

Docket No.: 50-424

March 16, 1987

Mr. James P. O'Reilly  
Senior Vice President - Nuclear Operations  
Georgia Power Company  
P. O. Box 4545  
Atlanta, Georgia 30302

Dear Mr. O'Reilly:

Subject: Issuance of Facility Operating License No. NPF-68 - Vogtle  
Electric Generating Plant, Unit 1

The NRC has issued the enclosed Facility Operating License NPF-68 together with Technical Specifications and Environmental Protection Plan for the Vogtle Electric Generating Plant, Unit 1. The license authorizes operation up to 100 percent of power (3411 megawatts thermal).

Also enclosed is a copy of a related notice, the original of which has been forwarded to the Office of the Federal Register for publication.

Also enclosed is a copy of SSER 6. A printed version will be forwarded shortly.

Five signed copies of Amendment No. 2 to Indemnity Agreement No. B-107 which covers the activities authorized under License No. NPF-68 are enclosed. Please sign all copies and return one copy to this office.

Sincerely,

*S/*

Thomas M. Novak, Acting Director  
Division of PWR Licensing-A  
Office of Nuclear Reactor Regulation

Enclosures:

1. Facility Operating License NPF-68
2. Federal Register Notice
3. Amendment No. 2 to Indemnity Agreement No. B-107
4. SSER 6

cc w/encl: See next page

DISTRIBUTION: See next page

PWR#4 ADPWR-A  
MDuncan/mac  
*3/16/87*

PWR#4 ADPWR-A  
MMMer  
*3/16/87*

PWR#4 ADPWR-A  
BJYoungblood  
*3/16/87*

AD/DPWR-A  
TNovak  
*1/187*

Mr. J. P. O'Reilly  
Georgia Power Company

Vogtle Electric Generating Plant

cc:

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Nuclear Regulatory Commission  
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U.S. Department of the Interior  
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Washington, D.C. 20240

Mr. Allan Hirsch, Director  
Office of Federal Activities  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

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Atlanta, Georgia 30334

J. Leonard Ledbetter, Director  
Environmental Protection Division  
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Office of the County Commissioner  
Burke County Commission  
Waynesboro, Georgia 30830

Chairman  
Georgia Public Service Commission  
162 State Office Building  
244 Washington Street, S.W.  
Atlanta, Georgia 30334

DISTRIBUTION: FULL POWER LICENSE VOGTLE UNIT 1 DATED: March 16, 1987  
Docket File\* (\*w/Tech Specs)

NRC PDR\*  
Local PDR\*  
PRC System\*  
NSIC\*  
PWR#4 Reading  
MDuncan  
TNovak\*  
CMiles  
HDenton  
JRutberg  
Rdiggs, LFMB  
JPartlow\*  
BGrimes\*  
EJordan\*  
LHarmon\*  
TBarnhart (4)\*  
IBaily\*  
MMiller\*  
NThompson\*  
EButcher\*  
OGC-Bethesda  
IDinitz, OSP  
BLambe  
LSolander  
JHolloway



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  
FACILITY OPERATING LICENSE

License No. NPF-68

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for license filed by the Georgia Power Company acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, (the licensees) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I; and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Vogtle Electric Generating Plant, Unit 1 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-108 and the application, as amended, the provisions of the Act and the regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license 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 (except as exempted from compliance in Section 2.D. below);
  - E. Georgia Power Company\* is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

\* Georgia Power Company is authorized to act as agent for the Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
  - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-68, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied;
  - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.
2. Based on the foregoing findings and the Partial Initial Decision and the Concluding Partial Initial Decision issued by the Atomic Safety and Licensing Board on August 27 and December 23, 1986, respectively, regarding this facility and satisfaction of conditions therein imposed, and pursuant to approval by the Nuclear Regulatory Commission at a meeting held on March 12, 1987, Facility Operating License No. NPF-61, issued on January 16, 1987, is superseded by Facility Operating License No. NPF-68, hereby issued to the Georgia Power Company (GPC), Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees) to read as follows:
- A. This license applies to the Vogtle Electric Generating Plant, Unit 1, a pressurized water reactor and associated equipment (the facility) owned by GPC, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia. The facility is located on the licensees' site in Burke County, Georgia, on the west bank of the Savannah River approximately 25 miles south of Augusta, Georgia, and is described in Georgia Power Company's Final Safety Analysis Report, as supplemented and amended, and in its Environmental Report, as supplemented and amended;
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - (1) GPC, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Burke County, Georgia, in accordance with the procedures and limitations set forth in this license;
    - (2) Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, pursuant to the Act and 10 CFR Part 50, to possess the facility at the designated location in Burke County, Georgia, in accordance with the procedures and limitations set forth in this license;

