Docket No. 50-424

April 16, 1988

Mr. George F. Head
Senior Vice President
Georgia Power Company
P.O. Box 4545
Atlanta, Georgia 30302

Dear Mr. Head:

SUBJECT: ISSUANCE OF AMENDMENT NO. 4 TO FACILITY OPERATING LICENSE NPF-68
VOGTLE ELECTRIC GENERATING PLANT, UNIT 1 (TAC 67567)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 4 to Facility Operating License No. NPF-68 for the Vogtle Electric Generating Plant, Unit 1. The amendment is being issued in response to your letter dated March 23, 1988.

The amendment modifies the Technical Specifications to allow pre-operational positive pressure testing of the Unit 2 Emergency Heating, Ventilation, and Air Conditioning System. The amendment is effective as of its date of issuance.

A copy of the related safety evaluation supporting Amendment No. 4 to Facility Operating License NPF-68 is enclosed.

Notice of issuance of the amendment will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

/S/

Jon B. Hopkins, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II

Enclosures:
1. Amendment No. 4 to NPF-68
2. Safety Evaluation

cc w/enclosures:
See next page

OFFICIAL RECORD COPY

PDII3/DRP-I/II	PDII3/DRP-I/II	PDII3/DRP-I/II
MRood	JHopkins:pw	Acting PD
4/5/88	4/5/88	4/12/88

Mr. George F. Head
Georgia Power Company

Vogtle Electric Generating Plant

cc:
Mr. L. T. Gucwa
Manager of Safety and Licensing
Georgia Power Company
P.O. Box 4545
Atlanta, Georgia 30302

Mr. Ruble A. Thomas
Executive Consultant
Southern Company Services, Inc.
P. O. Box 2625
Birmingham, Alabama 35202

Mr. Paul D. Rice
Vice President & Project Director
Georgia Power Company
Post Office Box 282
Waynesboro, Georgia 30830

Mr. J. A. Bailey
Project Licensing Manager
Southern Company Services, Inc.
P.O. Box 2625
Birmingham, Alabama 35202

Ernest L. Blake, Jr.
Bruce W. Churchill, Esq.
Shaw, Pittman, Potts and Trowbridge
2300 N Street, N. W.
Washington, D. C. 20037

Mr. G. Bockhold, Jr.
General Manager Nuclear Operations
Georgia Power Company
P. O. Box 1600
Waynesboro, Georgia 30830

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W., Suite 2900
Atlanta, Georgia 30323

Resident Inspector
Nuclear Regulatory Commission
P. O. Box 572
Waynesboro, Georgia 30830

Deppish Kirkland, III, Counsel
Office of the Consumers' Utility Council
Suite 225
32 Peachtree Street, N.E.
Atlanta, Georgia 30302

James E. Joiner
Troutman, Sanders, Lockerman, & Ashmore
1400 Candler Building
127 Peachtree Street, N.E.
Atlanta, Georgia 30303

Danny Feig
1130 Alta Avenue
Atlanta, Georgia 30307

Carol Stangler
Georgians Against Nuclear Energy
425 Euclid Terrace
Atlanta, Georgia 30307

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

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MUNICIPAL ELECTIC AUTHORITY OF GEORGIA

CITY OF DALTON, GEORGIA

VOGTLE ELECTRIC GENERATING PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 4
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 March 23, 1988, 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, as amended, 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 attachments to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-68 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 4 , 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 and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Lawrence Crocker, Acting Director
Project Directorate II-3
Division of Reactor Projects

Attachment:
Technical Specification Changes

Date of Issuance: April 16, 1988

OFFICIAL RECORD COPY

LA:PDII-3	PM:PDII-3	PSB	OGC-WF	PD:PDII-3	ADRII-NRR
MRood	JHopkins:			Acting PD	GLainas
4/15/88	4/15/88	4/1/88	4/1/88	4/12/88	4/1/88

