

March 22, 1993

Docket Nos. 50-424
and 50-425

Mr. W. G. Hairston, III
Senior Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

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Dear Mr. Hairston:

SUBJECT: ISSUANCE OF AMENDMENTS - VOGTLE ELECTRIC GENERATING PLANT, UNIT
NOS. 1 AND 2 (TAC NOS. M84474 AND M84475)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 58 to Facility Operating License No. NPF-68 and Amendment No. 37 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated February 2, 1993, that supersedes your previous amendment request proposed on August 31, 1992.

The amendments revise TS 4.8.1.1.2.h.7 and its associated footnote to remove the requirement to have the diesel generators perform the LOOP/ESFAS test within 5 minutes after completing the 24-hour test and substitute the requirement to start the diesel generator in accordance with TS 4.8.1.1.2.a.4 within 5 minutes after the 24-hour test.

A copy of the related Safety Evaluation is also enclosed. Notice of issuance of the amendments will be included in the Commission's biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY:

Darl S. Hood, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 58 to NPF-68
2. Amendment No. 37 to NPF-81
3. Safety Evaluation

cc w/enclosures: See next page

With Noled deletion on pg 2
EBT 2/25/93
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

March 22, 1993

Docket Nos. 50-424
and 50-425

Mr. W. G. Hairston, III
Senior Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

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A copy of the related Safety Evaluation is also enclosed. Notice of issuance of the amendments will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in dark ink, appearing to read "Darl Hood", is written over a horizontal line.

Darl S. Hood, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. **58** to NPF-68
2. Amendment No. **37** to NPF-81
3. Safety Evaluation

cc w/enclosures:
See next page

Mr. W. G. Hairston, III
Georgia Power Company

Vogtle Electric Generating Plant

CC:

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

GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA
CITY OF DALTON, GEORGIA
DOCKET NO. 50-424
VOGTLE ELECTRIC GENERATING PLANT, UNIT 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 58
License No. NPF-68

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Vogtle Electric Generating Plant, Unit 1 (the facility), Facility Operating License No. NPF-68 filed by the Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated February 2, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-68 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 58, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. GPC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: **March 22, 1993**



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

GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA
CITY OF DALTON, GEORGIA
DOCKET NO. 50-425
VOGTLE ELECTRIC GENERATING PLANT, UNIT 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. **37**
License No. NPF-81

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Vogtle Electric Generating Plant, Unit 2 (the facility), Facility Operating License No. NPF-81 filed by the Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated February 2, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-81 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. **37**, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. GPC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: **March 22, 1993**

ATTACHMENT TO LICENSE AMENDMENT NO.58

FACILITY OPERATING LICENSE NO. NPF-68

AND LICENSE AMENDMENT NO. 37

FACILITY OPERATING LICENSE NO. NPF-81

DOCKETS NOS. 50-424 AND 50-425

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the areas of change.

Remove Page

3/4 8-7

Insert Page

3/4 8-7

SURVEILLANCE REQUIREMENTS

auto-start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test;

- 6) Simulating a loss-of-offsite power in conjunction with an ESF Actuation test signal, and:
 - a) Verifying deenergization of the emergency busses and load shedding from the emergency busses;
 - b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 11.5 seconds,* energizes the auto-connected emergency (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 +170, -410 volts and 60 ± 1.2 Hz during this test; and
 - c) Verifying that all automatic diesel generator trips, except engine overspeed, low lube oil pressure, high jacket water temperatures### and generator differential, are automatically bypassed upon loss of voltage on the emergency bus concurrent with a Safety Injection Actuation signal.
- 7) Verifying the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to an indicated 7600 to 7700 kW,** and during the remaining 22 hours of this test, the diesel generator shall be loaded to an indicated 6800-7000 kW.** The generator voltage and frequency shall be 4160 + 170, - 135 volts and 60 ± 1.2 Hz within 11.4 seconds after the start signal; the steady-state generator voltage and frequency shall be 4160 + 170, -410 volts and 60 ± 1.2 Hz during this test.* Within 5 minutes after completing this 24-hour test, perform Specification 4.8.1.1.2a.4;##
- 8) Verifying that the auto-connected loads to each diesel generator do not exceed the continuous rating of 7000 kW;
- 9) Verifying the diesel generator's capability to:

*All engines starts for the purpose of surveillance testing as required by Specification 4.8.1.1.2 may be preceded by an engine prelube period as recommended by the manufacturer to minimize mechanical stress and wear on the diesel engine.

