September 12, 2006

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

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2, ISSUANCE OF AMENDMENTS REGARDING THE STEAM GENERATOR TUBE SURVEILLANCE PROGRAM (TAC NOS. MD2642 AND MD2643)

Dear Mr. Grissette:

The Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 146 to Facility Operating License NPF-68 and Amendment No. 126 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant (Vogtle), Units 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated July 20, 2006, as supplemented by letter dated August 4, 2006.

The amendment request involves a one-time change to TS 5.5.9, “Steam Generator (SG) Tube Surveillance Program,” regarding the required SG inspection scope for Vogtle, Unit 1, during Refueling Outage 13 and the subsequent operating cycle and Vogtle, Unit 2, during Refueling Outage 12, and the subsequent operating cycle. The proposed changes modify the inspection requirements for portions of the SG tubes within the hot leg tubesheet region of the SGs.

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.

Please note that this amendment was applied for on July 20, 2006, with a requested completion date of September 1, 2006, giving the staff approximately 6 weeks to perform a complete evaluation of your proposal. Several other recent Vogtle applications for licensing actions have also requested short turn-around times, including the May 18, 2006, request for relaxation from the *First Revised Order Modifying Licenses*; the June 29, 2006, relief requests (2) for inservice inspection alternatives for reactor pressure vessel examinations; and the August 10, 2006, relief request for a proposed alternative for application of pressurizer nozzle full-structural weld overlay. In each case, Southern Nuclear Operating Company, Inc., requested significantly less than 1-year turn around for what the NRC staff considers routine licensing actions. It is the

staff's expectation that licensees schedule their work such that routine licensing actions can be applied for approximately 1 year in advance of the date the action is needed to give the NRC staff sufficient time to perform its safety review, giving adequate consideration to the priority of the licensee's request when compared to the priority of other tasks that may be under review at that time by the staff. The NRC staff appreciates your consideration in this matter.

Sincerely,

/RA/

Christopher Gratton, 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. 146 to NPF-68
2. Amendment No. 126 to NPF-81
3. Safety Evaluation

cc w/encls: See next page

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Sincerely,

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Christopher Gratton, Project Manager
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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. 146
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 July 20, 2006, as supplemented by letter dated August 4, 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. 146 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

/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: September 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. 126
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 July 20, 2006, as supplemented by letter dated August 4, 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. 126, 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

/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: September 12, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 146

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

AND

TO LICENSE AMENDMENT NO. 126

FACILITY OPERATING LICENSE NO. NPF-81

DOCKET NO. 50-425

Replace the following pages of the License and 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	Insert Pages
License	License
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
5.5-8	5.5-8
5.5-9	5.5-9
5.5-10	5.5-10
5.5-11	5.5-11
5.5-12	5.5-12
5.5-13	5.5-13
5.5-14	5.5-14
5.5-15	5.5-15
5.5-16	5.5-16
5.5-17	5.5-17

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 146 FACILITY OPERATING LICENSE NPF-68

AND AMENDMENT NO. 126 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 letter dated July 20, 2006 (Agencywide Documents Access and Management System Accession No. ML062050256), and supplemented by a letter dated August 4, 2006 (ML062190023), Southern Nuclear Operating Company, Inc (the licensee), requested changes to the Technical Specifications (TSs) for Vogtle Electric Generating Plant (Vogtle), Units 1 and 2. The supplement dated August 4, 2006, provided clarifying information that did not expand the scope of the July 20, 2006, application nor the initial proposed no significant hazard consideration determination. The amendment request involves a one-time change to TS 5.5.9, "Steam Generator (SG) Tube Surveillance Program," regarding the required SG inspection scope for Vogtle, Unit 1 during Refueling Outage (RFO) 13 and the subsequent operating cycle, and Vogtle Unit 2 during RFO 12 and the subsequent cycle. The proposed changes modify the inspection requirements for portions of the SG tubes within the hot leg tubesheet region of the SGs. Specifically, the proposed changes would modify:

1.1 TS 5.5.9.c, "Provisions for SG tube repair criteria"

Two new paragraphs have been added to state:

> For Unit 1 during Refueling Outage 13 and the subsequent operating cycle, and for Unit 2 during Refueling Outage 12 and the subsequent operating cycle, degradation identified in the portion of the tube below 17 inches from the top of the hot leg tubesheet does not require plugging.
>
> For Unit 1 during Refueling Outage 13 and the subsequent operating cycle, and for Unit 2 during Refueling Outage 12 and the subsequent operating cycle, degradation identified in the portion of the tube from the top of the hot leg tubesheet to 17 inches below the top of the hot leg tubesheet shall be plugged upon detection.

