

NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

ENCLOSURE 3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 179 TO FACILITY OPERATING LICENSE NO. DPR-77 AND AMENDMENT NO. 171 TO FACILITY OPERATING LICENSE NO. DPR-79 TENNESSEE VALLEY AUTHORITY SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2 DOCKET NOS. 50-327 AND 50-328

1.0 INTRODUCTION

By application dated February 7, 1994, the Tennessee Valley Authority (the licensee) proposed amendments to the Technical Specifications (TS) for Sequoyah Nuclear Plant (SQN) Units 1 and 2. The requested changes would replace the wording in Surveillance Requirement (SR) 4.7.9.i, "Snubber Service Life Program," with that from the Westinghouse Electric Corporation Standard TS, Revision 4a. In addition, the wording in SR 4.7.9.c, "Snubber Visual Inspection Performance and Evaluation," that is inconsistent with Generic Letter (GL) 90-09, would be deleted.

2.0 EVALUATION

SR 4.7.9.i presently requires: (1) the seal service life of hydraulic snubbers be monitored to ensure that the seals do not fail between surveillance inspections; (2) the maximum expected service life for the various seals, seal materials, and applications, be estimated based on engineering information; (3) the seals be replaced so that the maximum expected service life does not expire during the period when the snubber is required to be operable; (4) any mechanical snubber drag force increase more than 50 percent over the previously measured values must be evaluated as an indication of impending failure of the snubber; and (5) seal replacements and evaluations must be documented and the documentation retained.

The licensee has proposed rewording this SR to be consistent with the Westinghouse Standard TS, Revision 4a, regarding the Snubber Service Life Program. One result would be to more clearly specify the seal components to be included in the service life program by replacing the words "seal materials, and applications" with "springs, and other critical parts." Because the wording more clearly describes the components, the proposed change is acceptable.

A second result would be elimination of the requirement to perform an engineering evaluation if a snubber drag force increases by more than 50 percent above the previously measured value. The licensee stated that the requirement is unnecessary for snubbers with a relatively small drag force

measured during a test. This is because a small increase in drag force found during the next test, even if it is greater than 50 percent of the previous value, may still be well within the acceptable range when it is compared with the rated load of the snubber. The current Sequoyah procedures have defined snubber failure as any measured drag force of 5 percent or greater of rated load, with some exceptions for lower-rated snubbers. When a drag force of 4 percent or greater is measured, an engineering evaluation is necessary. As such, a program for predicting snubber failure has been established that is consistent with the Standard TS regarding snubber functional testing criteria. The staff finds the proposed change to be acceptable.

A third result would be to more clearly specify that engineering information will be used to shorten or extend the maximum expected service life based on the test results and failure history. Critical parts will be replaced so that the snubber service life will not be exceeded during the period when the snubber is required to be operable. Since this is consistent with the Standard TS, it is acceptable.

The proposed change to SR 4.7.9.c, "Snubber Visual Inspection Performance and Evaluation," would revise the SR to be more consistent with GL 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions," dated December 11, 1990. The change would remove the term "if applicable" for performing the functional test in its as-found condition for snubbers that appear to be unacceptable as a result of a visual inspection, thereby requiring a functional test of any with visual defects. This proposed change is consistent with the GL and is, therefore, acceptable.

The change to SR 4.7.9.c would also remove the prescriptive test guidance concerning snubbers with uncovered fluid ports. Presently, the SR requires that tests of these snubbers be performed by starting with the piston in the as-found setting and then extending the piston rod in the extension mode direction. However, once the fluid port is uncovered, the snubber is considered to be inoperable (per Specification 4.7.9.c) and the appropriate compensatory measures must be taken. Therefore, the requirement to perform the test is not appropriate. For this reason and its consistency with GL 90-09, the proposed change is acceptable.

In summary, the proposed change incorporates requirements and revises wording to be consistent with Revision 4a of the Standard TS and GL 90-09 for the Snubber Service Life Program, SR 4.7.9.i, and the Snubber Visual Inspection Performance and Evaluation Program, SR 4.7.9.c. The staff finds the proposed changes to be acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Tennessee State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a surveillance requirement. The NRC staff has determined that the amendments involve 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 issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (59 FR 12367). Accordingly, the amendments meet 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 amendments.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the rublic will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: April 18, 1994