December 12, 2006

Mr. D. E. Grissette
Vice President
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, AL 35201-1295

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2, ISSUANCE OF

AMENDMENTS REGARDING TENDON SURVEILLANCE PROGRAM

(TAC NOS. MD1078 AND MD1079)

Dear Mr. Grissette:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 147 to Facility Operating License NPF-68 and Amendment No. 127 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2. The amendments consist of changes to the Technical Specification Containment Tendon Surveillance Program as addressed in your application dated March 29, 2006, as supplemented on July 6, 2006.

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/

Robert E. Martin, Sr. Project Manager Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosures:

- 1. Amendment No. 147 to NPF-68
- 2. Amendment No. 127 to NPF-81
- 3. Safety Evaluation

cc w/encls: See next page

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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. 147 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. (the licensee), acting for itself, Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the owners), dated March 29, 2006, as supplemented on July 6, 2006, 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. 147, 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 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Evangelos C. Marinos, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to License No. NPF-68 and the Technical Specifications

Date of Issuance: December 12, 2006

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. 127 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. (the licensee), acting for itself, Georgia Power Company Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the owners), dated March 29, 2006, as supplemented on July 6, 2006, 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. 127, 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 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Evangelos C. Marinos, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to License No. NPF-81 and the Technical Specifications

Date of Issuance: December 12, 2006

<u>ATTACHMENT</u>

TO LICENSE AMENDMENT NO. 147

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

<u>AND</u>

TO LICENSE AMENDMENT NO. 127

FACILITY OPERATING LICENSE NO. NPF-81

DOCKET NO. 50-425

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

Remove Pages	<u>Insert Pages</u>
<u>License</u>	<u>License</u>
License No. NPF-68, page 4	License No. NPF-68, page 4
License No. NPF-81, page 4	License No. NPF-81, page 4
TSs	TSs
vi	vi
5.5-5	5.5-5
5.5-20	5.5-20
5.6-6	5.6-6
B 3.6.1-4	B 3.6.1-4
B 3.6.1-5	B 3.6.1-5

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO

AMENDMENT NO. 147 TO FACILITY OPERATING LICENSE NPF-68

AND

AMENDMENT NO. 127 TO FACILITY OPERATING LICENSE NPF-81

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

DOCKET NOS. 50-424 AND 50-425

1.0 INTRODUCTION

By application dated March 29, 2006, as supplemented by letter dated July 6, 2006, References 1 and 2, Southern Nuclear Operating Company, Inc. (SNC, the licensee), requested changes to the Technical Specifications (TSs) for the Vogtle Electric Generating Plant, Units 1 and 2 (VEGP). The supplement dated July 6, 2006, provided additional information that clarified the application, did not expand the scope of the application as originally noticed and did not change the Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on May 9, 2006, (71 FR 27004).

The proposed changes would revise the VEGP TS Sections 5.5, "Programs and Manuals," and Section 5.6, "Reporting Requirements." By this amendment, the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.55a(b)(2)(vi), will be incorporated in the VEGP TS containment tendon surveillance program in order to reflect the latest requirements for tendon surveillance. The proposed changes are a result of the NRC amending its regulations to incorporate by reference the 1992 edition with the 1992 addenda of Subsection IWE and Subsection IWL, of the American Society of Mechanical Engineers (ASME), *Boiler and Pressure Vessel Code* (*Code*) (References 3 and 4), to assure that the critical areas of the containments are routinely inspected to detect, and take corrective action for, defects that could compromise a containment's structural integrity. This evaluation addresses the appropriateness of the licensee's proposed amendments to VEGP's TSs for Units 1 and 2. Associated changes to the TS Bases for Surveillance Requirements (SR) 3.6.1, "Containment," were also proposed.

2.0 REGULATORY EVALUATION

In the *Federal Register* (61 FR 41303) dated August 8, 1996, the Commission amended 10 CFR to incorporate by reference the 1992 edition through the 1992 addenda or the 1995 edition with the 1996 addenda of Subsection IWE and Subsection IWL, of the ASME Code, as modified and supplemented by the requirements in 10 CFR 50.55a, paragraphs (b)(2)(viii), "Examinations of concrete containment," and (b)(2)(ix), "Examinations of metal containments and the liners of concrete containments," when implementing the initial 120-month inspection interval for the containment inservice inspection requirements of 10 CFR 50.55a. Successive 120-month interval updates must be implemented in accordance with 10 CFR 50.55a(g)(4)(ii).

