



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

June 13, 2011

Mr. M. J. Ajluni
Nuclear Licensing Director
Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
P. O. Box 1295 Bin - 038
Birmingham, AL 35201-1295

**SUBJECT: EDWIN I. HATCH NUCLEAR PLANT, UNIT NOS. 1 AND 2 AND VOGTLE
ELECTRIC GENERATING PLANT, UNIT NOS. 1 AND 2, ISSUANCE OF
AMENDMENTS REGARDING TECHNICAL SPECIFICATION CHANGE
(TAC NOS. HATCH, ME5219 AND ME5220; AND VOGTLE, ME5221 AND
ME5222)**

Dear Mr. Ajluni:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 264 to Renewed Facility Operating License DPR-57 and Amendment No. 208 to Renewed Facility Operating License NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2, respectively and Amendment No. 161 to Facility Operating License NPF-68 and Amendment No. 143 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2, respectively.

The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated December 16, 2010, and supplemented on May 10, 2011. The amendments revise TS section 2.0 "Safety Limits."

Specifically, the amendment removes the requirement to report a Safety Limit Violation that is redundant to existing regulations, as required in Title 10 of the *Code of Federal Regulations* (10 CFR), 50.36(c)(8), "Written Reports." The proposed change is described in Technical Specification Task Force Traveler, TSTF-5-A, Revision 1, "Delete Safety Limit Violation Notification Requirements."

M. Ajluni

- 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,

A handwritten signature in black ink, appearing to read "Patrick G. Boyle". The signature is fluid and cursive, with the first name "Patrick" being more prominent.

Patrick G. Boyle, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366
50-424 and 50-425

Enclosures:

1. Amendment No. 264 to DPR-57
2. Amendment No. 208 to NPF-5
3. Amendment No. 161 to NPF-68
4. Amendment No. 143 to NPF-81
5. Safety Evaluation

cc w/encls: Distribution via Listserv



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

DOCKET NO. 50-321

EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 264
Renewed License No. DPR-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Edwin I. Hatch Nuclear Plant, Unit No. 1 (the facility) Renewed Facility Operating License No. DPR-57 filed by 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 December 16, 2010, as supplemented by letter dated May 10, 2011, 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 Renewed Facility Operating License No. DPR-57 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications (Appendix A) and the Environmental Protection Plan (Appendix B), as revised through Amendment No. 264 , are hereby incorporated in the renewed 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 from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Gloria Kulesa, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. DPR-57
and the Technical Specifications

Date of Issuance: June 13, 2011

ATTACHMENT TO LICENSE AMENDMENT NO. 264

RENEWED FACILITY OPERATING LICENSE NO. DPR-57

DOCKET NO. 50-321

Replace the following pages of the License 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

License
page – 4

TSs
page 2.0-1
page 2.0-2

Insert Pages

License
page – 4

TSs
page 2.0-1
(none)

for sample analysis or instrument calibration, or associated with radioactive apparatus or components

- (6) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed license shall be deemed to contain, and is subject to, the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 of Part 50, and Section 70.32 of Part 70; all applicable provisions of the Act and the rules, regulations, and orders of the Commission now or hereafter in effect; and the additional conditions specified or incorporated below:

(1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at steady-state reactor core power levels not in excess of 2,804 megawatts thermal.

(2) Technical Specifications

The Technical Specifications (Appendix A) and the Environmental Protection Plan (Appendix B), as revised through Amendment No. 264 are hereby incorporated in the renewed license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

The Surveillance Requirement (SR) contained in the Technical Specifications and listed below, is not required to be performed immediately upon implementation of Amendment No. 195. The SR listed below shall be successfully demonstrated before the time and condition specified:

SR 3.8.1.18 shall be successfully demonstrated at its next regularly scheduled performance.

(3) Fire Protection

Southern Nuclear shall implement and maintain in effect all provisions of the fire protection program, which is referenced in the Updated Final Safety Analysis Report for the facility, as contained in the updated Fire Hazards Analysis and Fire Protection Program for the Edwin I. Hatch Nuclear Plant, Units 1 and 2, which was originally submitted by letter dated July 22, 1986. Southern Nuclear may make changes to the fire protection program without prior Commission approval only if the changes

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

- 2.1.1.1 With the reactor steam dome pressure < 785 psig or core flow < 10% rated core flow:

THERMAL POWER shall be \leq 24% RTP.

