

July 6, 1995

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

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Docket File
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OGC 0-15 B18
E. Merschoff, RII
J. Zwolinski, 0-14 H3
C. Harbuck, 0-11 E22

SUBJECT: ISSUANCE OF AMENDMENTS - VOGTLE ELECTRIC GENERATING PLANT,
UNITS 1 AND 2 (TAC NOS. M91240 AND M91241)

Dear Mr. McCoy:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 89 to Facility Operating License NPF-68 and Amendment No. 67 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated December 27, 1994.

The amendments revise the frequency of conducting leak testing of containment purge valves with seals made of resilient material from every 3 months to each refueling outage.

Please note that this action affects TS Bases page B 3/4 6-3. There are different versions of this page in effect for Units 1 and 2 until the spray additive system is removed from Unit 1 during the Unit 1 Cycle 6 refueling outage in the spring of 1996. These two pages are to be replaced with the enclosed two versions of page B 3/4 6-3. The page with 3/4.6.2.2 (Spray Additive System) is for Unit 1 and the page with 3/4.6.2.2 deleted is for Unit 2.

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

Sincerely,

/s/

Louis L. Wheeler, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425
Enclosures:

1. Amendment No. 89 to NPF-68
 2. Amendment No. 67 to NPF-81
 3. Safety Evaluation
- cc w/encl: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 7, 1995

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

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Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

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1. Amendment No. 89 to NPF-68
2. Amendment No. 67 to NPF-81
3. Safety Evaluation

cc w/encl: See next page

Mr. C. K. McCoy
Georgia Power Company

Vogtle Electric Generating Plant

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 89
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 27, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this 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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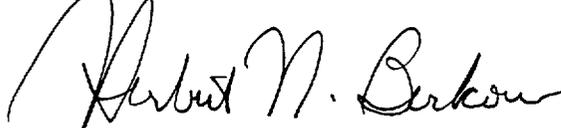
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-68 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 89 , 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 from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: July 7, 1995



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA
CITY OF DALTON, GEORGIA
VOGTLE ELECTRIC GENERATING PLANT, UNIT 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 67
License No. NPF-81

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Vogtle Electric Generating Plant, Unit 2 (the facility) Facility Operating License No. NPF-81 filed by the Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated December 27, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 67 , 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 from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: July 7, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 89

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

AND

TO LICENSE AMENDMENT NO. 67

FACILITY OPERATING LICENSE NO. NPF-81

DOCKET NO. 50-425

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. This action affects TS Bases page B 3/4 6-3. There are different versions of this page in effect for Units 1 and 2 until the spray additive system is removed from Unit 1 during the Unit 1 Cycle 6 refueling outage in the spring of 1996. These two pages are to be replaced with the enclosed two versions of page B 3/4 6-3. The page with 3/4.6.2.2 (Spray Additive System) is for Unit 1 and the page with 3/4.6.2.2 deleted is for Unit 2.

Remove Pages

3/4 6-12
B 3/4 6-3 (w/TS 3/4.6.2.2)
B 3/4 6-3 (w/TS 3/4.6.2.2 deleted)

Insert Pages

3/4 6-12
B 3/4 6-3 (w/TS 3/4.6.2.2)
B 3/4 6-3 (w/TS 3/4.6.2.2 deleted)

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.6.1.7.2 At least once during each refueling outage the containment purge valves with resilient material seals in each sealed closed containment purge supply and exhaust penetration shall be demonstrated OPERABLE by verifying that the measured penetration leakage rate is less than $0.06 L_a$ when pressurized to P_a .

4.6.1.7.3 Each 14-inch containment purge supply and exhaust isolation valve (HV-2626B, HV-2627B, HV-2628B, HV-2629B) shall be verified to be closed or open in accordance with Specification 3.6.1.7b at least once per 31 days.

CONTAINMENT SYSTEMS

BASES

CONTAINMENT VENTILATION SYSTEM (Continued)

The use of the containment purge lines is restricted to the 14-inch purge supply and exhaust isolation valves since, unlike the 24-inch valves, the 14-inch valves are capable of closing during a LOCA or steam line break accident. Therefore, the SITE BOUNDARY dose guideline of 10 CFR Part 100 would not be exceeded in the event of an accident during containment PURGING operation. Only safety-related reasons; e.g., containment pressure control or the reduction of airborne radioactivity to facilitate personnel access for surveillance and maintenance activities, should be used to justify the opening of these isolation valves.