1.2 TS 5.5.9.d, “Provisions for SG tube inspections”

One new paragraph has been added to state:

> For Unit 1 during Refueling Outage 13 and the subsequent operating cycle, and for Unit 2 during Refueling Outage 12 and the subsequent operating cycle, the portion of the tube below 17 inches from the top of the hot leg tubesheet is excluded.

2.0 BACKGROUND

Vogtle Units 1 and 2 have four Westinghouse Model F SGs per unit. There are 5626 thermally treated Alloy 600 tubes in each of the steam generators. The tubes have an outside diameter of 11/16 inch, a wall thickness of 0.040 inch, and are supported by seven stainless steel tube support plates and a flow distribution baffle. The tube support plate holes are quatrefoil shaped. The U-bend region of the tubes in rows 1 through 10 was stress relieved after bending.

In a letter dated September 21, 2005 (ML052630011), the Nuclear Regulatory Commission (NRC) staff previously approved a similar amendment for a one-time change to the Vogtle Unit 2 TSs. The amendment requested a one-time change to TS 5.5.9, “Steam Generator (SG) Tube Surveillance Program,” regarding the required SG inspection scope for Vogtle, Unit 2, during Refueling Outage 11 and the subsequent operating cycle. The proposed changes modified the inspection requirements for portions of the SG tubes within the hot leg tubesheet region of the SGs.

Similar to the September 21, 2005, amendment, the licensee is proposing a one-time change to exempt the lower 4 inches of the tube within the 21-inch deep tubesheet region from an inspection and to exempt tubes with flaw indications in this lower 4-inch zone from the need to plug. The latter part of this proposal (i.e., to exempt tubes from plugging) is needed as a practical matter since, although rotating coil probe inspections will not be performed in this region, the bobbin probe will necessarily be recording any signals produced in this zone. This proposal, in effect, redefines the pressure boundary within the tubesheet region as consisting of a 17-inch friction or expansion joint (with the tube hydraulically expanded against the tubesheet over the top 17 inches of the tubesheet region). Under this proposal, no credit is taken for the lower 4 inches of the tube or the tube-to-tubesheet weld in contributing to the structural or leakage integrity of the joint. The lower 4 inches of the tube and weld are assumed not to exist.

3.0 REGULATORY EVALUATION

SG tubes function as an integral part of the reactor coolant pressure boundary (RCPB) and, in addition, serve to isolate radiological fission products in the primary coolant from the secondary coolant and the environment. For the purposes of this Safety Evaluation (SE), tube integrity means that the tubes are capable of performing these functions in accordance with the plant design and licensing basis.

Title 10 of the *Code of Federal Regulations* (10 CFR) establishes the fundamental regulatory requirements with respect to the integrity of the SG tubing. Specifically, the General Design Criteria (GDC) in Appendix A to 10 CFR Part 50 state that the RCPB shall have “an extremely low probability of abnormal leakage ... and gross rupture" (GDC 14), "shall be designed with sufficient margin" (GDC 15 and 31), shall be of "the highest quality standards possible" (GDC 30), and shall be designed to permit "periodic inspection and testing ... to assess ... structural and leak tight integrity" (GDC 32). To this end, 10 CFR 50.55a specifies that components which are part of the RCPB must meet the requirements for Class 1 components in Section III of the American Society of Mechanical Engineers (ASME), *Boiler and Pressure Vessel Code* (Code). Section 50.55a further requires, in part, that throughout the service life of a pressurized-water reactor (PWR) facility, ASME Code, Class 1 components meet the requirements, except design and access provisions and pre-service examination requirements, in Section XI, "Rules for Inservice Inspection [ISI] of Nuclear Power Plant Components," of the ASME Code, to the extent practical. This requirement includes the inspection and repair criteria of Section XI of the ASME Code. Section XI requirements pertaining to ISI of SG tubing are augmented by additional SG tube surveillance requirements in the TSs.

As part of the plant licensing basis, applicants for PWR licenses are required to analyze the consequences of postulated design-basis accidents such as an SG tube rupture and main steamline break. These analyses consider the primary-to-secondary leakage through the tubing that may occur during these events and must show that the offsite radiological consequences do not exceed the GDC 19 criteria for control room operator doses or the applicable limits of the 10 CFR Part 100 guidelines for offsite doses or some fraction, thereof, as appropriate to the accident, or the NRC-approved licensing basis (e.g., a small fraction of these limits).

Under the plant TS SG surveillance program requirements, the licensee is required to monitor the condition of the SG tubing and plug tubes as necessary. Specifically, the licensee is required to perform periodic inspections of, and to remove from service by plugging, all tubes found to contain flaws with sizes exceeding the acceptance limit, termed the "plugging limit." The tube plugging limits were developed with the intent of ensuring that degraded tubes: (1) maintain factors of safety against gross rupture consistent with the plant design basis (i.e., consistent with the stress limits of the ASME Code, Section III); and (2) maintain leakage integrity consistent with the plant licensing basis, while at the same time, allowing for potential flaw size measurement error and flaw growth between SG inspections. The required frequency and scope of tubing examinations and the tube plugging limits are specified in TS 5.5.9, "Steam Generator (SG) Tube Surveillance Requirements."