- (3) GPC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
  - (4) GPC, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
  - (5) GPC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
  - (6) GPC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level  
GPC is authorized to operate the facility at reactor core power levels not in excess of 3411 megawatts thermal (100 percent power) in accordance with the conditions specified herein.
  - (2) Technical Specifications and Environmental Protection Plan  
The Technical Specifications contained in Appendix A 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) Initial Startup Test Program (Section 14, SER)\*  
Any changes to the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

\* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(4) Emergency Planning (Section 13.3, SER and SSERs 2, 3, 4, and 5)

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

(5) Steam Generator Tube Rupture (Section 15.6.3, SER and SSER 3)

By March 1, 1988, GPC shall submit for NRC review a revised plant-specific steam generator tube rupture analysis based on the Westinghouse Owner's Group generic resolution, which includes radiological consequence analyses, analysis of steamline static load in the event of overfill, and justification that systems and components credited in the analysis to mitigate accident consequences are safety related.

(6) Transamerica Delaval, Inc. (TDI) Diesel Generators  
(Section 9.5.4, SER and SSERs 4 and 5)

GPC shall implement the TDI diesel generator requirements as specified in Attachment 1. Attachment 1 is hereby incorporated into this license.

(7) NUREG-0737 Items

a. Compliance with NUREG-0737, Item II.F.2 (Section 4.4.8, SER and SSERs 1 and 4)

In accordance with NUREG-0737, Item II.F.2, GPC shall submit the proposed reactor vessel level instrumentation system (RVLIS) report by June 1, 1987.

b. Supplemental Report on Safety Parameter Display System  
(Section 18.2, SSER 6)

GPC shall submit by March 1, 1988, a supplemental report on the safety parameter display system as discussed in Section 18.2 of SSER 6.

c. Supplemental Summary Report on Detailed Control Room Design Review (Section 18, SSER 5)

GPC shall submit by March 1, 1988, a Supplemental Summary Report on the detailed control room design review discussing:

1. the final results of the remaining control room surveys (ambient noise; illumination; heating, ventilation, and air conditioning; plant safety monitoring system computer survey; automatic turbine supervisory instrumentation computer survey; and communications) and the resolution of any human engineering discrepancies (HEDs) resulting from these surveys

2. a complete assessment of cumulative and interactive effects of the HEDs
  3. the completed review of annunciator nuisance alarms and modifications to minimize nuisance alarms and the number of annunciator windows lit during normal operations
  4. documentation showing tradeoff analyses and other information used in resolving HEDs
  5. the methodology by which control room changes were to be factored into the operators' training program
  6. procedures that incorporate human factors review into the design process for future control room modifications
- (8) Zinc Coating of Diesel Fuel Oil Storage Tanks (Section 9.5.4.2, SSER 4)

Prior to restart following the first refueling, GPC shall

- (1) replace the zinc coating in the diesel generator fuel oil storage tanks with a coating which does not contain zinc or
- (2) by March 1, 1988 provide an acceptable justification to the staff that the present fuel oil storage tank zinc-based coating will not affect the operability and reliability of the diesel generators over the life of the plant as specified in IE Circular 77-15.

If option (1) is chosen, GPC shall provide the NRC with a modification status report 30 days before the expiration of the license condition.

- (9) Alternate Radwaste Facility (Section 11.4, SSERs 3 and 4)

Prior to restart following the first refueling, the ventilation exhaust of the alternate radwaste facility shall be modified to exhaust through HEPA filters already installed in the auxiliary building HVAC system.

GPC shall provide the NRC with a modification status report 30 days before the expiration of the license condition.

- D. The facility requires exemptions from certain requirements of 10 CFR Part 50 and 10 CFR Part 70. These include (a) an exemption from the requirements of 10 CFR 70.24 for two criticality monitors around the fuel storage area, (b) an exemption from the requirements of Paragraph III.D.2(b)(ii) of Appendix J of 10 CFR 50, the testing of containment air locks at times when containment integrity is not required, and

(c) a schedular exemption from 10 CFR 50.34(b)(2)(i) as it pertains to GDC 2, 61, and 62 of Appendix A to 10 CFR 50 for the spent fuel pool racks for the time period before the racks contain irradiated fuel. The special circumstances regarding exemptions b and c are identified in Sections 6.2.6 and 9.1.2 of SSER 5, respectively.

An exemption was previously granted pursuant to 10 CFR 70.24. The exemption was granted with NRC materials license No. SNM-1967, issued August 21, 1986, and relieved GPC from the requirement of having a criticality alarm system. GPC is hereby exempted from the criticality alarm system provision of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this license.

These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. The exemptions in items b and c above are granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. GPC shall fully implement and maintain in effect all provisions of the physical security, guard training and qualification, and safeguards contingency plans previously approved by the Commission and all amendments and revisions to such plans made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Vogtle Electric Generating Plant Units 1 and 2 Physical Security and Contingency Plan," with revisions submitted through December 5, 1986; and "Vogtle Electric Generating Plant Units 1 and 2 Nuclear Training and Qualification Plan," with revisions submitted through June 2, 1986.
- F. GPC shall comply with the antitrust conditions delineated in Appendix C to this license.
- G. GPC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility, and submittals dated July 2, August 4 and 13, October 10 and 24, November 5, and December 19, 1986, and January 2, 1987, as approved in the SER (NUREG-1137) through Supplement 5 subject to the following provision:

GPC may make changes to the approved fire protection program without prior approval of the Commission, only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

H. Reporting to the Commission

Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, GPC shall report any violations of the requirements contained in Section 2.C. of this license in the following manner: initial notification shall be made within twenty-four (24) hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).

I. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

J. This license is effective as of the date of issuance and shall expire at midnight on January 16, 2027.

FOR THE NUCLEAR REGULATORY COMMISSION

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Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Enclosures:

1. Attachment 1 - TDI Requirements
2. Appendix A - Technical Specifications
3. Appendix B - Environmental Protection Plan
4. Appendix C - Antitrust Conditions

Date of Issuance: March 16, 1987

\* SEE PREVIOUS CONCURRENCES

PWR#4/DPWR-A  
\*MDuncan/mac  
03/10/87

PWR#4/DPWR-A  
\*MMiller  
03/10/87

*[Signature]*  
PWR#4/DPWR-A  
BJYoungblood  
3/16/87

OGC/Bethesda  
\*MKarmen  
03/10/87

OGC/Bethesda  
\*JScinto  
03/10/87

PPAS  
\*BLambe  
03/09/87

OSP  
\*JDinitz  
03/09/87

*[Signature]*  
AD/DPWR-A  
TMKovak  
3/16/87

DD/NRR  
JSniezek  
1/87

AD/NRR  
HDenton  
3/16/87

ATTACHMENT 1 TO LICENSE NPF-61TDI DIESEL ENGINE REQUIREMENTS

1. Changes to the maintenance and surveillance programs for the TDI diesel engines, as identified in Section 9.5.4.1 of Supplement 4 to the Vogtle Electric Generating Plant Safety Evaluation Report, shall be subject to the provisions of 10 CFR 50.59.

The frequency of the major engine overhauls referred to in the license conditions below shall be consistent with Section IV.1. "Overhaul Frequency" in Revision 2 of Appendix II of the Design Review/Quality Revalidation report which was transmitted by letter dated May 1, 1986, from J. George, Owners Group, to H. Denton, NRC.

2. Connecting rod assemblies shall be subjected to the following inspections at each major engine overhaul:
  - a. The surfaces of the rack teeth shall be inspected for signs of fretting. If fretting has occurred, it shall be subject to an engineering evaluation for appropriate corrective action.
  - b. All connecting-rod bolts shall be lubricated in accordance with the engine manufacturer's instructions and torqued to the specifications of the manufacturer. The lengths of the two pairs of bolts above the crankpin shall be measured ultrasonically pre- and post-tensioning.
  - c. The lengths of the two pairs of bolts above the crankpin shall be measured ultrasonically prior to detensioning and disassembly of the bolts. If bolt tension is less than 93% of the value at installation, the cause shall be determined, appropriate corrective action shall be taken, and the interval between checks of bolt tension shall be re-evaluated.
  - d. All connecting-rod bolts shall be visually inspected for thread damage (e.g. galling), and the two pairs of connecting rod bolts above the crank pin shall be inspected by magnetic particle testing (MT) to verify the continued absence of cracking. All washers used with the bolts shall be examined visually for signs of galling or cracking, and replaced if damaged.
  - e. Visual inspection shall be performed of all external surfaces of the link rod box to verify the absence of any signs of service induced distress.
  - f. All of the bolt holes in the link rod box shall be inspected for thread damage (e.g., galling) or other signs of abnormalities. In addition, the bolt holes subject to the highest stresses (i.e., the pair immediately above the crankpin) shall be examined with an appropriate nondestructive method to verify the continued absence of cracking. Any indications shall be recorded for engineering evaluation and appropriate corrective action.

3. The cylinder blocks shall be subjected to the following inspections at the interval specified in the inspections:
  - a. Cylinder blocks shall be inspected for "ligament" cracks, "stud-to-stud" cracks and "stud-to-end" cracks as defined in a report\* by Failure Analysis Associates, Inc. (FaAA) entitled, "Design Review of TDI R-4 and RV-4 Series Emergency Diesel Generator Cylinder Blocks" (FaAA report no. FaAA-84-9-11.1), dated December 1984. (Note that the FaAA report specifies additional inspections to be performed for blocks with "known" or "assumed" ligament cracks). The inspection intervals (i.e., frequency) shall not exceed the intervals calculated using the cumulative damage index model in the subject FaAA report. In addition, the inspection method shall be consistent with or equivalent to those identified in the subject FaAA report.
  - b. In addition to inspections specified in the aforementioned FaAA report, blocks with "known" or "assumed" ligament cracks (as defined in the FaAA report) shall be inspected at each refueling outage to determine whether or not cracks have initiated on the top surface exposed by the removal of two or more cylinder heads. This process shall be repeated over several refueling outages until the entire block top has been inspected. Liquid-penetrant testing or a similarly sensitive nondestructive testing technique shall be used to detect cracking, and eddy current shall be used as appropriate to determine the depth of any cracks discovered.
  - c. If inspection reveals cracks in the cylinder blocks between stud holes of adjacent cylinders ("stud-to-stud" cracks) or "stud-to-end" cracks, this condition shall be reported promptly to the NRC staff and the affected engine shall be considered inoperable. The engine shall not be restored to "operable" status until the proposed disposition and/or corrective actions have been approved by the NRC staff.
4. The following air roll test shall be performed as specified below, except when the plant is already in an Action Statement of Technical Specification 3/4.8.1, "Electric Power Systems, A.C. Sources":

The engines shall be rolled over with the airstart system and with the cylinder stopcocks open prior to each planned start, unless that start occurs within 4 hours of a shutdown. The engines shall also be rolled over with the airstart system and with the cylinder stopcocks open after 4 hours, but not more than 8 hours after engine shutdown and then rolled over once again approximately 24 hours after each shutdown. (In the event an engine is removed from service for any reason other than the rolling over procedure prior to expiration of the 8-hour or 24-hour periods noted above, that engine need not be rolled over while it is out of service. The licensee shall air roll the engine over with the stopcocks open at the time it is returned to service). The origin of any water

\* This report was transmitted to H. Denton, NRC, from C. L. Ray, Jr., TDI Owners Group, by letter dated December 11, 1984.

detected in the cylinder must be determined and any cylinder head which leaks due to a crack shall be replaced. The above air roll test may be discontinued following the first refueling outage subject to the following conditions:

- a. All cylinder heads are Group III heads (i.e., cast after September 1980).
  - b. Quality revalidation inspections, as identified in the Design Review/Quality Revalidation report, have been completed for all cylinder heads.
  - c. Group III heads continue to demonstrate leak-free performance. This should be confirmed with TDI prior to deleting air roll tests.
5. Periodic inspections of the turbochargers shall include the following:
- a. The turbocharger thrust bearings shall be visually inspected for excessive wear after 40 non-prelubed starts since the previous visual inspection.
  - b. Turbocharger rotor axial clearance shall be measured at each refueling outage to verify compliance with TDI/Elliott specifications. In addition, thrust bearing measurements shall be compared with measurements taken previously to determine a need for further inspection or corrective action.
  - c. Spectrographic engine oil and ferrographic engine oil (wear) analysis shall be performed quarterly to provide early evidence of bearing degradation. Particular attention shall be paid to copper level and particulate size which could signify thrust bearing degradation.

March 16, 1987

APPENDIX B

TO

FACILITY OPERATING LICENSE NO. NPF-68  
VOGTLE ELECTRIC GENERATING PLANT

UNIT 1 AND UNIT 2

GEORGIA POWER COMPANY  
DOCKET NOS. 50-424, 50-425

ENVIRONMENTAL PROTECTION PLAN  
(NONRADIOLOGICAL)

1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of nonradiological environmental values during operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the facility is operated in an environmentally acceptable manner, as established by the Final Environmental Statement - Operating Licensing Stage (FES-OL) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES-OL which relate to water quality matters are regulated by way of the licensee's NJPDES permit.

## 2.0 Environmental Protection Issues

In the FES (NUREG-1087), dated March, 1985, the staff considered the environmental impacts associated with the operation of the two unit Vogtle Electric Generating Plant (VEGP). Certain environmental issues were identified which required study, or license conditions to resolve concerns and assure adequate protection of the environment.

### 2.1 Aquatic Issues

No specific aquatic issues were identified in the FES-OL.

### 2.2 Terrestrial Issues

No specific terrestrial issues were identified in the FES-OL.

### 2.3 Issues Related to Maintenance of Transmission Line Corridors

Routine maintenance requirements for the extent of use of herbicides, trimming of the trees, and for preservation of National Natural Landmarks and Historic Places are discussed in Section 4.2.3.

## 2.4 Noise Issues

Noise levels at residences along the transmission lines could be slightly above ambient levels. Monitoring requirements for noise associated with transmission facilities are specified in Section 4.2.4.

### 3.0 Consistency Requirements

#### 3.1 Plant Design and Operation

The licensee may make changes in plant design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP\*. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in additional construction or operational activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological environmental effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

\* This provision does not relieve the licensee of the requirements of 10 CFR 50.59.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns: (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level; or (3) a matter, not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in plant design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include written evaluations which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of the Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

### 3.2 Reporting Related to the NPDES Permit and State Certification

Changes to, or renewals of, the NPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change or renewal is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The licensee shall notify the NRC of changes to the effective NPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the NPDES Permit at the same time the application is submitted to the permitting agency.

### 3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, and local environmental regulations are not subject to the requirements of Section 3.1.

#### 4.0 Environmental Conditions

#### 4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and reported to the NRC within 24 hours followed by a written report per Subsection 5.4.2. The following are examples: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; fish kills or impingement events on the intake screens; increase in nuisance organisms or conditions; unanticipated or emergency discharge of waste water or chemical substances; and damage to vegetation resulting from cooling tower operations.

No routine monitoring programs are required to implement this condition.

#### 4.2 Environmental Monitoring

##### 4.2.1 Aquatic Monitoring

The certifications and permits required under the Clean Water Act provide mechanisms for protecting water quality and, indirectly, aquatic biota. The NRC will rely on the decisions made by the State of Georgia under the authority of the Clean Water Act for any requirements for aquatic monitoring.

#### 4.2.2 Terrestrial Monitoring

Terrestrial monitoring is not required.

#### 4.2.3 Maintenance of Transmission Line Corridors

The use of herbicides within the Vogtle Electric Generating Plant transmission line corridors (VEGP-Thalman, VEGP-Scherer, Georgia side of VEGP-South Carolina Electric and Gas, and VEGP-Goshen) shall conform to the approved use of selected herbicides as registered by the Environmental Protection Agency and approved by the State of Georgia authorities and applied as directed on the herbicide label.

Records shall be maintained in accordance with EPA or State of Georgia requirements by the licensee's Transmission Operating and Maintenance Department concerning herbicide use. Such records shall be made readily available to the NRC upon request. There shall be no routine reporting requirement associated with this condition.

##### 4.2.3.1 Ebenezer Creek

Any routine maintenance involving trimming of the trees within the National Natural Landmark area necessary to maintain conductor clearance shall be done by hand (Section 5.2.2, FES-OL).

#### 4.2.3.2 Francis Plantation

Routine maintenance involving trimming of the trees within the National Register of Historic Places property necessary to maintain conductor clearance shall be done by hand (Memorandum of Agreement between Advisory Council on Historic Preservation (ACHP), U.S. Nuclear Regulatory Commission (NRC), State Historic Preservation Officer (SHPO) for Georgia Power Company).

#### 4.2.3.3 Cultural Properties Along Transmission Line Corridors

Routine maintenance activities in these areas will be in accordance with the Final Cultural Resource Management Plan.

#### 4.2.4 Noise Monitoring

Complaints received by Georgia Power Company regarding noise along the high voltage transmission lines (VEGP-Goshen, VEGP-Scherer, VEGP-Thalman, and Georgia side of VEGP-SCEG) and a report of the actions taken in response to any complaints shall be submitted to the NRC in the annual report (FES-OL Section 5.12.2).

## 5.0 Administrative Procedures

### 5.1 Review and Audit

The licensee shall provide for review and audit of compliance with the EPP. The audits shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organization structure utilized to achieve the independent review and audit function and results of the audit activities shall be maintained and made available for inspection.

### 5.2 Records Retention

Records and logs relative to the environmental aspects of station operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to station structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the station. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

### 5.3 Changes in Environmental Protection Plan

Requests for changes in the EPP shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the EPP.

