



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

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 150 TO FACILITY OPERATING LICENSE NO. DPR-33

AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 121 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

By letter dated February 24, 1988 (TS 238), the Tennessee Valley Authority (TVA or the licensee) requested amendments to Facility Operating Licenses Nos. DPR-33, DPR-52, and DPR-68 for the Browns Ferry Nuclear Plant (BFN), Units 1, 2 and 3. The proposed amendments would modify the following Technical Specification (TS) Surveillance Requirements (SR) to replace the words "not to exceed" with the words "at least once every": SR 4.7.E.1, 4.7.E.3, 4.7.F.1, 4.9.A.2.c, and 4.11.A.5.

2.0 EVALUATION

The proposed amendment would change the BFN TS for Units 1, 2 and 3 to eliminate the use of absolute surveillance intervals for TS 4.7.E.1, 4.7.E.3, 4.7.F.1, 4.9.A.2.c, and 4.11.A.5. The current TS words "at least once per operating cycle, not to exceed 18 months" are replaced by "at least once every 18 months" for SR 4.7.E.1, 4.7.E.3, and 4.7.F.1. The current TS words "at intervals not to exceed 24 months" are replaced by "at least once every 24 months" for SR 4.9.A.2.c. The current TS words "at intervals no greater than 3 months" are replaced by "at least once every 3 months" for SR 4.11.A.5.

The language change makes these five surveillance requirements consistent with other BFN surveillance intervals. In addition, the proposed changes permit the application of TS Definition 1.0.LL, Surveillance. This definition allows a maximum extension of a single surveillance interval not to exceed 25 percent of the interval. Further, the combined time for any three consecutive surveillance intervals is not to exceed 3.25 times the specified surveillance interval. Thus, the wording change adds flexibility to the surveillance scheduling without significantly impacting the surveillance intervals.

Surveillance requirements 4.7.E.1 and 4.7.F.1 demonstrate that the Control Room Emergency Ventilation filters and adsorbers and the Primary Containment Purge System filters and adsorbers, respectively, are not clogged with excessive

amounts of foreign matter. This is done by measuring the pressure drop across the combined filters and charcoal adsorber banks. The licensee has stated that a review of the data collected during performance of the surveillance shows that the recorded pressure drop is less than one half of the TS limit. This surveillance is normally scheduled during refuel outages. Deleting the once-per-operating cycle phrase will not result in a significant change in the requirements since the 18-month interval corresponds to the planned operating cycle and will almost always be the most restrictive surveillance interval.

Surveillance Requirement 4.7.E.3 demonstrates the automatic initiation function of the Control Room Emergency Ventilation System. This surveillance is normally scheduled during refuel outages. Deleting the once-per-operating cycle phrase will not result in a significant change in the requirements since the 18-month interval corresponds to the planned operating cycle.

Surveillance requirement 4.9.A.2.c demonstrates that the unit batteries, the diesel generator batteries, and the shutdown board batteries have maintained their rated capacities by performing at rated discharge. The change in the surveillance interval to "at least once every 24 months" does not decrease the confidence that the batteries are at rated capacity. Pilot cell and individual cell tests are performed at frequencies that would indicate irregularities long before failure of the batteries.

Surveillance requirement 4.11.A.5 verifies that the fire protection header and component isolation valves are open. The change to once every three months is consistent with other surveillance intervals and will not increase the probability of a mispositioned valve going undetected for a long period of time.

The intent of surveillance requirements to ensure system operability is not affected by this change. Although the average surveillance interval may be slightly longer, the definition of surveillance in the TS allows for this. This change is also in agreement with the Standard Technical Specifications. No adverse safety consequences result from the proposed change. This change improves nuclear safety by minimizing unnecessary plant shutdowns that may be required by inadvertently exceeding the present absolute time intervals and is therefore 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/or 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 findings.

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 13108) on April 20, 1988 and consulted with the State of Alabama. No public comments were received and the State of Alabama 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: July 5, 1988