ATTACHMENT TO LICENSE AMENDMENT NO. 4

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

Amended Page	Overleaf Page
3/4 7-14	3/4 7-13
3/4 7-16	3/4 7-15

3/4.7.5 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.5 The Ultimate Heat Sink (UHS) shall be OPERABLE with:

a. Two OPERABLE Nuclear Service Cooling Water (NSCW) tower basins each with:

1. A minimum water level (LI-1606-train A, LI-1607-train B) in the NSCW tower basin of 80.25 ft (plant elevation of 217' 3") (73% of instrument span)

2. A maximum water temperature (TJR-1690/1-train A, TJR-1691/1-train B) of 90°F.

b. Two OPERABLE trains of NSCW tower fans, each train consisting of four fans and associated spray cells.

c. Two OPERABLE NSCW transfer pumps.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

a. With the UHS inoperable due to water level and/or water temperature, restore the UHS to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With the UHS inoperable due to inoperable fans and/or associated spray cells, restore to OPERABLE status within 72 hours; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With the UHS inoperable due to an inoperable NSCW transfer pump, restore the transfer pump to OPERABLE status within 8 days or implement an alternate method of transfer of basin content; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Implementation of the alternate method of transfer of basin content shall not exceed 31 days. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.5 The ultimate heat sink shall be determined OPERABLE:

a. At least once per 24 hours by verifying the water level and water temperature to be within their limits.

b. At least once per 31 days by verifying that the required number of fans start and operate for at least 15 minutes.

c. The NSCW transfer pumps will be tested pursuant to the requirement of Specification 4.0.5.

3/4.7.6 CONTROL ROOM EMERGENCY FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6 Two independent Control Room Emergency Filtration Systems shall be OPERABLE.*

APPLICABILITY: MODES 1, 2, 3, and 4. MODES 5 and 6 during movement of irradiated fuel or movement of loads over irradiated fuel.

ACTION:

MODES 1, 2, 3 or 4:

With one Control Room Emergency Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5, and 6 during movement of irradiated fuel or movement of loads over irradiated fuel:

a. With one Control Room Emergency Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE Control Room Emergency Filtration System in the emergency mode.

b. With both Control Room Emergency Filtration Systems inoperable, or with the OPERABLE Control Room Emergency Filtration System, required to be in the emergency mode by ACTION a., not capable of being powered by an OPERABLE emergency power source, suspend all operations involving movement of irradiated fuel or movement of loads over irradiated fuel.

SURVEILLANCE REQUIREMENTS

4.7.6 Each Control Room Emergency Filtration System shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 80°F

b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow (FI-12191, FI-12192) through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 continuous hours with the heater control circuit energized.

SURVEILLANCE REQUIREMENTS (Continued)

c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire, or chemical release in any ventilation zone communicating with the system by:

1) Verifying that the filtration system satisfies the in-place testing acceptance criteria of greater than or equal to 99.95% filter retention while operating the system at a flow rate of 19,000 cfm ±10% and performing the following tests:

(a) A visual inspection of the control room emergency filtration system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980.

(b) An in-place DOP test for the HEPA filters shall be performed in accordance with Section 10 of ANSI N510-1980.

(c) A charcoal adsorber section leak test with a gaseous halogenated hydrocarbon refrigerant shall be performed in accordance with Section 12 of ANSI N510-1980.

2) Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 99.8% when tested with methyl iodide at 30°C and 70% relative humidity.

3) Verifying a system flow rate of 19,000 cfm ± 10% during system operation when tested in accordance with Section 8 of ANSI N510-1980.

d. After every 720 hours of charcoal adsorber operation, by verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 99.8% when tested with methyl iodide at 30°C and 70% relative humidity.

e. At least once per 18 months by:

1) Verifying that the pressure drop across the combined HEPA filters, charcoal adsorber banks and cooling coil is less than 7.1 inches Water Gauge while operating the system at a flow rate of 19,000 cfm ± 10%;

2) Verifying that on a Control Room Isolation Test Signal, the system automatically switches into an emergency mode of operation with flow through the HEPA filters and charcoal adsorber banks;

3) Verifying that the system maintains the control room at a positive pressure of greater than or equal to 1/8 inch Water Gauge at less than or equal to a pressurization flow of 850 cfm relative to adjacent areas during system operation;

