



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 81

FACILITY OPERATING LICENSE NPF-5

GEORGIA POWER COMPANY  
OGLETHORPE POWER CORPORATION  
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA  
CITY OF DALTON, GEORGIA

EDWIN I. HATCH NUCLEAR PLANT, UNIT 2

DOCKET NO. 50-366

INTRODUCTION

By letter dated May 8, 1987, Georgia Power Company (the licensee) requested a change to the Technical Specifications (TS) for the Edwin I. Hatch Nuclear Plant, Unit 2. The proposed change would delete Surveillance Requirement 4.3.7.2.a.2.

EVALUATION

Surveillance Requirement 4.3.7.2.a.2 requires that the extraction steam non-return valves be cycled through one complete test cycle of partial closure at least once per seven days. The extraction steam non-return (check) valves are designed to preclude the possibility of steam in the feedwater system back-feeding the turbine and contributing to a turbine overspeed condition. The valves also protect against a water leg in the extraction steam lines which could lead to excess moisture in the turbine.

Protection from turbine overspeed is a nuclear safety concern since excessive overspeed could result in the generation of missiles from turbine components with the potential for damaging safety-related components, equipment and/or structures. However, the licensee stated that to protect the plant against possible turbine overspeed, both a normal overspeed protection system and an emergency overspeed protection system are provided. Either system is capable of preventing excessive turbine overspeed without regard to the operability of the extraction steam non-return valves.

The licensee has classified the extraction steam non-return valves as non-critical, based on the energy content in the associated lines and their possible contribution to turbine speed. The licensee stated that these valves do not impact the redundant turbine overspeed protection system, and further are not considered in the probabilistic risk evaluation for the turbine generated missiles. The licensee intends to perform regular surveillance testing on these valves in accordance with the turbine manufacturer's (General Electric's) recommendations.

The staff has reviewed the licensee's submittal and concurs with the licensee's classification of the extraction steam non-return valves as non-critical. The staff also notes that the TS for similar BWRs and the Standard Technical Specifications for BWR/4 plants (Hatch Unit 2 is a BWR/4 plant) do not have requirements for weekly operability tests of these valves. Accordingly, the staff concludes that the proposed deletion of Surveillance Requirement 4.3.7.2.a.2 from the Hatch Unit 2 TS is acceptable.

#### ENVIRONMENTAL CONSIDERATION

The amendment involves a change in the use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that the amendment involves 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 exposures. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there have been no public comments on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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 amendment.

#### CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration, which was published in the Federal Register on June 17, 1987, (52 FR 23099), and consulted with the state of Georgia. No public comments were received, and the state of Georgia 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: R. Goel  
L. Crocker

Dated: August 20, 1987