



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

ENCLOSURE 3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 111 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 101 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 the letter dated December 2, 1988, the Tennessee Valley Authority (TVA or the licensee) requested a change to the Sequoyah, Units 1 and 2 Technical Specifications (TS). The purpose of the TS change was to ensure the availability for reactor pressure control by limiting the conditions for operation during intervals when pressurizer power-operated relief valves (PORVs) are inoperable. The pressurizer has two PORVs and two associated block valves. This is the licensee's TS change request 88-25.

The proposed change is to revise the action statements of limiting condition for operation (LCO) 3.4.3.2 for the PORVs and their associated block valves. The proposed change will require different actions based on the cause of valve inoperability. With one or more PORVs inoperable but capable of reactor coolant system (RCS) pressure control, power operation may continue, provided the associated block valve is closed (power does not have to be removed from the closed block valve). With one or more PORVs or block valves inoperable and incapable of RCS pressure control, reactor shutdown will be required.

2.0 EVALUATION

The current action statement for an inoperable PORV requires the associated block valve to be closed and its power removed. Once the block valve is closed and the power is removed, there is no time limit to return the PORV to operable status because the action statement was only intended to ensure that a leaking PORV could not be a source of uncontrolled RCS leakage. This action statement does not ensure the availability of at least one PORV for RCS depressurization following a postulated Steam Generator Tube Rupture (SGTR) accident coincident with a loss of offsite power and a single active failure. For example, the normal pressurizer spray system is not available during a loss of offsite power, and a single active failure involving a battery board would render the one intact PORV inoperable.

The proposed action statement requires different plant operational responses based on the cause of PORV inoperability. With one or more PORVs inoperable but capable of RCS pressure control, power operation of the plant may

continue, provided the associated block valve is closed. With one or more PORVs or block valves inoperable and incapable of RCS pressure control, reactor shutdown is required. This action statement ensures that RCS pressure control is available for the postulated SGTR accident and a leaking PORV is not a source of uncontrolled RCS leakage.

Since the proposed action statement not only ensures that the PORVs are not a source of uncontrolled leakage but also ensures that availability of at least one PORV for RCS depressurization following a postulated SGTR accident, we concluded that the proposed action statement in Technical Specification change request 88-25 is acceptable.

### 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 area 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 be prepared in connection 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 (53 FR 53099) on December 30, 1988 and consulted with the State of Tennessee. No public comments were received and the State of Tennessee did not have any comments.

The staff has 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 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: April 3, 1989