



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO.79 TO FACILITY OPERATING LICENSE NO. DPR-40

OMAHA PUBLIC POWER DISTRICT  
FORT CALHOUN STATION, UNIT NO. 1  
DOCKET NO. 50-285

Introduction

By application dated October 3, 1983, the Omaha Public Power District (the licensee) requested an amendment to the Technical Specifications (TS) for the Fort Calhoun Station. The proposed changes provide an up-to-date identification of the accessibility of safety-related system hydraulic snubbers (Table 2-6(a)) and update the surveillance capsule removal schedule (Table 3-7). This safety evaluation addresses the proposed snubber changes. Our review of the proposed surveillance capsule removal schedule is continuing. The specific changes and the staff's evaluation of them follow.

Evaluation

The following specific changes are proposed:

1. Change one snubber designation to avoid confusion with a solid strut which has the same designation as the snubber.
2. Two snubbers incorrectly shown in the table as "Accessible During Normal Operation" should be correctly shown as "Inaccessible During Normal Operation".
3. One snubber, RWS-89 should actually be listed as RWS-79.
4. Amendment No. 59 to the Technical Specifications changed the designation snubber SIS-174BB to SIS-176. It was later discovered that no snubber had ever been designated as SIS-174BB, therefore, SIS-176 (formerly SIS-174BB) should be deleted.
5. In response to NUREG-0737, a stress analysis was performed on the pressurizer overpressure protection system. The results showed that, with the proposed modification to the system, loads resulting from water hammer conditions would be reduced. To accommodate the new loading condition, five snubbers, RCS-23 top, RCS-23A, RCS-24 top, RCS-24 bottom, and RCS-26 should be deleted; and one snubber, RCS 64 top should be added.

Proposals 1 through 4 are basically bookkeeping processes, which update the snubber list to the correct one-to-one correspondence. These are desirable and acceptable.

Proposal 5 is based on the stress analysis results. The analysis is based on the NRC reviewed programs RELAP 5, FORCE, and TPIPE. Results of the analysis show that if the PORVs were to open with the piping and restraints in their previous configuration, very large water hammer forces would occur in the discharge piping. These forces would overstress both the pipe and the restraints. Modification of the system was required to reduce these overstressed conditions. After performing analyses of several different restraint configurations, the licensee determined the optimal configuration which resulted in the addition and deletions of snubbers described in Proposal 5. We find this configuration acceptable.

The requirements of NUREG-0737, Item II.D.1, "Performance Testing of BWR and PWR Relief and Safety Valves" are still under review. The approval of addition and deletions of snubbers in this proposed amendment shall not be interpreted as the fulfillment of the NUREG-0737, II.D.1 requirements for the Fort Calhoun Station Unit 1.

#### Environmental Consideration

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) 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: May 23, 1984

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