The licensee proposed to update the TSs to incorporate the above regulatory requirement for the inspection of the concrete containment. TS Section 5.5.6, "Pre-stressed Concrete Containment Tendon Surveillance Program" will be revised to state "The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an exemption, relief, or alternative has been authorized by the NRC."

3.0 TECHNICAL EVALUATION

The requirements of 10 CFR 50.55a were amended (61 FR 41303) to incorporate, by reference, Subsections IWE and IWL of Section XI of the ASME Code, for the inspection of containments of light water-cooled reactors. Subsection IWE provides the requirements for inservice inspection (ISI), repair, and replacement of Class MC pressure retaining components, and metallic shell and penetration liners of Class CC pressure retaining components, and their integral attachments. Subsection IWL provides the requirements for preservice examination, ISI and repair and replacement of concrete containments.

The regulation covering the ISI of the containment tendons is 10 CFR 50.55a(g)(4). This requires that throughout the service of a boiling or pressurized water-cooled nuclear power facility, components which are classified as ASME Code Class CC must meet the requirements, except design and access provisions and preservice examination requirements, set forth in Section XI of editions of the ASME Code and addenda that are incorporated by reference in paragraph (b) of 10 CFR 50.55a, subject to the limitations and modifications listed therein.

The licensee has proposed to replace the reference to Regulatory Guide 1.35, Revision 2, "Inservice Inspection of Ungrouted Tendons in Prestressed Concrete Containment Structures," (RG 1.35), by a reference to the regulations and to the specific subsection of Section XI of the ASME Code for containment tendons (IWL). The NRC staff 's request for addition information (RAI), and the licensee's response to the RAIs, dated June 6, 2006, are discussed below:

In RAI No. 1, dated June 6, 2006, the NRC staff noted that the requirements of RG 1.35, with exceptions referenced in TS 5.5.6, are included in ASME Code Section XI, Subsections IWL as modified by 10 CFR 50.55a(b)(2)(viii). The NRC staff requested the licensee to clarify how the requirements of 10 CFR 50.55a(b)(2)(viii)(A-E) are addressed in the VEGP inspection program.

In an enclosure to the licensee's response dated July 6, 2006, the licensee indicated that it plans to utilize the equivalent requirements of the 1995 edition of 10 CFR 50.55a(b)(2)(ix),

which are required to be met in accordance with the VEGP containment inspection program plan. In accordance with the VEGP containment inspection plan, the licensee addresses the 10 CFR 50.55a(b)(ix)(A) examination requirement by performing grease cap inspections at the same frequency as for the VT-3C inspection that is required by IWL Item L1.11. The VEGP containment inspection program plan captures the reporting requirements of IWA-6000 as supplemented by 10 CFR 50.55a(b)(2)(ix)(B-E). In addition, the non-reporting requirements of 10 CFR 50.55a(b)(ix)(B-C) are listed in the VEGP procedure "Containment Inspection Program Plan, Request for Engineering Reviews", as acceptance criteria. As noted in the VEGP containment Inspection Program Plan, Request for Engineering Reviews are used to evaluate potential degradation in inaccessible areas as described in 10 CFR 50.55a(b)(2)(ix)(E).

The NRC staff finds that the licensee is appropriately incorporating the requirements of 10 CFR 50.55a(b)(2)(viii) in its inspection plan. Based on the NRC staff's review of the licensee's response, the NRC staff concludes that the licensee's response to RAI No. 1 is acceptable.

In RAI No. 2, dated June 6, 2006, the NRC staff noted that visual examination of containment concrete surfaces intended to fulfill the requirements of 10 CFR Part 50, Appendix J, Option B testing, will be performed in accordance with the requirements of and frequency specified by the ASME Code, Section XI, Subsection IWL. The NRC staff requested the licensee to clarify how the VEGP inspection program meets these duel requirements.