**This band is meant as guidance to avoid routine overloading of the engine. Loads in excess of this band or momentary variations due to changing bus loads shall not invalidate the test.

#Failure to maintain voltage and frequency requirements due to grid disturbances does not render a 24-hour test as a failure.

##If Specification 4.8.1.1.2a.4 is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at the load required by Surveillance Requirement 4.8.1.1.2.a5 for a minimum of 2 hours.

###The high jacket water temperature trip may be bypassed.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 58 TO FACILITY OPERATING LICENSE NPF-68
AND AMENDMENT NO. 37 TO FACILITY OPERATING LICENSE NPF-81

GEORGIA POWER COMPANY, ET AL.

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

DOCKET NOS. 50-424 AND 50-425

1.0 INTRODUCTION

By letter dated August 31, 1992, as superseded February 2, 1993, Georgia Power Company, et al. (the licensee), proposed license amendments to change the Technical Specifications (TSs) for Vogtle Electric Generating Plant (Vogtle or the facility), Units 1 and 2.

The proposed amendments would revise TS 4.8.1.1.2.h.7 and its associated footnote ## to remove the requirement that the diesel generators (DGs) be tested by performing the loss-of-offsite power/engineered safety features actuation system (LOOP/ESFAS) test specified by TS 4.8.1.1.2.h.6)b) within 5 minutes after completing the 24-hour test. Instead, the change would substitute the requirement to start the DG in accordance with TS 4.8.1.1.2.a.4 within 5 minutes after the 24-hour test. TS 4.8.1.1.2.a.4 requires that the DGs be verified to start using one of several specified start signals and that the generator achieve specified voltage and frequency within a certain time. Specifically:

1. TS 4.8.1.1.2.h.7 requires, in part, that the DGs be tested periodically, during shutdown, by operating them at specified loads for 24 hours, and that "Within 5 minutes after completing this 24-hour test, perform Specification 4.8.1.1.2.h.6)b)." This sentence would be changed to read "Within 5 minutes after completing this 24-hour test, perform Specification 4.8.1.1.2.a.4"
2. The associated footnote to Specification 4.8.1.1.2.h.7 reads:

If Specification 4.8.1.1.2.h.6)b) is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at the load required by Surveillance Requirement 4.8.1.1.2.a5 kW for 1 hour or until operating temperature has stabilized.

The footnote would be changed to read:

If Specification 4.8.1.1.2.a.4 is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be

operated at the load required by Surveillance Requirement 4.8.1.1.2.a5 for a minimum of 2 hours.

2.0 EVALUATION

The primary purpose of performing a LOOP/ESFAS test within 5 minutes of the 24-hour test is to demonstrate the ability of the DG to restart shortly after being shut down following prolonged operation at or near full power (i.e., a hot restart test). This verifies that mechanical expansion of engine components following shutdown of the engine does not prevent the DG from restarting. Performance of the LOOP/ESFAS test is required by TS 4.8.1.1.2.h.6)b) and is not changed by the proposed amendments. Performing a LOOP/ESFAS test in conjunction with a hot restart test is repetitive.

The staff has determined that the hot restart test can be accomplished using any of the start signals required by TS 4.8.1.1.2.a.4, since the hot restart test verifies the mechanical capabilities of the engine and is not a verification of the DG control system or actuation logic. The staff has concluded that the replacement of the LOOP/ESFAS test with the requirement to start the DG in accordance with TS 4.8.1.1.2.a.4 within 5 minutes after the 24-hour test is sufficient to demonstrate hot restart capability, and the proposed change is, therefore, acceptable.

The staff has also determined that modifying TS 4.8.1.1.2.h.7 footnote ## to require operation of the DG for a minimum of 2 hours at the load required by TS 4.8.1.1.2.a.5 will allow the DG to achieve an acceptable temperature for conducting the hot restart test. Therefore, the staff, finds the modification to footnote ## to be acceptable.

Accordingly, the NRC staff finds that the proposed changes are acceptable. The staff also notes that similar changes have been accepted for several other facilities and that these changes have been incorporated into the Technical Specification Improvement Program.

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 surveillance requirements. The 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 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 (57 FR 45084 dated September 30, 1992, and 58 FR 8999 dated February 18, 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 these 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: D. Hood
J. Ganiere
P. Balmain

Date: **March 22, 1993**