- 2.1.1.2 With the reactor steam dome pressure \geq 785 psig and core flow \geq 10% rated core flow:

MCPR shall be \geq 1.07 for two recirculation loop operation or \geq 1.09 for single recirculation loop operation.

- 2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.

2.1.2 Reactor Coolant System (RCS) Pressure SL

Reactor steam dome pressure shall be \leq 1325 psig.

2.2 SL Violations

With any SL violation, the following actions shall be completed within 2 hours:

- 2.2.1 Restore compliance with all SLs; and

- 2.2.2 Insert all insertable control rods.
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SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA

CITY OF DALTON, GEORGIA

DOCKET NO. 50-366

EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 208
Renewed License No. NPF-5

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Edwin I. Hatch Nuclear Plant, Unit No. 2 (the facility) Renewed Facility Operating License No. NPF-5 filed by 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 December 16, 2010, as supplemented by letter dated May 10, 2011, 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 Renewed Facility Operating License No. NPF-5 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications (Appendix A) and the Environmental Protection Plan (Appendix B), as revised through Amendment No. 208 , are hereby incorporated in the renewed 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 from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Gloria Kulesa, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-5
and the Technical Specifications

Date of Issuance: June 13, 2011

ATTACHMENT TO LICENSE AMENDMENT NO. 208

RENEWED FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

Replace the following pages of the License 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

License
page – 4

TSs
page 2.0-1
page 2.0-2

Insert Pages

License
page - 4

TSs
page 2.0-1
(none)

- (6) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This renewed license shall be deemed to contain, and is subject to, the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 of Part 50, and Section 70.32 of Part 70; all applicable provisions of the Act and the rules, regulations, and orders of the Commission now or hereafter in effect; and the additional conditions² specified or incorporated below:

(1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at steady-state reactor core power levels not in excess of 2,804 megawatts thermal, in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications (Appendix A) and the Environmental Protection Plan (Appendix B), as revised through Amendment No. 208 are hereby incorporated in the renewed license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the renewed license or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the license supported by a favorable evaluation by the Commission.

(a) Fire Protection

Southern Nuclear shall implement and maintain in effect all provisions of the fire protection program, which is referenced in the Updated Final Safety Analysis Report for the facility, as contained

2 The original licensee authorized to possess, use, and operate the facility was Georgia Power Company (GPC). Consequently, certain historical references to GPC remain in certain license conditions.

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

- 2.1.1.1 With the reactor steam dome pressure < 785 psig or core flow < 10% rated core flow:

THERMAL POWER shall be \leq 24% RTP.

- 2.1.1.2 With the reactor steam dome pressure \geq 785 psig and core flow \geq 10% rated core flow:

MCPR shall be \geq 1.08 for two recirculation loop operation or \geq 1.10 for single recirculation loop operation.

- 2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.

2.1.2 Reactor Coolant System (RCS) Pressure SL

Reactor steam dome pressure shall be \leq 1325 psig.

2.2 SL Violations

With any SL violation, the following actions shall be completed within 2 hours:

- 2.2.1 Restore compliance with all SLs; and
- 2.2.2 Insert all insertable control rods.
-



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SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA

CITY OF DALTON, GEORGIA

DOCKET NO. 50-424

VOGTLE ELECTRIC GENERATING PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 161
Renewed 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 December 16, 2010, as supplemented by letter dated May 10, 2011, 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. 161 , 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



Gloria Kulesa, 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: June 13, 2011



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

DOCKET NO. 50-425

VOGTLE ELECTRIC GENERATING PLANT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 143
Renewed 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 December 16, 2010, as supplemented by letter dated May 10, 2011, 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. 14³, 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



Gloria Kulesa, 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: June 13, 2011

ATTACHMENT TO LICENSE AMENDMENT NO. 161
RENEWED FACILITY OPERATING LICENSE NO. NPF-68
DOCKET NO. 50-424
AND
TO LICENSE AMENDMENT NO. 143
RENEWED 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

License

License No. NPF-68, page 4
License No. NPF-81, page 3

TSs

page 2.0-1

Insert Pages

License

License No. NPF-68, page 4
License No. NPF-81, page 3

TSs

page 2.0-1

(1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at reactor core power levels not in excess of 3625.6 megawatts thermal (100 percent power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 161 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) Southern Nuclear Operating Company shall be capable of establishing containment hydrogen monitoring within 90 minutes of initiating safety injection following a loss of coolant accident.