The subject TS amendment request concerns the portions of the tubing that are subject to the TS SG tube surveillance requirements, including any necessary plugging or repairs, and the inspection methods to be employed. TS 5.5.9 defines a tube inspection as an inspection of the SG tube from the point of entry (hot leg side) completely around the U-bend to the top support of the cold leg. This includes the full length of tubing within the thickness of the tubesheet on the hot leg side.

The proposed license amendment would limit the required inspections and plugging in the 21-inch thick tubesheet region to the upper 17 inches of the tubesheet region and is conceptually similar to permanent amendments approved by the NRC staff for a number of plants. Examples include the F* criteria approved for Westinghouse SGs where the tubes were hard roll expanded inside the tubesheet, and the W* criteria approved for plants where the tubes were explosively

expanded against the tubesheet. In the case of the F* criteria, the required inspection zone was limited to approximately the upper 1.5-inch zone below the TTS. The W* criteria required an inspection zone extending approximately 8 inches below the TTS. The larger required inspection zone for W* relative to F* results from the explosively expanded joints not exhibiting as much residual interference fit as do hard rolled joints. The proposed license amendment for Vogtle is similar to recently approved amendments at other plants where the tubes are hydraulically expanded against the tubesheet.

4.0 TECHNICAL EVALUATION

Similar to the amendment approved by the NRC staff on September 21, 2005, the licensee submitted a Westinghouse report on July 20, 2006, intended to demonstrate the conservatism of the requested amendment. The data used in both reports is the same, although the licensee used the load when the test specimens moved 0.25 inch to determine the pullout resistance in the July 20, 2006, submittal rather than the load associated with the first movement (as was used in the September 21, 2005, submittal). This did not have a material affect on the NRC staff's safety conclusion. The NRC staff has not reviewed either of the Westinghouse analyses in detail regarding the tube-to-tubesheet engagement distance of 2.3 to 7 inches; however, based on our evaluations of tubesheet radial contact pressure, tube internal primary pressure, and tubesheet bore dilations documented in the September 21, 2005, amendment, and the similarity between the Vogtle Units 1 and 2 SGs, the NRC staff concludes that the 17-inch engagement length proposed herein is acceptable to ensure the structural integrity of the tubesheet joint. In addition, the NRC staff concludes that there is reasonable assurance that the proposed one-time exclusion of the lower 4 inches of the tubes in the tubesheet region from the SG tube inspection and plugging requirements will not impair the leakage integrity (for the reasons discussed in the September 21, 2005, amendment).

The NRC staff finds that the proposed one-time license amendment ensures that the structural and leakage integrity of the tube-to-tubesheet joint will be maintained with structural safety margins consistent with the design basis, with leakage integrity within assumptions employed in the licensing basis accident analyses and, thus, in accordance with the applicable regulations without undue risk to public health and safety. Based on this, the NRC staff concludes that the proposed changes to TS 5.5.9 are acceptable.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION

The Commission's regulations in 10 CFR 50.92(c), "Issuance of amendment," state that the Commission may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility in accordance with the amendment would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

The following analysis was provided by the licensee in its letter dated August 4, 2006:

1. Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

No. The previously analyzed accidents are initiated by the failure of plant structures, systems, or components. The proposed changes that alter the SG inspection criteria do not have a detrimental impact on the integrity of any plant structure, system, or component that initiates an analyzed event. The proposed changes will not alter the operation of, or otherwise increase the failure probability of any plant equipment that initiates an analyzed accident. Therefore, the proposed change does not involve a significant increase in the probability of an accident previously evaluated.

Of the applicable accidents previously evaluated, the limiting transients with consideration to the proposed changes to the SG tube inspection criteria, are the SG tube rupture (SGTR) event and the steam line break (SLB) accident.

During the SGTR event, the required structural integrity margins of the SG tubes will be maintained by the presence of the SG tubesheet. SG tubes are hydraulically expanded in the tubesheet area. Tube rupture in tubes with cracks in the tubesheet is precluded by the constraint provided by the tubesheet. This constraint results from the hydraulic expansion process, thermal expansion mismatch between the tube and tubesheet and from the differential pressure between the primary and secondary side. Based on this design, the structural margins against burst discussed in Regulatory Guide (RG) 1.121, “Bases for Plugging Degraded PWR SG Tubes,” are maintained for both normal and postulated accident conditions.

The proposed changes do not affect other systems, structures, components or operational features. Therefore, the proposed changes result in no significant increase in the probability of the occurrence of a SGTR accident.

