



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

February 9, 1989

Docket No. 50-424

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

Dear Mr. Hairston:

SUBJECT: ISSUANCE OF AMENDMENT NO.18 TO FACILITY OPERATING LICENSE NPF-68
VOGTLE ELECTRIC GENERATING PLANT, UNIT 1 (TAC 71436)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 18 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 December 12, 1988, as supplemented January 13, 30, and 31, 1989.

The amendment replaced the Unit 1 Technical Specifications (TS) with combined TS for Units 1 and 2. The amendment is effective as of its date of issuance.

A copy of the related safety evaluation supporting Amendment No. 18 to Facility Operating License NPF-68 is enclosed.

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

Sincerely,

A handwritten signature in cursive script that reads "Jon B. Hopkins".

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

Enclosures:

1. Amendment No. 18 to NPF-68
2. Safety Evaluation

cc w/enclosures:

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

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DMatthews
02/4/89

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

Vogtle Electric Generating Plant

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

- 2 -

Vogtle Electric Generating Plant

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DATED: February 9, 1989

AMENDMENT NO. 18 TO FACILITY OPERATING LICENSE NPF-68 - Vogtle Electric
Generating Plant, Unit 1

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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
VOGTLE ELECTRIC GENERATING PLANT, UNIT 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 18
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 December 12, 1988, as supplemented January 13, 30, and 31, 1989, 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.

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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. 18, 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
Office of Nuclear Reactor Regulation

Attachment:
Technical Specifications

Date of Issuance: February 9, 1989

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. 18, 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
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification

Date of Issuance: February 9, 1989

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02/17/89

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02/8/89

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02/8/89

ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

Replace the current Technical Specifications with the enclosed combined Technical Specifications for Units 1 and 2.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 18 TO FACILITY OPERATING LICENSE NPF-68
GEORGIA POWER COMPANY, ET AL.
VOGTLE ELECTRIC GENERATING PLANT, UNIT 1
DOCKET NO. 50-424

1.0 INTRODUCTION

The Vogtle Electric Generating Plant, Units 1 and 2 are of similar design with a shared control room. In order to maximize the advantages of the similarities in the two units, Georgia Power Company (GPC) (the licensee) decided to utilize one Technical Specifications (TS) document for both units. This document, a combined TS for both Units 1 and 2, was developed by revising the Unit 1 TS to make it applicable to both units.

By letter dated December 12, 1988 GPC proposed changes to the TS for Vogtle Electric Generating Plant (VEGP), Unit 1 which would replace the Unit 1 TS with a combined Units 1 and 2 TS. The combined TS would become effective for Unit 2 when the Unit 2 Operating License is issued. All the changes necessary to convert the current Unit 1 TS into the combined Units 1 and 2 TS were included in the proposed amendment and are covered by this safety evaluation.

Additional information was submitted by letters dated January 13, 30, and 31, 1989. Included in those submittals were additional editorial changes to the Technical Specifications, such as spelling corrections, capitalization, and correction of titles for TS headings, tables, and figures. These additional changes do not substantially affect the amendment request as noticed or the staff's initial determination; therefore, the amendment was not renoticed.

2.0 EVALUATION

During the development of the combined Units 1 and 2 TS the Unit 1 TS was reviewed relative to the design of Unit 2 in order to identify those portions of the Unit 1 TS where requirements would be different for the two units. Those requirements that apply only to Unit 1 were identified and, where necessary, requirements for Unit 2 were added without changing the Unit 1 requirements. The changes proposed by GPC include those necessary for Unit 1 to continue operation following start-up of Unit 2. In the process, numerous editorial and format changes were added that did not alter the TS requirements.

This evaluation involves the review of each proposed change. All but five of the changes represent format and editorial changes, changes necessary in order to incorporate Unit 2 requirements, changes necessary to distinguish Unit 1

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requirements from Unit 2 requirements, and changes necessary to indicate that the TS apply to each unit. These proposed changes were evaluated by the NRC staff and found to be acceptable. It should be noted that GPC recently proposed amendments to the Unit 1 TS which affect conversion to the combined Units 1 and 2 TS that have already been reviewed and approved by the NRC staff in separate actions.

The five changes incorporated into the combined Units 1 and 2 TS, that are not included with the changes mentioned above, are discussed below:

1) Location of "Free" Field Accelerometer

Seismic monitoring instrumentation for VEGP consists of 9 time history strong motion accelerometers (SMAs), 4 peak recording accelerometers (PRAs), a response-spectrum analyzer and 2 seismic switches. Data from the SMAs are fed to the control room for recording and processing by the response-spectrum analyzer. The spectrum analyzer produces the associated earthquake spectrum immediately following an earthquake for comparison with the design spectra. Since both Units share common buildings and the expected response is the same for both units, only one set of seismic instrumentation is provided for the site.