(4) Deleted

(5) Deleted

(6) Deleted

(7) Deleted

(8) Deleted

(9) Deleted

(10) Mitigation Strategy License Condition

The licensee shall develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy

- (2) Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, pursuant to the Act and 10 CFR Part 50, to possess but not operate the facility at the designated location in Burke County, Georgia, in accordance with the procedures and limitations set forth in this license;
 - (3) Southern Nuclear, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (4) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
 - (6) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified or incorporated below.

(1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at reactor core power levels not in excess of 3625.6 megawatts thermal (100 percent power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 143, 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.

The Surveillance Requirements (SRs) contained in the Appendix A Technical Specifications and listed below are not required to be performed immediately upon implementation of Amendment No. 74. The SRs listed below shall be

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

In MODES 1 and 2, the combination of THERMAL POWER, Reactor Coolant System (RCS) highest loop average temperature, and pressurizer pressure shall not exceed the SLs specified in Figure 2.1.1-1.

2.1.2 RCS Pressure SL

In MODES 1, 2, 3, 4, and 5, the RCS pressure shall be maintained ≤ 2735 psig.

2.2 SL Violations

2.2.1 If SL 2.1.1 is violated, restore compliance and be in MODE 3 within 1 hour.

2.2.2 If SL 2.1.2 is violated:

2.2.2.1 In MODE 1 or 2, restore compliance and be in MODE 3 within 1 hour.

2.2.2.2 In MODE 3, 4, or 5, restore compliance within 5 minutes.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 264 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-57

AND

AMENDMENT NO. 208 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-5

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

EDWIN I. HATCH NUCLEAR PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-321 AND 50-366

ALSO RELATED TO

AMENDMENT NO. 161 TO RENEWED FACILITY OPERATING LICENSE NPF-68

AND

AMENDMENT NO. 143 TO RENEWED 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 December 16, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML103550234), as supplemented by letter dated May 10, 2011 (ADAMS Accession No. ML111300428), Southern Nuclear Operating Company, Inc. (Southern Nuclear, the licensee), requested changes to the Technical Specifications (TSs) for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2 (Hatch) and Vogtle Electric Generating Plant, Units 1 and 2 (Vogtle). The supplement dated May 10, 2011, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on February 22, 2011 (76 FR 9828).

The proposed changes would delete the TSs Safety Limit (SL) notification and reporting requirements for Hatch and Vogtle to eliminate requirements that duplicate regulations in Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36(c)(8), "Written Reports" and 10 CFR Section 50.72, "Immediate notification requirements for operating nuclear reactors," and to take advantage of Nuclear Regulatory Commission (NRC) staff guidance as to the required content of TSs. The proposed change is described in Technical Specifications Task Force Traveler, TSTF-5-A, Revision 1, "Delete Safety Limit Violation Notification Requirements," (ADAMS Accession No. ML053010227), and was described in the Notice of Availability published in the FR on November 4, 2005 (70 FR 67202). The model safety evaluation (SE) was previously published in the FR on August 29, 2005 (70 FR 51098). The proposed changes are consistent with the NRC-approved TSTF-5-A, Revision 1.

2.0 REGULATORY EVALUATION

Appendix A to 10 CFR Part 50 - General Design Criteria (GDC) for Nuclear Power Plants establishes minimum requirements for the principal design criteria for water-cooled nuclear power plants similar in design and location to plants for which construction permits have been issued by the Commission. GDC, "*Criterion 10 - Reactor design*," includes the requirement that the reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.

Section 182(a) of the Atomic Energy Act (the Act) requires applicants for nuclear power plant operating licenses to include TSs as part of the license. The TSs ensure the operational capability of structures, systems, and components that are required to protect the health and safety of the public. The Commission's regulatory requirements related to the content of the TSs are contained in 10 CFR Section 50.36. That regulation requires that the TSs include items in the following specific categories: (1) Safety limits, limiting safety systems settings, and limiting control settings (Section 50.36(c)(1)); (2) Limiting conditions for operation (Section 50.36(c)(2)); (3) Surveillance requirements (Section 50.36(c)(3)); (4) Design features (Section 50.34(c)(4)); and (5) Administrative controls (Section 50.36(c)(5)).

