October

1993

Docket No. 50-424

Mr. C. K. McCoy Vice President - Nuclear Vogtle Project Georgia Power Company P. O. Box 1295 Birmingham, Alabama 35201 Distribution:

NRC & Local PDRs PDII-3 R/F EJordan, MNBB3701 ACRS (10), P-315 RAHermann LGBerry OPA, 2G5 SVarga GLainas OGC, 15B18 EMerschoff, RII CECarpenter

Dear Mr. McCoy:

SUBJECT: ENVIRONMENTAL ASSESSMENT - VOGTLE ELECTRIC GENERATING PLANT, UNIT 1 (TAC NO. M87783)

Enclosed is a copy of the "Environmental Assessment and Finding of No Significant Impact" which relates to your submittal dated September 30, 1993, requesting a one-time exemption from the requirements of 10 CFR Part 50, Appendix J, Section III.D.3, extending the interval for Type B and C (local leak rate) testing of the Unit 1 auxiliary component cooling water (ACCW) supply and return containment isolation valves beyond the 2-year limit of Appendix J, to prior to entry into Mode 4 following the next scheduled refueling outage (or the next forced outage requiring entry into Mode 5), but no later than November 1, 1994.

The staff has determined that the proposed change does not alter any initial conditions assumed for the design basis accidents previously evaluated nor change operation of safety systems utilized to mitigate the design basis accidents, and that there are no significant environmental effects that would result from the proposed actions.

The assessment has been forwarded to the Office of the Federal Register for publication.

Sincerely,

ORIGINAL SIGNED BY:

C. E. Carpenter, Jr., Acting Project Manager Project Directorate II-3 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosure: As stated

cc w/enclosure: See next page

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Mr. C. K. McCoy Georgia Power Company

cc: Mr. J. A. Bailey Manager - Licensing Georgia Power Company P. O. Box 1295 Birmingham, Alabama 35201

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# UNITED STATES NUCLEAR REGULATORY COMMISSION GEORGIA POWER COMPANY. ET AL. VOGTLE ELECTRIC GENERATING PLANT, UNIT 1 DOCKET NO. 50-424 ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of a schedular exemption from the requirements of 10 CFR Part 50, Appendix J, Section III.D.3, to Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), for the Vogtle Electric Generating Plant, Unit 1 (Vogtle or the facility), located in Burke County, Georgia.

#### ENVIRONMENTAL ASSESSMENT

# Identification of the Proposed Action:

The proposed action would grant a one-time, temporary exemption from the requirements of Section III.D.3 of Appendix J to 10 CFR Part 50, to extend the interval for Type C local leak rate testing of the Unit 1 auxiliary component cooling water (ACCW) supply and return containment isolation valves. Section III.D.3 requires that Type C tests be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years. The proposed exemption would allow the required test interval for valves HV-1974 (and associated check valve 1-1217-U4-113), HV-1975, HV-1978, and HV-1979 to be extended from 24 months to prior to entry into Mode 4 following the next scheduled refueling outage (or the next forced outage requiring entry

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into Mode 5), but no later than November 1, 1994. The proposed exemption is in accordance with the licensee's application dated September 30, 1993.

## The Need for the Proposed Action:

The proposed exemption is needed to prevent the shutdown of Unit 1 solely for the purpose of testing the subject valves.

# Environmental Impacts of the Proposed Action:

The proposed exemption will not result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite. The proposed action will not increase potential radiological environmental effects due to containment leakage beyond those already permitted by the regulations. Testing of Type B and C components under Appendix J to 10 CFR Part 50 is intended to demonstrate that containment leakage from these components is within defined acceptable limits of less than 0.6 times the maximum allowable containment leakage rate with the containment pressurized to its design limit, which provide information used to calculate the maximum radiological consequences of a design basis accident.

The subject ACCW valves have been Type C tested during all previous refueling outages with the exception of the Unit 1 spring 1993 outage. A review of the previous Type C test data has shown that sufficient margin existed and that there has been no significant degradation of the valves isolation capability.

The probability of containment isolation failure following a core damage accident is modeled in the Vogtle individual plant examination (IPE). The IPE was submitted by letter dated December 23, 1992. In

order to model a more conservative scenario of containment isolation failure than was considered in the base case Vogtle IPE, the licensee assumed that the occurrence of any core damage scenario would cause a break in the ACCW flow path and that the operator would be required to isolate the ACCW system for successful containment isolation. Based on a Type C test interval of 2 years, the frequency of core damage with containment isolation failure was found by the licensee to be on the order of 10<sup>-7</sup> per reactor year. The licensee has stated that extending the required Type C test interval for these valves beyond the Appendix J 2-year period has a negligible impact on that probability. Thus, the probability of an event that leads to core damage and a failure of the ACCW piping inside containment with a failure to isolate containment is not considered to be credible by the licensee. The staff concurs that the additional operation period, between expiration of the current leak tests to prior to entry into Mode 4 following the next scheduled refueling outage (or the next forced outage requiring entry into Mode 5), but no later than November 1, 1994, is not expected to significantly decrease the margin between expected as-found leak rate and L.

Therefore, radiological releases will not differ from those determined previously, and the proposed exemption does not otherwise affect facility radiological effluent or occupational exposures. With regard to potential nonradiological impacts, the proposed action does not affect plant nonradiological effluents and has no other nonradiological environmental impact.

Therefore, there will not be a significant increase in the types or amounts of any effluent that may be released offsite and, as such,

the proposed exemption does not involve irreversible environmental consequences beyond those already associated with normal operation of the plant.

Based on its review, the Commission concludes that the proposed exemption is acceptable. The staff has determined that the proposed exemption does not alter any initial conditions assumed for the design basis accidents previously evaluated nor change operation of safety systems utilized to mitigate the design basis accidents.

The proposed exemption does not increase the probability or consequences of accidents. No changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that proposed action would result in no significant radiological environmental impact.

With regard to potential nonradiological impacts, the proposed exemption involves components in the plant which are located within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impacts. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed exemption.

## <u>Alternatives to the Proposed Action:</u>

Since the Commission has concluded that there are no significant environmental effects that would result from the proposed actions, any alternatives with equal or greater environmental impacts need not be evaluated. The principal alternative would be to deny the licensee's

request for exemption. This would not reduce environmental impacts of plant operation.

### Alternative Use of Resources:

This action does not involve the use of resources not previously considered in the Final Environmental Statement for the Vogtle Electric Generating Plant, Units 1 and 2, dated March 1985.

# Agencies and Persons Consulted:

The staff consulted with the State of Georgia regarding the environmental impact of the proposed action.

## FINDING OF NO SIGNIFICANT IMPACT

Based on the foregoing environmental assessment, The Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed exemption.

For further details with respect to this action, see the application for exemption, dated September 30, 1993, which is available for public inspection in the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and the local public document room located at the Burke County Library, 412 Fourth Street, Waynesboro, Georgia 30830.

Dated at Rockville, Maryland this 18th day of October 1993.

FOR THE NUCLEAR REGULATORY COMMISSION

Victor Nerses, Acting Director Project Directorate II-3 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation