

March 27, 2000

Mr. J. B. Beasley, Jr.
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Company, Inc.
Post Office Box 1295
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SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 RE: ISSUANCE OF AMENDMENTS (TAC NOS. MA7703 AND MA7704)

Dear Mr. Beasley:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 112 to Facility Operating License NPF-68 and Amendment No. 90 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 October 4, 1999.

The amendments revise TS 5.5.6, "Prestressed Concrete Containment Tendon Surveillance Program," to incorporate three exceptions to Regulatory Guide (RG) 1.35, Revision 2, 1976. The exceptions concern the number of tendons detensioned, inspection of concrete adjacent to vertical tendons, and the time during which areas adjacent to tendons are inspected. In the enclosed safety evaluation, the NRC staff finds the licensee's proposed TS changes to be acceptable for the upcoming containment tendon surveillances. However, approval of this TS amendment does not limit inservice inspection of containments as required by 10 CFR 50.55a(g)(6)(ii)(B).

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,
/RA/

Ramin Assa, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosures:

1. Amendment No. 112 to NPF-68
2. Amendment No. 90 to NPF-81
3. Safety Evaluation

ENCLOSURE CENTER

cc w/encls: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 27, 2000

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Vice President
Southern Nuclear Operating
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Post Office Box 1295
Birmingham, Alabama 35201-1295

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Ramin Assa, Project Manager, Section 1
Project Directorate II
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1. Amendment No. 112 to NPF-68
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3. Safety Evaluation

cc w/encls: See next page

Vogtle Electric Generating Plant

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

SOUTHERN NUCLEAR OPERATING COMPANY, INC.
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. 112
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 Southern Nuclear Operating Company, Inc. (Southern Nuclear), acting for itself, Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated October 4, 1999, 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.

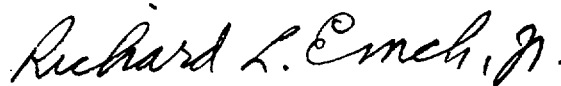
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-68 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 112 , and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: March 27, 2000



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

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

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. 90
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 Southern Nuclear Operating Company, Inc. (Southern Nuclear), acting for itself, Georgia Power Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated October 4, 1999, 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.

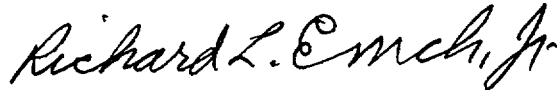
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-81 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 90 , and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: March 27, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 112

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

AND

TO LICENSE AMENDMENT NO. 90

FACILITY OPERATING LICENSE NO. NPF-81

DOCKET NO. 50-425

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

vi
5.5-5
5.5-6

Insert

vi
5.5-5
5.5-6
5.5-22

TABLE OF CONTENTS

LIST OF FIGURES

2.1.1-1	Reactor Core Safety Limits.....	2.0-2
3.4.16-1	Reactor Coolant Dose Equivalent I-131 Reactor Coolant Specific Activity Limit Versus Percent of Rated Thermal Power with the Reactor Coolant Specific Activity > 1 µCi/gram Dose Equivalent I-131	3.4.16-4
3.7.18-1	Vogtle Unit 1 Burnup Credit Requirements for All Cell Storage.....	3.7.18-3
3.7.18-2	Vogtle Unit 2 Burnup Credit Requirements for All Cell Storage.....	3.7.18-4
4.3.1-1	Vogtle Unit 1 Burnup Credit Requirements for 3-out-of-4 Storage	4.0-6
4.3.1-2	Vogtle Unit 2 Burnup Credit Requirements for 3-out-of-4 Storage	4.0-7
4.3.1-3	Vogtle Unit 2 Burnup Credit Requirements for 3x3 Storage.....	4.0-8
4.3.1-4	Vogtle Units 1 and 2 Empty Cell Checkerboard Storage Configurations.....	4.0-9
4.3.1-5	Vogtle Unit 2 3x3 Checkerboard Storage Configuration	4.0-10
4.3.1-6	Vogtle Units 1 and 2 Interface Requirements (All Cell to Checkerboard Storage)	4.0-11
4.3.1-7	Vogtle Units 1 and 2 Interface Requirements (Checkerboard Storage Interface)	4.0-12
4.3.1-8	Vogtle Unit 2 Interface Requirements (3x3 Checkerboard to All Cell Storage).....	4.0-13
4.3.1-9	Vogtle Unit 2 Interface Requirements (3x3 to Empty Cell Checkerboard Storage).....	4.0-14
5.5.6-1	Schedule of Lift-Off Testing for Two Containments at a Site	5.5-22

