance requirements for the containment air purge isolation valves. These requirements were erroneously deleted in the licensee's November 27, 1985 proposed technical specifications. We discussed this matter with the licensee, and it was concluded that this was an oversight. As such, we have kept the current surveillance requirements for the air purge valves in-place.

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 or a change in an inspection or surveillance requirement. 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 issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: February 3, 1986

Principal Contributor:
J. Pulsipher
E. Tourigny