4) Verifying that the heaters dissipate 118 ± 6 kW when tested in accordance with Section 14 of ANSI N510-1980; and

5) Verifying that on a Control Room/Toxic Gas Isolation test signal, the control room isolation dampers close within 6 seconds and the system automatically switches into an isolation mode of operation with flow through the HEPA filters and charcoal adsorbers.

f. After each complete or partial replacement of a HEPA filter bank, by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in place in accordance with Section 10 of ANSI N510-1980 while operating the system at a flow rate of 19,000 cfm ± 10%; and

g. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the charcoal absorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when tested in-place in accordance with Section 12 of ANSI N510-1980 while operating the system at a flow rate of 19,000 cfm ± 10%.

*The verification activity specified by Paragraph 4.7.6.e.3 is waived with respect to the Unit 1 Control Room/Unit 2 Control Room differential pressure during periods of operation of the Unit 2 Emergency HVAC System while conducting pre-operational testing of that system. The waiver is contingent upon the capability to shut down the applicable Unit 2 HVAC systems within 4.5 minutes after receipt of a Unit 1 Control Room Isolation signal.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 4 TO FACILITY OPERATING LICENSE NPF-68

GEORGIA POWER COMPANY, ET AL

DOCKET NO. 50-424

VOGTLE ELECTRIC GENERATING PLANT, UNIT 1

1.0 INTRODUCTION

By letter dated March 23, 1988, Georgia Power Company, et al., (the licensee) requested a change to the Technical Specifications for Vogtle Electric Generating Plant, (VEGP), Unit 1. The proposed change would add a footnote to VEGP Unit 1 Technical Specification (TS) 3/4.7.6, "Control Room Emergency Filtration System," to allow pre-operational testing of VEGP Unit 2 Emergency Heating, Ventilation, and Air Conditioning System.

2.0 EVALUATION

VEGP Unit 1 is protected from VEGP Unit 2 construction and testing activities by physical barriers and administrative controls. In particular, the VEGP Unit 1 and Unit 2 control room areas are separated by a temporary wall and the HVAC systems are separated by a series of dampers, removed duct sections, and caps on open ducts.

The licensee plans to remove the temporary wall separating the VEGP Unit 1 and VEGP Unit 2 control room areas during the first VEGP Unit 1 refueling outage, in order to minimize the negative impact of the wall removal on the operation of VEGP Unit 1. This schedule requires that pre-operational testing of the VEGP Unit 2 HVAC systems begin prior to the VEGP Unit 1 refueling outage. The VEGP Unit 2 testing activities will result in occasional positive pressures in the VEGP Unit 2 control room, which could negate the positive pressure requirement for the VEGP Unit 1 control room and is the reason that the proposed amendment is necessary. These testing activities are scheduled to begin immediately and end just in time to remove the temporary wall during the VEGP Unit 1 refueling outage scheduled to begin in September 1988.

The licensee initially believed that the required pre-operational testing of the VEGP Unit 2 emergency HVAC systems could be performed during full power operation of VEGP Unit 2 pressurization testing and the continued compliance with the VEGP Unit 1 Technical Specification Bases through compensatory operator action. The Nuclear Regulatory Commission (NRC) staff informed the licensee on March 17, 1988 of their position that a Technical Specification amendment was necessary. Therefore, approval of the proposed amendment on an exigent basis is necessary to avoid a potential extension of the planned VEGP Unit 1 refueling outage or a separate outage for removal of the temporary wall.

