



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

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 142 TO FACILITY OPERATING LICENSE NO. DPR-33

AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 113 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 impose a limit on reactor operation when nitrogen is not being used to supply the pneumatic control system inside containment. The amendment request is in response to Generic Letter 84-09, Hydrogen Recombiner Capability. The proposed amendments also delete an obsolete reference to the fire-related startup retesting program.

2.0 EVALUATION

The proposed amendments would add new technical specification requirements in response to Generic Letter (GL) 84-09, Hydrogen Recombiner Capability. The purpose of these technical specifications is to limit the possibility of the pneumatic control system being an oxygen source inside primary containment during reactor power operation.

The primary pneumatic supply to the containment is provided by compressors which take suction from the nitrogen inerted containment atmosphere itself. The system is also provided with a backup supply of compressed air from the plant control air system and prior to restart of Unit 2 modifications will be completed so that there will be an external supply of compressed nitrogen from the Containment Atmospheric Dilution System. The air supply is normally isolated by a lock closed manual control valve which is closed during times when the containment is inerted by nitrogen. Once the above modification is complete and the air supply control valve is locked closed, this system becomes the nitrogen containment atmospheric dilution system which satisfies the requirements of GL 84-09.

This proposed change would limit operation of the reactor with the air supply valves open by requiring the plant to be in the cold shutdown condition within 24 hours of opening the locked closed air supply valves. It would reduce the possibility of the containment becoming deinerted in a post-accident situation while at the same time allowing for a more orderly shutdown on loss of normal pneumatic supply.

8802240136 880212
PDR ADOCK 05000259
P PDR

This proposed change would add more stringent technical specification requirements in accordance with Generic Letter 84-09. Therefore, the staff has concluded that the proposed technical specification changes will not reduce the margin of nuclear safety.

The proposed amendments would also delete the first phrase of technical specification 3.7.A.5.a which is purely administrative and is not related to the other changes except that it is in the same technical specification section. The deleted phrase makes this requirement effective after the completion of the fire-related startup retesting program. Since this program has been completed, the requirement is effective and deleting this phrase will only remove extraneous information. No technical specification requirements are changed.

Based on the above evaluation the staff finds the proposed changes will enhance the safe operation of the plant or are administrative in nature and, therefore, the proposed changes to the technical specifications are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

The amendments involve a change to a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. 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 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.

Principal Contributor: John Stang

Dated: February 12, 1988