Leakage integrity tests with a maximum allowable leakage rate for containment purge supply and exhaust supply valves will allow opportunity for repair before gross leakage failures could develop. The 0.60 L_a leakage limit of Specification 3.6.1.2b. shall not be exceeded when the leakage rates determined by the leakage integrity tests of these valves are added to the previously determined total for all valves and penetrations subject to Type B and C tests.

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

3/4.6.2.1 CONTAINMENT SPRAY SYSTEM

The OPERABILITY of the Containment Spray System ensures that containment depressurization and cooling capability will be available in the event of a LOCA or steam line break. The pressure reduction and resultant lower containment leakage rate are consistent with the assumptions used in the safety analyses.

The Containment Spray System and the Containment Cooling System both provide post-accident cooling of the containment atmosphere. However, the Containment Spray System also provides a mechanism for removing iodine from the containment atmosphere and therefore the time requirements for restoring an inoperable Spray System to OPERABLE status have been maintained consistent with that assigned other inoperable ESF equipment.

3/4.6.2.2 SPRAY ADDITIVE SYSTEM

The OPERABILITY of the Spray Additive System ensures that sufficient NaOH is added to the containment spray in the event of a LOCA. The limits on NaOH volume and concentration ensure a pH value of between 8.0 and 10.5 for the solution recirculated within containment after a LOCA. This pH band minimizes the evolution of iodine and minimizes the effect of chloride and caustic stress corrosion on mechanical systems and components. The solution volume limits (3700-4000 gallons) represent the required solution to be delivered (i.e., the delivered solution volume is that volume above the tank discharge). These assumptions are consistent with the iodine removal efficiency assumed in the safety analyses.

CONTAINMENT SYSTEMS

BASES

CONTAINMENT VENTILATION SYSTEM (Continued)

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3/4.6.2.2 SPRAY ADDITIVE SYSTEM

Specification 3/4.6.2.2 DELETED



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NPF-68

AND AMENDMENT NO. 67 TO FACILITY OPERATING LICENSE NPF-81

GEORGIA POWER COMPANY, ET AL.

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

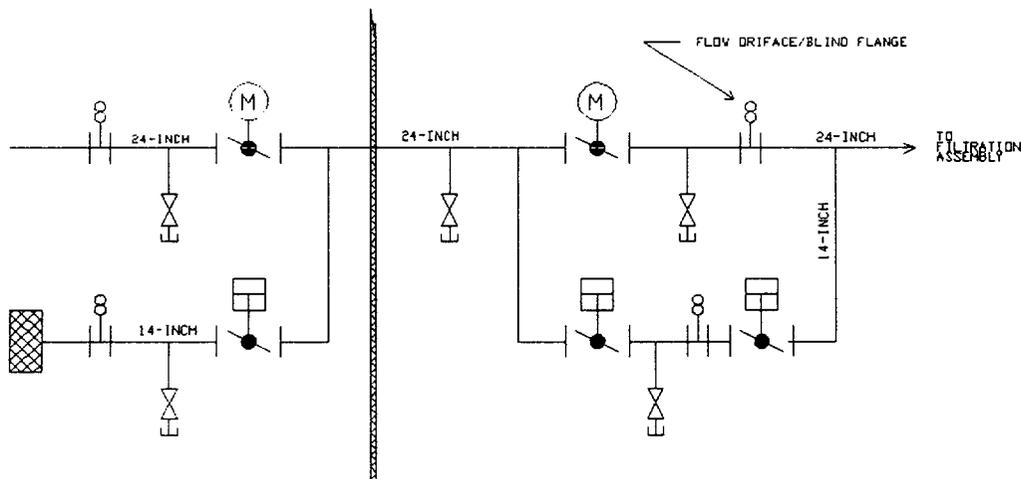
DOCKET NOS. 50-424 AND 50-425

1.0 INTRODUCTION

By letter dated December 27, 1994, Georgia Power Company, et al. (GPC or the licensee) proposed changes to the Vogtle Electric Generating Plant (VEGP), Units 1 and 2, Technical Specifications (TSs). The proposed amendments revise the leakage testing frequency for containment isolation valves installed in the containment purge lines from every 3 months to every refueling outage.