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5.5 Programs and Manuals

5.5.6 Prestressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in prestressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Regulatory Guide 1.35, Revision 2, 1976, with the following exceptions:

1. Number of Tendons Detensioned - Only one vertical and one horizontal tendon are detensioned on Unit 1 each time lift-offs are performed on Unit 1 per figure 5.5.6-1. Only one vertical or one horizontal tendon is detensioned on Unit 1 each time lift-offs are performed on Unit 2 per figure 5.5.6-1.
2. Concrete Inspection - The concrete adjacent to the vertical tendons cannot be inspected due to steel plating covering the concrete.
3. The areas adjacent to the tendons are inspected during the tendon surveillance instead of during the ILRT.

Only the Unit 1 containment is subject to the complete surveillance program. Unit 1 is equipped with selected tendons specifically designed for detensioning. The Unit 2 containment has permanent anchorage assemblies (nondetensionable).

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies.

5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel at least once per 10 years by conducting either:

- a. An in-place ultrasonic examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius; or
- b. A surface examination (magnetic particle and/or liquid penetrant) of exposed surfaces of the disassembled flywheel.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Reactor Coolant Pump Flywheel Inspection Program.

(continued)

5.5 Programs and Manuals

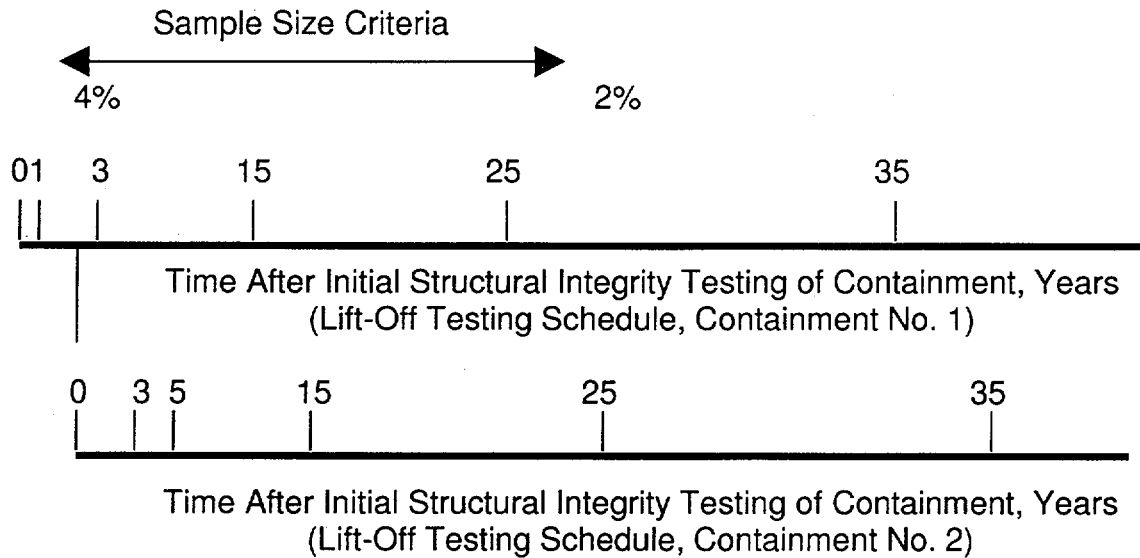
5.5.8 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

<u>ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice testing activities</u>	<u>Required Frequencies for performing inservice testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

(continued)



Schedule to be used provided:

- a. The containments are identical in all aspects such as size, tendon system, design, materials of construction, and method of construction. The tendon system for Unit 2 does not provide for detensioning. Detensioning can be performed only on the Unit 1 tendon system.
- b. The 1-year inspection for Unit 2 will consist of a visual inspection only. No lift-off testing will be performed on Unit 2 until the 3-year inspection.
- c. There is no unique situation that may subject either containment to a different potential for structural or tendon deterioration.
- d. The Unit 1 and Unit 2 surveillances may be performed back-to-back to facilitate detensioning of Unit 1 tendons during the Unit 2 surveillance.