At normal operating pressures, leakage from primary water stress corrosion cracking (PWSCC) below the proposed limited inspection depth is limited by both the tube-to-tubesheet crevice and the limited crack opening permitted by the tubesheet constraint. Consequently, negligible normal operating leakage is expected from cracks within the tubesheet region. The consequences of an SGTR event are affected by the primary-to-secondary leakage flow during the event. Primary-to-secondary leakage flow through a postulated broken tube is not affected by the proposed change since the tubesheet enhances the tube integrity in the region of the hydraulic expansion by precluding tube deformation beyond its initial hydraulically expanded outside diameter.

The probability of a SLB is unaffected by the potential failure of a SG tube as this failure is not an initiator for a SLB.

The consequences of a SLB are also not significantly affected by the proposed changes. During a SLB accident, the reduction in pressure above the tubesheet on the shell side of the SG creates an axially uniformly distributed load on the tubesheet due to the reactor coolant system pressure on the underside of the tubesheet. The resulting bending action constrains the tubes in the tubesheet thereby restricting primary-to-secondary leakage below the midplane.

The hydraulically expanded tube-to-tubesheet joints in Model F SGs are not leak-tight without the tube end weld. Considerations were also made with regard to the potential for primary-to-secondary leakage during postulated faulted conditions. However, the leak rate during postulated accident conditions would be expected to be less than that during normal operation for indications near the bottom of the tubesheet based on the evaluation (Reference 1) which shows that while the driving pressure increases by about a factor of almost two, the flow resistance increases because the tube-to-tubesheet contact pressure also increases. Depending on the depth within the tubesheet, the relative increase in resistance could easily be larger than that of the pressure potential. Therefore, the leak rate under normal operating conditions could exceed its allowed value before the accident condition leak rate would be expected to exceed its allowed value. This approach is termed an application of the “bellwether principle.” While such a decrease in the leak rate is expected, the postulated accident leak rate could conservatively be taken to be bounded by twice the normal operating leak rate if the increase in contact pressure is ignored.

Since normal operating leakage is limited by the TS changes proposed in SNC letter NL-06-0124 and by NEI 97-06 to less than 0.10 gpm (150 gpd) throughout one SG in the VEGP Units 1 and 2 SGs, the attendant accident condition leak rate, assuming all leakage to be from lower tubesheet indications, would be bounded by 0.20 gpm in the faulted SG which is less than the accident analysis assumption of 0.35 gpm to the affected SG included in Section 15.1.5 of the VEGP Updated Final Safety Analysis Report (FSAR). Hence it is reasonable to omit any consideration of inspection of the tube, tube end weld, bulges/overexpansions or other anomalies below 17 inches from the top of the hot leg tubesheet.

Based on the above discussion, the proposed changes do not involve an increase in the consequences of an accident previously evaluated.

2. Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

No. The proposed changes do not involve the use or installation of new equipment and the currently installed equipment will not be operated in a new or different manner. No new or different system interactions are created and no new processes are introduced. The proposed changes will not introduce any new failure mechanisms, malfunctions, or accident initiators not already considered in the design and licensing bases.

Based on this evaluation, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

No. The proposed changes maintain the required structural margins of the SG tubes for both normal and accident conditions. Nuclear Energy Institute (NEI) 97-06, “Steam Generator Program Guidelines,” and Regulatory Guide (RG) 1.121, “Bases for Plugging Degraded PWR Steam Generator Tubes,” are used as the bases in the development of the limited tubesheet inspection depth methodology for determining that SG tube integrity considerations are maintained within acceptable limits. RG 1.121 describes a method acceptable to the NRC for meeting General Design Criteria (GDC) 14, “Reactor coolant pressure boundary,” GDC 15, “Reactor coolant system design,” GDC 31, “Fracture prevention of reactor coolant pressure boundary,” and GDC 32, “Inspection of reactor coolant pressure boundary,” by reducing the probability and consequences of a SGTR. RG 1.121 concludes that by determining the limiting safe conditions for tube wall degradation the probability and consequences of a SGTR are reduced. This RG uses safety factors on loads for tube burst that are consistent with the requirements of Section III of the American Society of Mechanical Engineers (ASME) Code.

Application of the limited tubesheet inspection depth criteria will preclude unacceptable primary-to-secondary leakage during all plant conditions. The methodology for determining leakage provides for large margins between calculated and actual leakage values in the proposed limited tubesheet inspection depth criteria.

The NRC staff has reviewed the licensee’s analysis and, based on this review, has concluded that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has made a final determination that the proposed amendment involves no significant hazards consideration.

6.0 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.

7.0 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 made a final no finding that the amendments involve no significant hazards consideration. 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.

8.0 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: Y. Diaz

Date: September 12, 2006

Vogtle Electric Generating Plant, Units 1 & 2

cc:

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