### 5.4 Plant Reporting Requirements

#### 5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The period of the first report shall begin with the date of issuance of the Operating License for Unit 1, and the initial report shall be submitted prior to May 1 of the year following issuance of the Operating License for Unit 1.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.2 (if any) of this EPP for the report period, including a comparison with related preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of the plant operation on the environment. If harmful

effects or evidence of trends toward irreversible damage to the environment are observed, the licensee shall provide a detailed analysis of the data and a proposed course of mitigating action.

The Annual Environmental Operating Report shall also include:

- (1) A list of EPP noncompliances and the corrective actions taken to remedy them.
- (2) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 which involved a potentially significant unreviewed environmental question.
- (3) A list of nonroutine reports submitted in accordance with Subsection 5.4.2.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing results shall be submitted as soon as possible in a supplementary report.

#### 5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of a nonroutine event. The report shall: (a) describe, analyze, and evaluate

the event, including extent and magnitude of the impact, and plant operating characteristics; (b) describe the probable cause of the event; (c) indicate the action taken to correct the reported event; (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems; and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided with a copy of such report at the same time it is submitted to the other agency.

Appendix C

## Antitrust Conditions

The following antitrust conditions are hereby incorporated in Facility Operating License NPF-68:

## (1) As used herein:

(a) "Entity" means any financially responsible person, private or public corporation, municipality, county, cooperative, association, joint stock association or business trust, or facilities within the State of Georgia (other than Chatham, Effingham, Fannin, Towns and Union Counties) for the generation, transmission or distribution of electricity, provided that, except for municipalities, counties, or rural electric cooperatives, "entity" is restricted to those which are or will be public utilities under the laws of the State of Georgia or under the laws of the United States, and are or will be providing retail electric service under a contract of the Public Service Commission of the State of Georgia or any regulatory agency of the United States, and, provided further, that as to municipalities, counties or rural electric cooperatives, "entity" is restricted to those which provide electricity to the public at retail within the State of Georgia (other than Chatham, Effingham, Fannin, Towns and Union Counties) or to responsible and legally qualified organizations of such municipalities, counties and/or cooperatives in the State of Georgia (other than Chatham, Effingham, Fannin, Towns and Union Counties) to the extent they may bind their members.

(b) "Licensee" means Georgia Power Company, any successor, assignee of this license, or assignee of all or substantially all of Georgia Power Company's assets, and any affiliate or subsidiary of Georgia Power Company to the extent it engages in the ownership of any bulk power supply generation or transmission resource in the State of Georgia (but specifically not including (1) flood rights and other land rights acquired in the State of Georgia incidental to hydroelectric generation facilities located in another state and (2) facilities located west of the thread of the stream on that part of the Chattahoochee River serving as the boundary between the States of Georgia and Alabama).

(2) Licensee recognizes that it is often in the public interest for those engaging in bulk power supply and purchases to interconnect, coordinate for reliability and economy, and engage in bulk power supply transactions in order to increase interconnected system reliability and reduce the costs of electric power. Such arrangements must provide for licensee's costs (including a reasonable return) in connection therewith and allow other participating entities full access to the benefits available from interconnected bulk power supply operations and must provide net benefits to licensee. In entering into such arrangements neither licensee nor any other participant should be required to violate the principles of sound engineering practice or forego a reasonably contemporaneous alternative arrangement with another, developed in good faith in arms length

negotiations (but not including arrangements between licensee and its affiliates or subsidiaries which impair such arrangements made in good faith between licensee and a non-affiliate or non-sub subsidiary) which affords it greater benefits. Any such arrangement must provide for adequate notice and joint planning procedures consistent with sound engineering practice, and must relieve licensee from obligations undertaken by it in the event such procedures are not followed by any participating entity.

Licensee recognizes that each entity may acquire some or all of its bulk power supply from sources other than applicant.

In the implementation of the obligations stated in the succeeding paragraphs, licensee and entities shall act in accordance with the foregoing principles, and these principles are conditions to each of licensee's obligations herein undertaken.