The purpose of the Free Field Accelerometer is to record a base line ground acceleration time history that is representative of a location that is not significantly influenced by the presence of structures. This information is to be used, along with the more significant acceleration time history information collected from in-structure accelerometers (SMAs), to form the basis for the evaluation that is required following an earthquake. The location of the VEGP "Free" Field Accelerometer is 225 feet from the Unit 1 Containment rather than 500 feet as stated in TS in order to assure that the data measured are free of soil/structure interaction (SSI) effects from adjacent structures. Therefore, GPC proposed changing the instrumentation designation in Tables 3.3-5 and 4.3-4 from "Free Field (500 ft. from containment)" to "Free Field (approximately 225 ft. from containment)." By letter dated January 31, 1989, GPC requested that the word "Free" be deleted from the designation of this instrument in TS Tables 3.3-5 and 4.3-4, because the instrument is not located in the free field. The NRC staff questioned whether GPC can verify the adequacy of the SSI used in the FSAR to justify startup in the event of a required shutdown due to an earthquake with data from the accelerometer located 225 ft. from containment. The licensee has informed the staff that they can verify the adequacy of the SSI using data from this accelerometer. To verify the adequacy of the SSI, the licensee would use the accelerometer data to derive a representative free field motion by using a three dimensional methodology such as the computer code SASSI. The staff finds this acceptable, and therefore, the TS change to reflect the as-built condition is acceptable.

In addition, the licensee plans to install another accelerometer to be located on the blue marl. The staff finds this acceptable.

2) Temperature Instrumentation for Room RC41

During the construction of VEGP Unit 2, GPC decided that the planned Unit 2 waste evaporator could be eliminated and so it was. This eliminated the need for routing the high energy steam lines through room RC41 to the planned Unit 2 waste evaporator. Two high temperature detection instruments

(ATE 19722B and ATE 19723B) were located in this room for the purpose of detecting a temperature increase that would indicate a rupture in the high energy steam line in the evaporator area. GPC disconnected and capped the high energy line outside of room RC41 eliminating the need for these instruments. Therefore, GPC has proposed eliminating these instruments from Table 3.3-11 of the combined Units 1 and 2 TS. The NRC staff finds this proposed action acceptable.

3) Additional Valve with Thermal Overload Protection Bypass

During the development of the combined Units 1 and 2 TS an additional valve (1/2 HV-3548, RCS Hot Leg Sample Valve) was identified as having a thermal overload protection bypass device and thus GPC has proposed adding it to Table 3.8-1. The inclusion of this valve in Table 3.8-1 does not alter its current surveillance requirements. The NRC staff finds the proposed correction of this oversight adequate and acceptable.

4) Unit 1 Area Temperature Monitoring for Room D067

The rooms identified in Table 3.7-3 contain safety-related equipment that is required for safe shutdown and is not served by ESF HVAC systems. Temperature monitoring of these rooms ensures that the equipment will not be subjected to excessive temperatures for prolonged periods of time. During the preparation of the combined Units 1 and 2 TS it was discovered that pressure transmitter 1PT-11742, which controls one train of the NSCW tower spray header inlet and bypass valves, was located in auxiliary building room D067 rather than room D068. Room D068 does not contain any safety-related safe shutdown equipment. Therefore, GPC has proposed revising Table 3.7-3 to add room D067 to the list of rooms requiring temperature monitoring and to delete room D068. The NRC staff finds the proposed change acceptable.

5) Fuel Handling Building Heater Requirement

During the review of the combined Unit 1 and 2 TS a concern was raised that the TS 4.9.12 value for the Fuel Handling Building HVAC system heater dissipation (18 + or - 2 kW) was inconsistent with the design rating of 20 kW. As stated in ANSI N509, the heater should be sized to ensure that the relative humidity of incoming air will be reduced to less than 70 percent to ensure that water does not build up on the charcoal adsorber bed. In a telephone conference the licensee explained that the initial calculation

for heater size, based on a generic equation commonly used in the industry for this purpose, yielded a minimum heat dissipation requirement of 18.9 kW. This resulted in the purchase of the 20 kW HVAC system heater which when tested according to surveillance requirement 4.10.1.2.d.4 has consistently exceeded 20 kW. GPC revised the design calculation for heater sizing using plant specific data, and the new calculation indicates a minimum heat dissipation requirement of 17 kW is sufficient value. GPC proposed correcting the "18 + or - 2 kW" requirement in surveillance requirement 4.9.12.d.4 to "20 + or - 2 kW." The NRC staff finds the proposed change acceptable.

Summary

The replacement of the Unit 1 TS with a combined Units 1 and 2 TS and all changes necessary to affect the conversion, as described in this amendment proposed by GPC, are judged by the NRC staff to be adequate and acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes in the installation or use of the facility's components located within the restricted areas as defined in 10 CFR 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 previously issued a proposed finding that this amendment involves no significant hazards consideration, and there has been no public comment on such finding. Accordingly, this 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 assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register on December 27, 1988 (53 FR 52266), and consulted with the state of Georgia. No public comments were received, and the state of Georgia did not have any comments.

We have 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: John O. Schiffgens, PDII-3/DRP-I/II
Jon B. Hopkins, PDII-3/DRP-I/II

Dated: February 9, 1989