



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

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 140 TO FACILITY OPERATING LICENSE NO. DPR-33

AMENDMENT NO. 136 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 111 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3

DOCKETS NOS. 50-259, 50-260 AND 50-296

1.0 INTRODUCTION

The proposed amendments would clarify the trip level setting for the standby gas treatment system (SGTS) relative humidity (R.H.) heater. The current requirement of "less than or equal to 2000 cfm" is changed to be "greater than or equal to 2000 cfm and less than or equal to 4000 cfm".

2.0 EVALUATION

In the current Technical Specification (TS) a contradiction exists between the trip level setting column and the remarks column of Table 3.2.A for the instrument that trips the SGTS R.H. heater on low flow. The trip level setting column requires the actual trip point to be below 2000 cfm. Since the purpose of the switch is to protect the system from overheating if air flow is lost, the remarks column is correct and the setpoint column must be changed to be consistent with it.

The intent of the TS requirement in Table 3.2.A for the R.H. heater switch is to turn off the heater before a decreasing SGTS flow reaches 2000 cfm. This would prevent damage to the SGTS filter banks by turning off the R.H. heaters. A literal reading of the current TS wording would allow a setpoint of 0 cfm which does not fulfill the intent of the TS. Therefore, the "less than or equal to" requirement should be changed to "greater than or equal to" in order to meet the intent of the TS and achieve agreement with the design basis.

An upper bound of 4000 cfm is imposed on the setpoint to ensure that the flow switches do not prevent the heaters from performing their function during normal blower operation. TS 3.7.B.2.c requires that each train operate within ± 10 percent of design flow (9000 cfm). Therefore, when the system is initiated, the airflow for an operable train would be greater than 4000 cfm and the heaters would perform their function.

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the proposed change makes the TS more consistent with the design basis and the Final Safety Analysis Report and, therefore, will increase the margin of safety.

In further review of the proposed change to the remarks column of the TS Table 2.A, the staff found there was not a specific setpoint where the R.H. heaters were required to be shut off. The current TS have such a setpoint. In discussion with Mr. M. J. May, (TVA) it was agreed upon that clarifications could be made to the proposed wording in the amendments to specify the setpoint of 2000 cfm as the minimum flow rate where R.H. heaters could still operate. He agreed upon clarifications for the wording in the remarks column read as follows:

"Below 2000 cfm airflow R. H. heaters shall be shut off."

Based on the above evaluation and the clarification to TS, the staff finds the proposed change acceptable.

0 ENVIRONMENTAL CONSIDERATION

The amendments involve a change to a requirement with respect to installation of 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, or 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.

0 CONCLUSION

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: January 19, 1988