In an enclosure to the licensee's response dated July 6, 2006, the licensee points out that a general visual inspection of the accessible interior and exterior surfaces of the containment structure for structural deterioration which may affect the containment leak-tight integrity must be conducted prior to each test, and at a periodic interval between tests based on the performance of the containment system. The IWE general visual exam (IWE-3510.1) in conjunction with the IWL concrete surface VT-3C exams (IWL-2510) of the interior surfaces and exterior surfaces of the containment, at an interval described in Section XI, satisfies 10 CFR Part 50, Appendix J, Option B for VEGP. In addition, both the IWE and IWL containment surface visual exams are performed when performing a Type A test in accordance with 10 CFR Part 50, Appendix J, Option B.

The NRC staff finds acceptable the licensee's response that the ASME Code, Section XI, Subsection IWE & IWL containment surface inspection program meets the requirements of 10 CFR Part 50, Appendix J, Option B testing. Based on the response, the NRC staff's concern identified in RAI No. 2 is resolved.

Complying with the regulatory requirements described in 10 CFR 50.55a ensures the containment will function as designed to provide an acceptable barrier to the release of radioactive materials to the environment. Because the licensee has proposed the specific regulatory requirements for the containment tendon surveillance program, the NRC staff concludes that the proposed change to replace the reference to RG 1.35 by a reference to the regulations and to the specific subsection of the ASME Code is acceptable.

The licensee also proposes to delete the reference in TS 5.5.6 to SR 3.0.2, as the inspection frequency is now prescribed by the referenced Code and regulated by 10 CFR 50.55a. Additionally, because the tendon inspection frequencies will be in accordance with ASME Code, Section XI, Subsection IWL, the provisions of SR 3.0.2 are no longer necessary and are deleted from TS 5.5.6. As such, 10 CFR 50.55a requires the implementation of ASME Code,

Section XI, Subsection IWL, and specifies the requirements for extending inspection frequencies. Based on this, the NRC staff concludes that deletion of SR 3.0.2 from TS 5.5.6 is acceptable.

The licensee also proposes to delete TS Section 5.6.9, "Tendon Surveillance Report," which addresses the reporting of abnormal degradation of containment conditions to NRC. This is no longer required, as all reportable events are addressed under Subsections IWA and IWL of the ASME Code, as regulated by 10 CFR 50.55a, and it is not necessary to repeat regulations in the TSs to ensure safe plant operation. Also, because the reporting requirements will be in accordance with 10 CFR 50.55a(b)(2)(viii), the provisions of TS 5.6.9 are no longer necessary and are deleted from the TSs. On this basis, the NRC staff concludes that deletion of TS 5.6.9 is acceptable.

Based on the above findings and the consistency of the proposed amendment to Section XI of the ASME Code and to 10 CFR 50.55a, the NRC staff concludes that the proposed amendment is acceptable. The NRC staff also reviewed the licensee's identified changes to the TS Bases that were included in the application and finds that they are consistent with the proposed changes to the TSs.

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 a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and 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 (71 FR 27004, May 9, 2006). The amendments also relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10). 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.

7.0 REFERENCES

- Letter from H.L. Sumner, Jr., SNC, to NRC, "Request for Technical Specification Amendment Containment Tendon Surveillance Program," March 29, 2006, Agencywide Documents Access and Management System (ADAMS) Accession No. ML060890443.
- 2. Letter from H.L. Sumner Jr., SNC, to NRC, "Response to Request for Additional Information Regarding Technical Specification Revision Request Containment Tendon Surveillance Program," July 6, 2006, ADAMS No. ML061880282.
- 3. ASME Code, 1992 edition, Division 1, Section XI, Subsection IWE, "Requirement for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Plants," 1992 addenda, New York.
- ASME Code, 1992 edition, Division 1, Section XI, Subsection IWL, "Requirement for Class CC Concrete Components of Light-Water Cooled Plants," 1992 addenda, New York.

Principal Contributors: T. Terry

H. Ashar

Date: December 12, 2006

Vogtle Electric Generating Plant, Units 1 & 2

CC:

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