In general, there are two classes of changes with regard to requests for TSs license amendments: (1) changes needed to reflect modifications to the design basis (TSs are derived from the design basis), and (2) voluntary changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TSs over time.

This license amendment request deals with the second class of change. In determining the acceptability of eliminating requirements that duplicate regulations at 10 CFR Section 50.36 and 10 CFR Section 50.72, and of making changes to notifications of Safety Limit violations, in TS 2.2, "Safety Limit Violations," the staff used the accumulation of generically-approved guidance in NUREG-1433, Revision 3, "Standard Technical Specifications, Boiling Water Reactors, BWR/4," dated June, 2004 (BWR/4 STS) for Hatch Unit Nos. 1 and 2 and in NUREG-1431, Revision 3, "Standard Technical Specifications, Westinghouse Plants," dated June, 2004 (WOG STS) for Vogtle Units 1 and 2, as modified by Technical Specification Task Force (TSTF)-5-A, Revision 1 (TSTF-5).

3.0 TECHNICAL EVALUATION

3.1 Technical Specification Changes

3.1.1 Hatch Unit Nos. 1 and 2

By application dated December 16, 2010, for Hatch Unit Nos. 1 and 2, the licensee proposed revising TS 2.2, SL Violations as noted below.

1. TS Action 2.2.2.1 requires within 2 hours, "Restore compliance with all SLs." TS Action 2.2.2.2 requires within 2 hours, "Insert all insertable control rods." These actions are renumbered and the 2-hour completion time for each action is moved to the SL Violation Condition, "With any SL violation, the following actions shall be completed."
2. TS Action 2.2.1, which requires "Within 1 hour, notify the NRC Operations Center, in accordance with 10 CFR 50.72," is deleted.
3. TS Action 2.2.3, which requires "Within 24 hours, notify the Plant Manager, the Vice President – Hatch and the offsite review committee," is deleted.
4. TS Action 2.2.4, which requires "Within 30 days, a Licensee Event Report (LER) shall be prepared pursuant to 10 CFR 50.73. The LER shall be submitted to the NRC, the offsite review committee, the Plant Manager, and the Vice President – Hatch," is deleted.
5. TS Action 2.2.5, which requires "Operation of the unit shall not be resumed until authorized by the NRC," is deleted.
6. The remaining SL action requirements were renumbered and conforming changes to the Bases for TS 2.2 would be made.

3.1.2 Vogtle Units 1 and 2

By application dated December 16, 2010, for Vogtle Units 1 and 2, the licensee proposed revising TS 2.2, SL Violations as noted below.

1. TS Action 2.2.3, which requires "Within 1 hour, notify the NRC Operations Center, in accordance with 10 CFR 50.72," is deleted.
2. TS Action 2.2.4, which requires "Within 24 hours, notify the Plant Manager, the Vice President – Vogtle," is deleted.
3. TS Action 2.2.5, which requires "Within 30 days, a Licensee Event Report (LER) shall be prepared and submitted to the NRC pursuant to 10 CFR 50.73," is deleted.
4. TS Action 2.2.6, which requires "Operation of the unit shall not be resumed until authorized by the NRC," is deleted.
5. Conforming changes to the Bases for TS 2.2 would be made.

3.2 Hatch Unit Nos. 1 and 2 and Vogtle Units 1 and 2 Technical Specifications

The pertinent parts of the Hatch Unit Nos. 1 and 2 and Vogtle Units 1 and 2 licensing basis to the proposed TS 2.2 changes are provided below in Sections 3.2.1 through 3.2.4.

3.2.1 Safety Limits

GDC 10 requires, and SLs ensure that specified acceptable fuel design limits are not exceeded during steady state operation, normal operational transients, and anticipated operational occurrences (AOOs).

3.2.2 Reactor Core Safety Limits

The reactor core SLs are established to protect the integrity of the fuel clad barrier and to prevent the release of radioactive materials to the environs.

