



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 191 TO FACILITY OPERATING LICENSE DPR-57
AND AMENDMENT NO. 130 TO FACILITY OPERATING LICENSE NPF-5

GEORGIA POWER COMPANY, ET AL.

EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-321 AND 50-366

1.0 INTRODUCTION

By letter dated October 19, 1993, Georgia Power Company, et al. (the licensee), proposed license amendments to change the Technical Specifications (TS) for the Edwin I. Hatch Nuclear Plant, Units 1 and 2. The proposed changes would allow a time delay for tripping the electric power supply to the reactor protection system (RPS) buses by the electric power monitoring (EPM) system. The time delay would allow an under-voltage, over-voltage, and under-frequency condition to exist up to 4 seconds. The present TS for Units 1 and 2 does not require a time delay for the under-voltage, over-voltage and under-frequency trips.

2.0 EVALUATION

The RPS buses supply power to the logic for several engineered safety feature (ESF) systems. The EPM system trips are provided to disconnect the RPS loads from the primary or alternate power sources in the event of a sustained over-voltage, under-voltage, and under-frequency condition. However, because a small perturbation in voltage or frequency can result in a trip of the power supply and cause unnecessary ESF actuation, the licensee is proposing to add a time delay to the trip of the power supply. Such an event occurred at Hatch Unit 1 on May 17, 1992. The General Electric (GE) Company has performed an analysis for the Hatch plant and determined that a 4-second maximum time delay would adequately protect against inadvertent trips from small perturbation and also assure equipment integrity. The staff has previously reviewed the GE analysis for other plants, and found it acceptable. A maximum time delay of 4 seconds has been included in the design of the majority of plants similar to Hatch, as well as, in the BWR-5s and BWR-6s.

The proposed change to the TS to allow a maximum of 4 seconds time delay for tripping the power supply to the RPS buses by the EPM system would increase the stability of the power source and prevent premature and spurious trips from occurring during switching operations. Furthermore, it will not damage the electrical components subjected to this time delay. Therefore, the staff finds the proposed time delay acceptable.

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3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (58 FR 67846 dated December 22, 1993). 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 or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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