



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 6 TO FACILITY OPERATING LICENSE NO. NPF-2

ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 1

DOCKET NO. 50-348

INTRODUCTION

By letter dated October 26, 1978, Alabama Power Company (APC) proposed a one-time Technical Specification change to allow startup of Farley Nuclear Plant (FNP), Unit No. 1. Our letter dated October 26, 1978, granted authorization to startup the plant. We noted that a formal amendment was to be forwarded as soon as possible.

DISCUSSION

Based on a review conducted by APC of test results for Train B of the Penetration Room Filtration System (PRFS), APC declared Train B inoperable at 12:30 p.m. on October 25 in accordance with Technical Specification 3.7.8.1. This specification, applicable to operational Modes 1, 2 3 and 4 allows operation for up to 7 days to restore Train B to operable status. However, the plant tripped inadvertently at 11:35 p.m. on October 25 and was maintained in Mode 3 (Hot Standby) pending resolution of the problem.

With the plant tripped and in Mode 3, Technical Specification 3.0.4 precludes changing from Mode 3 (Hot Standby) to Mode 2 (Startup) until Train B of the PRFS is operable. The intent of Specification 3.0.4 is to assure that operation is not initiated with inoperable systems. This is a general requirement, but exceptions are recognized and sometimes found to be acceptable provided startup without the equipment being OPERABLE can be shown not to affect plant safety.

EVALUATION

We have reviewed the APC proposal, the PRFS design, as well as the NRC staff Safety Evaluation Report (NUREG-75/034) dated May 2, 1975, for FNP as it relates to accidents requiring PRFS operability.

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APC reported that the high efficiency particulate air (HEPA) filters in Train B of the PRFS tested out at 99.93% efficiency. However, 99.95% efficiency must be demonstrated when tested to Specification 4.7.8.1b.2. The HEPA filters are installed in the filtration system to remove airborne particulate matter only; activated charcoal is installed to remove radioiodine in both the elemental and organic form. The activated charcoal section of Train B when tested met all of its applicable Technical Specification requirements. Furthermore, the redundant Train A meets all Technical Specification requirements. The results of the Train A HEPA filters test demonstrated an efficiency in excess of 99.95% (99.98%).

In NUREG 75/034, we assumed that 5% of the total radioiodine from an accident would be in a particulate form and that the HEPA filters would be 99% efficient. The Train B HEPA filter assembly which will be available during startup, has an efficiency in excess of this 99% value. This slightly degraded HEPA filter assembly will not significantly affect plant safety for the brief period of time required to repair it and thus restore Train B to fully OPERABLE status (99.95% HEPA filter efficiency). Therefore, we conclude that one-time operation, until 12:30 p.m. on November 1, 1978, with Train B available but somewhat degraded (99.93% efficiency of its HEPA filter assembly) is acceptable.

ENVIRONMENTAL CONSIDERATION

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment

does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: October 26, 1978