The VEGP Unit 1 Control Room Emergency Filtration System (CREFS) is required by TS 4.7.6 to be capable of maintaining the control room at a positive pressure of greater than or equal to 1/8 inch water gauge relative to adjacent areas at less than or equal to a pressurization flow of 850 cfm during system operation. During pre-operational testing of Unit 2 heating, ventilation, and air conditioning (HVAC) systems, an adjacent area (the Unit 2 control room) will intermittently have positive pressures which in certain cases can affect the ability to establish and maintain the specified Unit 1 control room differential pressure; however, the bases of 4.7.6 can still be met by operator actions. If Unit 1 CREFS operation were required in the emergency (pressurization) mode while a positive pressure existed in the Unit 2 control room, the basis of TS 4.7.6 would be met if the operating Unit 2 Emergency HVAC system(s) were manually shut down within 4.5 minutes after receipt of a Unit 1 control room isolation signal. This time of 4.5 minutes is calculated with a difference from the Final Safety Analysis Report (FSAR) analysis. FSAR analysis takes credit for 20 seconds between accident initiation and radioactivity reaching the Unit 1 control room outside air intake, whereas the analysis supporting this amendment takes credit for 80.9 seconds. The main difference in the time is that the FSAR analysis assumes core release at time zero, whereas this amendment assumes core release at the time at which the first rod burst is calculated to occur. The NRC staff finds that this assumption is conservative and is acceptable.

In order to assure that the 4.5 minute time limit will be met, the licensee will station dedicated operators in the Unit 1 and Unit 2 control rooms during positive pressure operation of the Unit 2 emergency HVAC system. If a Unit 1 control room isolation signal is received, the Unit 1 operator will make immediate contact with the Unit 2 operator to order shutdown of the Unit 2 emergency HVAC system. The NRC staff has reviewed the above and finds the 4.5 minute time acceptable based on the analysis which meets the basis of TS 4.7.6 and the dedicated operators, who can act within the required time.

The Unit 2 emergency HVAC units can be run in a recirculation mode which does not pressurize the Unit 2 control room. The NRC staff finds that style of operation acceptable because it meets the original TS prior to this amendment. Also, manual shutdown of the Unit 2 normal HVAC units is not necessary, because those units automatically trip when the Unit 1 emergency units are started. The NRC staff finds that that operation meets the original TS prior to this amendment and is acceptable.

In summary, the NRC staff finds the amendment to allow pre-operational positive pressure testing of the Unit 2 emergency HVAC units acceptable.

3.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (53 FR 10450) on March 31, 1988, and consulted with the state of Georgia. No public comments were received and the state of Georgia did not have any comments. Because this amendment is being issued on an exigent basis, the following final no significant hazards consideration finding is made.

The Commission has made a final determination that the amendment request involves no significant hazards considerations. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The NRC staff has reviewed the amendment and has determined that it would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated because dedicated operators will shut down the VEGP Unit 2 emergency HVAC systems in the event of a control room isolation signal to ensure that radiation doses are not increased above those previously evaluated. Also, chlorine gas will not be stored on site in a quantity that requires any chlorine protection. In addition, the NRC staff has found that the amendment would not (2) create the possibility of a new or different kind of accident from any accident previously evaluated because the change does not involve any physical alteration of the plant. Therefore, a failure mode which could lead to a new or different type of accident is not introduced. Finally, the amendment would not (3) involve a significant reduction in a margin of safety because dedicated operators with no other duties will be stationed to shut down the VEGP Unit 2 emergency HVAC systems in the event of an accident.

Accordingly, the Commission has determined that this change does not involve significant hazards considerations.

4.0 ENVIRONMENTAL CONSIDERATION

These amendment involves changes in the use of facility components located within the restricted area as defined in 10 CFR Part 20. 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 radiation exposure. The Commission has determined that the amendment involves no significant hazards consideration. Accordingly, the amendment meets 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 this amendment.

5.0 CONCLUSION

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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. B. Hopkins, DRPI/II/PDII-3

Dated: April 16, 1988

DATED: April 16, 1988

AMENDMENT NO. 4 TO FACILITY OPERATING LICENSE NPF-68 - VOGTLE ELECTRIC GENERATING PLANT, UNIT 1

DISTRIBUTION:
Docket File
NRC PDR
Local PDR
PDII-3 R/F
Vogtle R/F
SVarga
GLainas
MRood
JHopkins
OGC-WF
EJordan
TBarnhart (4)
ACRS (10)
WJones
EButcher
GPA/PA
ARM/LFMB
DHagan
JPartlow