

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

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 83 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 74 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 submittal dated May 10, 1986, the Tennessee Valley Authority (TVA) submitted TS change 68 and requested a change to delete Table 3.4-1, "Reactor Coolant System Pressure Isolation Valves" of the Sequoyah Units 1 and 2 Technical Specifications (TS). Subsequent to this submittal, the staff issued Generic Letter (GL) 87-06 regarding periodic verification of the leak tight integrity of pressure isolation (PI) valves. Upon receipt and review of GL 87-06, TVA indicated the need to keep Table 3.4-1 in the TS and to add two valves to the existing table. By submittal dated June 10, 1987, TVA withdrew the May 10, 1986 application for amendments and proposed the addition of the two flow control valves, FCV-87-7 and FCV-87-8, to TS Table 3.4-1. This is TS change 87-35.

By letter dated July 6, 1988, the staff issued its safety evaluation report which closed out the staff's actions on GL 87-06.

2.0 EVALUATION

The proposed change would add flow control valves FCV-87-7 and FCV-87-8 to TS Table 3.4-1. These valves, which are PI valves for the Upper Head Injection (UHI) charging header, had been inadvertently omitted from Table 3.4-1 because these valves are PI valves.

By letter dated April 5, 1985, the staff transmitted a safety evaluation report regarding Sequoyah's Inservice Test Program which identified the need for inclusion of valves FCV-87-7 and FCV-87-8 in TS Table 3.4-1. The valves listed in Table 3.4-1 are required to prevent reactor coolant system (RCS) leakage into lower pressure systems. The UHI system is connected to the RCS via two main injection lines which divide into four reactor head injection lines. Series check valves, as repicted in Figure 6.3.2-16 of the Sequoyah Final Safety Analysis Report (FSAR), provide the PI function for the main injection lines. FCV-87-7 and FCV-87-8 connect the UHI system with the Liquid Waste Disposal System and perform an RCS PI function.

TVA has designed, installed, and currently performs maintenance on these valves as RCS PI valves even though they are not currently in TS Table 3.4-1. The proposed change would add FCV-87-7 and FCV-87-8 to this table thereby ensuring the appropriate TS limiting conditions for operation and surveillance requirements are satisfied. The staff has reviewed the proposed addition of FCV-87-7 and FCV-87-8 to TS Table 3.4-1 and found the addition to be acceptable.

As RCS PI valves, these valves would normally be tested after manual or automatic actuation or flow through the valves. TVA has proposed not to leak check these valves subsequent to their operation as indicated by the astericks assigned to these valves in the proposed TS Table 3.4-1. All of the valves currently listed in Table 3.4-1 are required to be leak tested subsequent to operation with the exception of FCV-74-1 and FCV-74-2 in the Residual Heat Removal system. As shown on Figure 7.1.4-1 (Sheet 15) of the FSAR, visual control room position indication is provided on Panel M-6 (red and green lights for FCV-87-7 and FCV-87-8 are air-operated normally closed valves and, therefore, unlike check valves, have a forcing mechanism for closure. FCV-74-1 and FCV-74-2 also have a forcing mechanism for closure. Therefore, the staff finds the proposed leak testing exception for FCV-87-7 and FCV-87-8 to be acceptable, namely that these valves do not have to be leak tested following manual or automatic actuation of flow through the valves.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to the installation or use of a facility component located within the restricted rea as defined in 10 CFR Part 20. The 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. 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 nor environmental assessment need to be prepared in cunnection with the issuance of these amendments.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (52 FR 42370) on November 4, 1987 and consulted with the State of Tennessee on September 20, 1988. No public comments were received and the State of Tennessee did not have any comments.

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 these amendments will not be inimical to the common defense and security nor to the health and safety of the public.

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Dated: September 21, 1988