2.0 EVALUATION

Primary containments are provided with vent/purge systems to enable the containment to be vented and purged as necessary for control of containment pressure and airborne radiation levels. Large lines (i.e., 24-inch diameter) are used during outages. These lines are sealed closed during power operation. Smaller (i.e., 14-inch diameter) "mini-purge" lines are used on a non-routine basis during power operation. The containment penetration arrangement is depicted in the figure below. The purpose and use of these lines is discussed in greater detail in Branch Technical Position CSB 6-4 in Standard Review Plan Section 6.2.



MINI-PURGE SYSTEM

TYPICAL PENETRATION ARRANGEMENT

The 24-inch and 14-inch diameter containment isolation valves installed in the VEGP vent/purge system are butterfly-type valves with seals made of a resilient material. Because valves of this design have a history of high leakage rates and rapid deterioration, and because the associated leakage path provides significant potential for release of fission products in the event of an accident, the staff imposed accelerated testing requirements (i.e., beyond the minimum Appendix J leak rate requirements) on such valves. The staff position related to surveillance testing of large containment vent/purge valves with resilient seal material is identified in the improved Standard Technical Specifications (STS). The improved STS specify a leakage testing frequency of 184 days and within 92 days of opening the valve. These requirements are intended to apply to all sizes of containment purge valves with resilient seals except for valves installed in lines that are isolated by blind flanges during power operation. In order to minimize personnel radiation exposure, the staff permits the additional leakage tests that are conducted at power to be performed using methods that do not require containment entry. The at-power tests may involve a test method that is not identical to the 10 CFR Part 50, Appendix J test procedure. (The VEGP TS do not reflect this position, but instead indicate that all purge valve leakage tests will be "Type C" [i.e., use the 10 CFR Part 50, Appendix J methodology and criteria for leakage testing of containment isolation valves]).

Operating experience has shown that for well-maintained butterfly valves with resilient seals, used at suitable environmental and operating conditions, the 24-month Appendix J leakage rate test interval is sufficiently frequent. Accordingly, the staff will approve a reduced leakage testing frequency if supported by plant-specific data (i.e., history of test results). Generic data is not acceptable for this purpose, since local environmental conditions and frequency of valve operation affects seal performance.

The 24-inch and 14-inch vent/purge valves at the VEGP are currently required by TS to be Appendix J/Type C leak-tested at 3-month intervals. Because the Type C test method is specified, the tests involve containment entry and the erection of scaffolding to permit installation of blank flanges to enable the inboard valves to be tested with the pressure applied in the accident direction.

The licensee proposes to reduce the Type C test frequency for containment purge valves to 24 months consistent with 10 CFR Part 50, Appendix J test interval requirements for Type C leakage testing. The application is based on the results of a total of over 400 Type C tests conducted on the four valves in each of the four penetrations over the period of 1987-1994. No valve exceeded its leakage rate test acceptance criterion of 26,320 standard cubic centimeters per minute on either an initial test or retest. (On some of the tests, above-average leakage rates were observed and retests conducted. In these cases, the leakage was found to be due to reasons other than resilient seat leakage).

The VEGP licensee has provided 7 years of historical evidence that the containment vent/purge valves are not subject to accelerated seal deterioration and gross leakage. As a confirmatory action, the staff performed a search of its Licensee Event Report database in an attempt to

identify any vent/purge leakage test failures due to resilient seals at the VEGP. This search did not reveal any such reports. Based on this evidence, the valves do not need to continue to be subjected to an accelerated leakage testing frequency. The 24-month test interval prescribed by Appendix J is, therefore, acceptable.

The leakage testing interval for the VEGP vent/purge valves may be extended to 24 months, the maximum interval permitted by 10 CFR 50, Appendix J.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (60 FR 6301 dated February 1, 1995). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: William O. Long

Date: July 7, 1995