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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 12 TO FACILITY OPERATING LICENSE NO. NPF-5

GEORGIA POWER COMPANY
OGLETHORPE ELECTRIC MEMBERSHIP CORPORATION
MUNICIPAL ELECTRIC ASSOCIATION OF GEORGIA
CITY OF DALTON, GEORGIA

EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 2

DOCKET NO. 50-366

I. INTRODUCTION

By letter dated September 19, 1979, Georgia Power Company (licensee) requested an amendment to the Hatch Unit No. 2 Operating License. The proposed amendment would extend certain surveillance intervals for the initial cycle of Hatch 2 operation to allow the testing to be performed during a scheduled reactor shutdown. The tests involved are those valve and penetration leak rate measurements and integrated safeguards system testing that would normally be performed during a refueling outage.

II. BACKGROUND AND DISCUSSION

The licensee's request for an extension of certain surveillance intervals was submitted because of a misinterpretation of the starting time for the surveillance periods. The surveillance requirements would require Unit shutdown and outage of the same magnitude as a refueling outage. The misinterpretation is not without precedent. The licensee had established a periodic test interval which commenced with the receipt of the operating license for Hatch Unit No. 2 on June 13, 1978. The required surveillance was scheduled for March 1980 to meet an operating cycle requirement based on a surveillance interval beginning with the issuance of an operating license.

Recently, the staff advised the licensee that the time interval extends to when the surveillance was previously performed on a system following construction. Accordingly, the previous testing would have been performed prior to issuance of the license, and the proposed testing in March 1980 would be outside the authorized test interval.

The licensee's application identified those surveillance requirements which could not be performed without reactor shutdown. Such tests require reactor shutdown in order to not violate General Design Criteria, to avoid inadvertent reactor trips, physical impossibility (e.g., injection of low pressure water into a high pressure system) and inaccessibility of components while at power.

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The licensee requested that certain surveillance intervals be extended to March 1980 based on the maintenance history of the systems in question, the lack of any information that would indicate system inoperability and the favorable operating experience to date with the same or similar components on Hatch Unit No. 1.

III. EVALUATION

The staff's requirements for 18 month surveillance intervals was set with the nominal refueling outage in mind. The intent was not to allow extension of surveillance requirements for long refueling cycles or to require more frequent testing for short refueling cycles. Thus, the refueling test frequency was intended to routinely demonstrate operability of systems over the service life of the plant. Our review of the licensee's requested one-time extension of certain surveillance intervals identified that the type testing involved includes: integrated safety system testing, integrated and periodic testing of fire protection systems and Type B and C leak rate testing of selected penetrations and valves.

The integrated safety system testing includes Standby Liquid Control System test actuation, Core Spray auto actuation and diesel generator load reject/load shedding tests. The fire protection system tests include fire pump capacity tests, sprinkler flow tests and auto and manual activation of CO_2 valves and dampers. Each of these requirements is intended to be a demonstration of total system response on a periodic basis. This requirement supplements the routine (e.g., monthly, quarterly) verification of system component operability which includes pumps, fans, valves and emergency diesel generators. The licensee is performing these routine tests to verify system operability. Our review of the performance history of integrated system response indicates that the pre-operational testing was performed adequately and that no problems are known to exist. Therefore, a onetime extension of such test intervals until the next scheduled shutdown in March 1980 is acceptable.

The local leak rate testing of valves and penetrations for which the licensee requested an increase in surveillance interval include 174 separate tests that would be required between September 1979 and March 1980. As with the integrated system response tests discussed above, the surveillance intervals were established based on a nominal operating cycle. Our review of each of these test requirements indicates that the vast majority of the tests involve penetrations. Based on our review of maintenance history of these valves we have not identified a technical basis on which the surveillance interval cannot be extended one to five months to coincide with the licensee's scheduled shutdown in March 1980 to perform these tests. Our evaluation considered the advantage of a March 1980 shutdown vs an October 1979 shutdown in order to permit the licensee to concurrently perform facility modifications

to the torus in support of the Mark I Long Term Program. We conclude that the enhancement of safety as related to Mark I containment improvements far outweigh the benefit of requiring a shutdown in October 1979 for the purpose of conducting local leak rate testing. Two separate shutdowns over a period of 6 months is not considered justified.

In summary we find that the licensee, in good faith, scheduled integrated system response tests and local leak rate tests beyond the limits authorized by current specifications. To require shutdown at this time in the absence of an identified safety issue is not considered to be in the best interest of the public. Therefore, a one-time extension of the interval for the identified surveillance requirements is justified and acceptable.

IV. ENVIRONMENTAL CONSIDERATIONS

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.

V. 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.

Dated: September 21, 1979

References

1. Letter, Florida Power and Light (Uhrig) to NRC (Davis) dated June 16, 1977.