For Hatch, SL 2.1.1.1 and SL 2.1.1.2 ensure that the core operates within the fuel design criteria. SL 2.1.1.3 ensures that the reactor vessel water level is greater than the top of the active irradiated fuel in order to prevent elevated clad temperatures and resultant clad perforations.

For Vogtle, SL restrictions prevent overheating of the fuel and cladding, as well as possible cladding perforation that would result in the release of fission products to the reactor coolant.

3.2.3 Reactor Pressure Safety Limit

The reactor pressure SL is established to protect the integrity of the Reactor Coolant System (RCS) pressure boundary.

For Hatch, the reactor pressure SL is the most limiting allowable RCS pressure from the maximum transient RCS pressure allowable in (1) the RCS pressure vessel under the American Society of Mechanical Engineers (ASME) Code, Section III, (2) the RCS piping, valves, and fittings, and (3) the suction piping and discharge piping. The most limiting of these allowances is the 110% of the suction piping design pressures; therefore, the SL on maximum allowable RCS pressure is established at 1325 psig for Hatch.

For Vogtle, the maximum transient pressure allowed in the RCS pressure vessel under the ASME Code, Section III, is 110% of design pressure, and is 120% of design pressure in the RCS piping, valves, and fittings. The most limiting of these two allowances is the 110% of design pressure; therefore, the SL on maximum allowable RCS pressure is 2735 psig.

3.2.4 Safety Limit Violations

For Hatch, exceeding an SL may cause fuel damage and create a potential for radioactive releases in excess of 10 CFR 100, "Reactor Site Criteria," limits. Therefore, TSs require operators to insert all insertable control rods and restore compliance with the SLs within 2 hours. The 2-hour Completion Time ensures that the operators take prompt remedial action and also considers that the probability of an accident occurring during this period is minimal.

For Vogtle, if reactor core SLs are violated, then TSs require operators to place the unit in Mode 3, a Mode in which this SL is not applicable. The allowed Completion Time of 1 hour recognizes the importance of bringing the unit to a Mode of operation where this SL is not applicable, and reduces the probability of fuel damage. If the RCS pressure SL is exceeded in Modes 1 or 2, immediate RCS boundary failure may result which would create a potential for radioactive releases in excess of 10 CFR Part 100, "Reactor Site Criteria," limits. The allowable Completion Time of 1 hour recognizes the importance of reducing the power level to a Mode of operation where the potential for challenges to safety systems is minimized. If the RCS pressure SL is exceeded in Mode 3, 4, or 5, RCS pressure must be restored to within the SL value within 5 minutes. Exceeding the RCS pressure SL in Mode 3, 4, or 5 is more severe than exceeding this SL in Mode 1 or 2, since the reactor vessel temperature may be lower and the vessel material, consequently, less ductile. As such, pressure must be reduced to less than the SL within 5 minutes. The action does not require reducing Modes, since this would require reducing temperature, which would compound the problem by adding thermal gradient stresses to the existing pressure stress.

3.3 Traveler TSTF-5, Revision 1, Safety Limit Violation Reporting Requirements

The NRC-approved TSTF-5 changes to Standard Technical Specifications (STS) Revision 1 on June 11, 1996, to revise STS Section 2.2, "Safety Limit Violations," by deleting the following requirements that must be satisfied upon discovery if an SL is violated.

- Deleted STS 2.2.1[BWR/4 STS] 2.2.3 [WOG STS], a one-hour NRC reporting requirement,
- Deleted STS 2.2.3 [BWR/4 STS] 2.2.4 [WOG STS], a requirement to notify licensee management (e.g., the General Manager and the Plant Operations Manager), which is redundant to the licensee's Quality Assurance (QA) program required by 10 CFR Part 50.54 and Criterion XVI of Appendix B to 10 CFR Part 50.
- Deleted STS 2.2.4 [BWR/4 STS] 2.2.5 [WOG STS], a requirement to submit a Licensee Event Report (LER) within 30 days to the NRC and licensee management, pursuant to 10 CFR Part 50.73. This requirement is redundant to 10 CFR 50.73 and the licensee's QA program.
- Deleted STS 2.2.5 [BWR/4 STS] 2.2.6 [WOG STS], a requirement that the NRC give prior approval to resume plant operation, which is redundant to 10 CFR Section 50.36(c)(1)(i)(A).