Figure 5.5.6-1 Schedule of Lift-Off Testing for Two Containments at a Site



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE NPF-68
AND AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NPF-81
SOUTHERN NUCLEAR OPERATING COMPANY, INC., ET AL.
VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2
DOCKET NOS. 50-424 AND 50-425

1.0 INTRODUCTION

By letter dated October 4, 1999, Southern Nuclear Operating Company, Inc., et al. (the licensee) proposed license amendments to change the Technical Specifications (TS) for the Vogtle Electric Generating Plant (Vogtle), Units 1 and 2. The proposed changes would revise TS 5.5.6, "Prestressed Concrete Containment Tendon Surveillance Program," to incorporate exceptions to Regulatory Guide (RG) 1.35, Revision 2, 1976. Specifically, the proposed change adds the following three exceptions and a clarifying statement:

1. Number of Tendons Detensioned - Only one vertical and one horizontal tendon are detensioned on Unit 1 each time lift-offs are performed on Unit 1 per figure 5.5.6-1. Only one vertical or one horizontal tendon is detensioned on Unit 1 each time lift-offs are performed on Unit 2 per figure 5.5.6-1.
2. Concrete Inspection - The concrete adjacent to the vertical tendons cannot be inspected due to steel plating cover the concrete.
3. The areas adjacent to the tendons are inspected during the tendon surveillance instead of during the ILRT.

Only the Unit 1 containment is subject to the complete surveillance program. Unit 1 is equipped with selected tendons specifically designed for detensioning. The Unit 2 containment has permanent anchorage assemblies (nondetensionable).

The licensee requested approval of these TS changes to facilitate the performance of the containment tendon surveillances for Unit 2. The adequacy of the proposed changes is discussed below.

2.0 BACKGROUND

TS 5.5.6 requires the tendon surveillance program, inspection frequencies, and acceptance criteria to be in accordance with RG 1.35, Revision 2. Prior to conversion to the improved TS,

the licensee's TS contained three exceptions to RG 1.35, Revision 2. These exceptions were approved by the staff's safety evaluation dated September 12, 1989, but were later removed during TS conversion.

3.0 EVALUATION

In its October 4, 1999, submittal, the licensee proposed to revise the TS to reinstate the three exceptions approved on September 12, 1989. These exceptions are consistent with RG 1.35, Revision 3 and also with the 1992 Edition of the American Society of Mechanical Engineers *Boiler and Pressure Vessel Code*, Section XI, Subsection IWL and therefore, are acceptable.

In addition, the licensee proposed to add a statement to its TS to clarify the first exception to RG 1.35, Revision 2. The permanent anchorage assembly design of the Unit 2 containment makes it is impractical to detension a tendon, take strand samples, and subsequently retension the tendon. For this reason, the licensee stated that when it performs lift-off testing on Unit 2, it will detension one tendon on Unit 1 and remove a strand sample for material testing.

On January 7, 1994, the Nuclear Regulatory Commission (NRC) published a proposed amendment to the regulations to incorporate by reference the 1992 Edition with the 1992 Addenda of Subsections IWE and IWL of Section XI of the ASME Code. The final rule, Section 50.55a(g)(6)(ii)(B) of Title 10 of the *Code of Federal Regulations* (10 CFR), became effective on September 9, 1996, and requires licensees to implement Subsections IWE and IWL, with specified modifications and limitations, by September 9, 2001. The licensee's proposed TS change is acceptable for the upcoming containment tendon surveillances. However, approval of this TS amendment does not limit inservice inspection of containments as required by 10 CFR 50.55a(g)(6)(ii)(B). By September 9, 2001, all subsequent tendon surveillance program, inspection frequencies, and acceptance criteria shall be in accordance with Subsections IWE and IWL of the 1992 Edition with the 1992 Addenda in conjunction with the modification specified in 50.55a(b)(2)(ix).

4.0 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.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (65 FR 6411). 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.

6.0 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: M. Kotzalas

Date: March 27, 2000