- (3) Licensee shall interconnect with any entity which provides, or which has undertaken firm contractual obligations to provide, some or all of its bulk power supply from sources other than licensee on terms to be included in an interconnection agreement which shall provide for appropriate allocation of the costs of interconnection facilities; provided, however, that if an entity undertakes to negotiate such a firm contractual obligation, the licensee shall, in good faith, negotiate with such entity concerning any proposed interconnection. Such interconnection agreement shall provide, without undue preference or discrimination, for the following, among other things, insofar as consistent with the operating necessities of licensee's and any participating entity's systems:
  - (a) maintenance and coordination of reserves, including, where appropriate, the purchase and sale thereof,
  - (b) emergency support,
  - (c) maintenance support,
  - (d) economy energy exchanges,
  - (e) purchase and sale of firm and non-firm capacity and energy,
  - (f) economic dispatch of power resources within the State of Georgia,provided, however, that in no event shall such arrangements impose a higher percentage of reserve requirements on the participating entity than that maintained by licensee for similar resources.
- (4) Licensee shall sell full requirements power to any entity. Licensee shall sell partial requirements power to any entity. Such sales shall be made pursuant to rates on file with the Federal Power Commission, or any successor regulatory agency, and subject to reasonable terms and conditions.

- (5) (a) Licensee shall transmit ("transmission service") bulk power over its system to any entity or entities with which it is interconnected, pursuant to rate schedules on file with the Federal Power Commission which will fully compensate licensee for the use of its system, to the extent that such arrangements can be accommodated from a functional engineering standpoint and to the extent that licensee has surplus line capacity or reasonably available funds to finance new construction for this purpose. To the extent the entity or entities are able, they shall reciprocally provide transmission service to licensee. Transmission service will be provided under this subparagraph for the delivery of power to an entity for its or its members' consumption and retail distribution or for casual resale to another entity for (1) its consumption or (2) its retail distribution. Nothing contained herein shall require the licensee to transmit bulk power so as to have the effect of making the Tennessee Valley Authority ("TVA") or its distributors, directly or indirectly, a source of power supply outside the area determined by the TVA Board of Directors by resolution of May 16, 1966 to be the area for which the TVA or its distributors were the primary source of power supply on July 1, 1957, the date specified in the Revenue Bond Act of 1959, 16 USC 831 n-4.
- (b) Licensee shall transmit over its system from any entity or entities with which it is interconnected, pursuant to rate schedules on file with the Federal Power Commission which will fully compensate licensee for the use of its system, bulk power which results from any such entity having excess capacity available from self-owned generating resources in the State of Georgia, to the extent such excess necessarily results for economic unit sizing or from failure to forecast load accurately or from such generating resources becoming operational earlier than the planned in-service date, to the extent that such arrangements can be accommodated from a functional engineering standpoint, and to the extent licensee has surplus line capacity available.
- (6) Upon request, licensee shall provide service to any entity purchasing partial requirements service, full requirements service or transmission service from licensee at a delivery voltage appropriate for loads served by such entity, commensurate with licensee's available transmission facilities. Sales of such service shall be made pursuant to rates on file with the Federal Power Commission or any successor regulatory agency, and subject to reasonable terms and conditions.
- (7) Upon reasonable notice licensee shall grant any entity the opportunity to purchase an appropriate share in the ownership of, or, at the option of the entity, to purchase an appropriate share of unit power from, each of the following nuclear generating units at licensee's costs, to the extent the same are constructed and operated: Hatch 2, Vogtle 1, Vogtle 2, and any other nuclear generating unit constructed by licensee in the State of Georgia which, in the application filed with the USAEC or its successor agency, is scheduled for commercial operation prior to January 1, 1989.

An entity's request for a share must have regard for the economic size of such nuclear unit(s), for the entity's load size, growth and characteristics, and for demands upon licensee's system from other entities and licensee's retail customers, all in accordance with sound engineering practice. Executory agreements to accomplish the foregoing shall contain provisions reasonably specified by licensee requiring the entity to consummate and pay for such purchase by an early date or dates certain. For purposes of this provision, "unit power" shall mean capacity and associated energy from a specified generating unit.

- (8) To effect the foregoing conditions, the following steps shall be taken:
- (a) Licensee shall file with the appropriate regulatory authorities and thereafter maintain in force as needed an appropriate transmission tariff available to any entity;
  - (b) Licensee shall file with the appropriate regulatory authorities and thereafter maintain in force as needed an appropriate partial requirements tariff available to any entity; licensee shall have its liability limited to the partial requirements service actually contracted for and the entity shall be made responsible for the security of the bulk power supply resources acquired by the entity from sources other than the licensee;
  - (c) Licensee shall amend the general terms and conditions of its current Federal Power Commission tariff and thereafter maintain in force as needed provisions to enable any entity to receive bulk power at transmission voltage at appropriate rates;
  - (d) Licensee shall not have the unilateral right to defeat the intended access by each entity to alternative sources of bulk power supply provided by the conditions to this license; but licensee shall retain the right to seek regulatory approval of changes in its tariffs to the end that it be adequately compensated for services it provides, specifically including, but not limited to, the provisions of Section 205 of the Federal Power Act;
  - (e) Licensee shall use its best efforts to amend any outstanding contract to which it is a party that contains provisions which are inconsistent with the conditions of this license;
  - (f) Licensee affirms that no consents are or will become necessary from licensee's parent, affiliates or subsidiaries to enable licensee to carry out its obligations hereunder or to enable the entities to enjoy their rights hereunder;
  - (g) All provisions of these conditions shall be subject to and implemented in accordance with the laws of the United States and of the State of Georgia, as applicable, and with rules, regulations and orders of agencies of both, as applicable.