The remaining SL-violation action requirements were renumbered, and appropriate changes to STS 2.2 Bases were made.

The licensee proposed changes to the Hatch and Vogtle TSs are consistent with the changes contained in the traveler as approved by the NRC staff. The reporting requirements in 10 CFR Section 50.36(c)(7), "Initial Notification," and 10 CFR Section 50.36(c)(8), "Written Reports," require that appropriate prompt notifications and written reports are made to the NRC. They also require that these reports be performed in accordance with the requirements of 10 CFR Section 50.72 and 10 CFR Section 50.73. Thus, if an SL is violated, appropriate reporting will be made to the NRC in accordance with the regulations. Therefore, removal of the NRC notification

and reporting requirements in TSs 2.2.1, and 2.2.4 for Hatch and 2.2.3, and 2.2.5 for Vogtle is acceptable.

The licensee also proposed to remove requirements to notify the offsite review committee, Plant Manager and Vice President within 24 hours of any SL violation and to submit a licensee event report (LER) within 30 days from Hatch TSs 2.2.3 and 2.2.4. For Vogtle, the licensee proposed to remove requirements to notify the Plant Manager and Vice President within 24 hours of any SL violation and to submit an LER within 30 days from Vogtle Units 1 and 2 TSs 2.2.4 and 2.2.5. The proposed requirements for deletion are adequately addressed in the Hatch and Vogtle QA program. Therefore, removing management notification and reporting requirements from the TSs is acceptable.

As noted above, the prior NRC approval constraint on resumption of plant operation in Hatch TS 2.2.5 and also in Vogtle TS 2.2.6 is redundant to 10 CFR Section 50.36(c)(1)(i)(A). Therefore, its removal is acceptable.

The removal of these notification, reporting, and plant startup requirements from the TSs is an administrative change because the current requirements duplicate what is already contained in 10 CFR Section 50.36 and the QA program, which is required by 10 CFR Section 50.54, "Conditions of licenses." The proposed changes do not alter existing restrictions on plant operation because entry into TS 2.2 SL Violations actions will continue to be made in accordance with Limiting Condition of Operations 3.0.1 to comply with the plant TSs as controlling decisions on plant operations. Additionally, in its application, the licensee stated that adequate administrative controls exist in administrative programs at SNC for the identification and reporting of safety limit violations, and restart restrictions following safety limit violations, in accordance with 10 CFR Section 50.36, 10 CFR Section 50.72, and 10 CFR Section 50.73. The NRC staff concludes the proposed changes only remove the administrative burden of maintaining redundant notification, reporting, and plant startup requirements.

The NRC staff finds the proposed removal of redundant notification and reporting requirements from the Hatch Unit Nos. 1 and 2 and Vogtle Units 1 and 2 TSs are acceptable because adequate administrative controls exist in administrative programs at SNC, the administrative changes are consistent with the STSs guidance in TSTF-5, Revision 1, and the changes do not adversely impact plant safety. The NRC staff reviewed the associated proposed Bases changes and had no objections because they are consistent with the STS Bases.

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 installation or use of a facility components 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 (76 FR 9828, February 22, 2011). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

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: Carl Schulten, NRR/DIRS/ITSB

Date: June 13, 2011

M. Ajluni

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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/

Patrick G. Boyle, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366
50-424 and 50-425

Enclosures:

1. Amendment No. 264 to DPR-57
2. Amendment No. 208 to NPF-5
3. Amendment No. 161 to NPF-68
4. Amendment No. 143 to NPF-81
5. Safety Evaluation

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Amendment No. ML11096A064

*SE transmitted by memo dated March 10, 2011 ML110190213

OFFICE	NRR/LPL2-1/PM	NRR/LPL2-1/LA	NRR/ITSB/BC	OGC	NRR/LPL2-1/BC	NRR/LPL2-1/PM
NAME	PBoyle	MO'Brien (5/26/11 ABaxter for)	RElliott*	RHarper	GKulesa	PBoyle
DATE	05/19/11	06/02/11 (ABaxter on OGC comments)	03/10/11	05/31/11	06/09/11	06/09/11

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