UNITED STATES NUCLEAR REGULATORY COMMISSIONVOGTLE ELECTRIC GENERATING PLANT, UNIT 1DOCKET NO. 50-424NOTICE OF ISSUANCE OF FACILITY OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Facility Operating License No. NPF-68 to Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, (the licensees) which authorizes operation of the Vogtle Electric Generating Plant, Unit 1, at reactor core power levels not in excess of 3411 megawatts thermal in accordance with the provisions of the license, the Technical Specifications, and the Environmental Protection Plan.

On January 16, 1987, the Commission issued Facility Operating License No. NPF-61 to the licensees which authorized operation of Vogtle Electric Generating Plant, Unit 1, to five percent of full power (170 megawatts thermal). License No. NPF-68 supersedes NPF-61.

The Vogtle Electric Generating Plant, Unit 1, is a pressurized water reactor located in Burke County, Georgia, approximately 25 miles south of Augusta, Georgia.

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the Federal Register

on December 28, 1983 (48 FR 57183). The power level authorized by this license and the conditions contained therein are encompassed by that prior notice.

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of exemptions included in this license will have no significant impact on the environment (52 FR 1565).

For further details with respect to this action, see (1) Facility Operating License No. NPF-68; (2) Facility Operating License No. NPF-61; (3) the Commission's Safety Evaluation Report, dated June 1985 (NUREG-1137), and Supplements 1 through 6; (4) the Final Safety Analysis Report and Amendments thereto; (5) the Environmental Report and supplements thereto; (6) the Final Environmental Statement, dated March 1985 (NUREG-1087); (7) the Partial Initial Decision of the Atomic Safety and Licensing Board, dated August 27, 1986; and (8) the Concluding Partial Initial Decision dated December 23, 1986.

These items are available at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555, and at the Burke County Library, 4th Street, Waynesboro, Georgia 30830. A copy of Facility Operating License NPF-68 may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of PWR Licensing-A. Copies of the Safety Evaluation Report and its supplements (NUREG-1137) and the Final Environmental Statement (NUREG-1087) may be purchased

through the U. S. Government Printing Office by calling (202) 275-2060 or by writing to the U. S. Government Printing Office, P. O. Box 37082, Washington, D. C. 20013-7082. Copies may also be purchased from the National Technical Information Service, U. S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

Dated at Bethesda, Maryland, this 16<sup>th</sup> day of March 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

5/

B. J. Youngblood, Director  
PWR Project Directorate #4  
Division of PWR Licensing-A

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PWR#4/DPWR-A  
BJYoungblood  
3/16/86



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

Docket No. 50-424

AMENDMENT TO INDEMNITY AGREEMENT NO. B-107  
AMENDMENT NO. 2

Effective March 16, 1987, Indemnity Agreement No. B-107, between Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia and City of Dalton, Georgia and the Nuclear Regulatory Commission, dated August 21, 1986, is hereby amended as follows:

Item 3 of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 3 - License number or numbers

SNM-1967	(From 12:01 a.m., August 21, 1986 to 12 midnight, January 15, 1987 inclusive)
NPF-61	(From 12:01 a.m., January 16, 1987 to 12 midnight, March 15, 1987, inclusive)
NPF-68	(From 12:01 a.m., March 16, 1987 )

FOR THE U. S. NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script that reads "Darrel A. Nash".

Darrel A. Nash, Acting Assistant Director  
State and Licensee Relations  
Office of State Programs

Accepted \_\_\_\_\_, 1987

By GEORGIA POWER COMPANY

Accepted \_\_\_\_\_, 1987

By MUNICIPAL ELECTRIC AUTHORITY OF  
GEORGIA

Accepted \_\_\_\_\_, 1987

By OGLETHORPE POWER CORPORATION

Accepted \_\_\_\_\_, 1987

By CITY OF DALTON, GEORGIA