

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

January 13, 2017

Mr. Charles R. Pierce Regulatory Affairs Director Southern Nuclear Operating Company, Inc. P.O. Box 1295 / Bin – 038 Birmingham, AL 35201-1295

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2; VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2; AND EDWIN I. HATCH NUCLEAR PLANT, UNIT NOS. 1 AND 2 – ISSUANCE OF AMENDMENTS REGARDING THE ADOPTION OF TSTF-65-A, REVISION 1, "USE OF GENERIC TITLES FOR UTILITY POSITIONS" (CAC NOS. MF7466, MF7467, MF7468, MF7469, MF7470, AND MF7471)

Dear Mr. Pierce:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 207 to the Joseph M. Farley Nuclear Plant (FNP) Unit 1, Renewed Facility Operating License No. NPF-2; Amendment No. 203 to FNP, Unit 2, Renewed Facility Operating License No. NPF-8; Amendment No. 183 to the Vogtle Electric Generating Plant (VEGP), Unit 1, Renewed Facility Operating License NPF-68; Amendment No. 166 to VEGP, Unit 2, Renewed Facility Operating License NPF-81; Amendment No. 282 to the Edwin I. Hatch Nuclear Plant (HNP), Unit No. 1, Renewed Facility Operating License DPR-57; and Amendment No. 227 to HNP, Unit No. 2, Renewed Facility Operating License NPF-5.

The amendments are in response to your application dated March 14, 2016, as supplemented by letters dated May 17, 2016, and October 26, 2016. The amendments consist of changes that insert generic personnel titles in lieu of plant-specific personnel titles. In addition, the term "plant-specific titles" is replaced with "generic titles" in Technical Specification (TS) 5.2.1.a for each plant. This change also revises HNP, Unit Nos. 1 and 2, TS 5.1 to be consistent with the corresponding FNP, Units 1 and 2, and VEGP, Units 1 and 2, TS 5.1, and make it consistent with the corresponding Improved Standard Technical Specifications section. Finally, several corrections were made to the HNP, Unit Nos. 1 and 2, TS to fix administrative errors from previously approved amendments.

C. Pierce

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

Sincerely,

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Michael D. Orenak, Project Manager Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-348, 50-364, 50-424, 50-425, 50-321, and 50-366

Enclosures:

- 1. Amendment No. 207 to NPF-2
- 2. Amendment No. 203 to NPF-8
- 3. Amendment No. 183 to NPF-68
- 4. Amendment No. 166 to NPF-81
- 5. Amendment No. 282 to DPR-57
- 6. Amendment No. 227 to NPF-5
- 7. Safety Evaluation

cc w/enclosures: Distribution via Listserv



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

# SOUTHERN NUCLEAR OPERATING COMPANY, INC.

# ALABAMA POWER COMPANY

# DOCKET NO. 50-348

# JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1

### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 207 Renewed License No. NPF-2

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Joseph M. Farley Nuclear Plant, Unit 1, Renewed Facility Operating License No. NPF-2, filed by Southern Nuclear Operating Company, Inc. (the licensee), dated March 14, 2016, as supplemented by letters dated May 17, 2016, and October 26, 2016, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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;
  - D. The issuance of this license 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 amended by 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-2 is hereby amended to read as follows:
  - (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 207, are hereby incorporated in the renewed license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: January 13, 2017



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

# SOUTHERN NUCLEAR OPERATING COMPANY, INC.

# ALABAMA POWER COMPANY

# DOCKET NO. 50-364

# JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 2

### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 203 Renewed License No. NPF-8

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Joseph M. Farley Nuclear Plant, Unit 2, Renewed Facility Operating License No. NPF-8, filed by Southern Nuclear Operating Company, Inc. (the licensee), dated March 14, 2016, as supplemented by letters dated May 17, 2016, and October 26, 2016, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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;
  - D. The issuance of this license 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 amended by 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-8 is hereby amended to read as follows:
  - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 203, are hereby incorporated in the renewed license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: January 13, 2017

# ATTACHMENT TO LICENSE AMENDMENT NOS. 207 AND 203

# JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

# TO RENEWED FACILITY OPERATING LICENSE NOS. NPF-2 AND NPF-8

#### DOCKET NOS. 50-348 AND 50-364

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

Remove Pages	Insert Pages		
<u>License</u> License No. NPF-2, page 4 License No. NPF-8, page 3	<u>License</u> License No. NPF-2, page 4 License No. NPF-8, page 3		
TSs	TSs		
5.2-1	5.2-1		
5.2-2	5.2-2		
5.2-3	5.2-3		
5.3-1	5.3-1		
5.5-1	5.5-1		
5.7-1	5.7-1		

#### (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 207, are hereby incorporated in the renewed license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

-4-

#### (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 renewed license supported by a favorable evaluation by the Commission.

- Southern Nuclear shall not operate the reactor in Operational Modes 1 and 2 with less than three reactor coolant pumps in operation.
- b. Deleted per Amendment 13
- c. Deleted per Amendment 2
- d. Deleted per Amendment 2
- e. Deleted per Amendment 152

Deleted per Amendment 2

- f. Deleted per Amendment 158
- g. Southern Nuclear shall maintain a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:
  - Identification of a sampling schedule for the critical parameters and control points for these parameters;
  - 2) Identification of the procedures used to quantify parameters that are critical to control points;
  - 3) Identification of process sampling points;
  - 4) A procedure for the recording and management of data;
  - 5) Procedures defining corrective actions for off control point chemistry conditions; and

Farley - Unit 1

Renewed License No. NPF-2 Amendment No. 207

- (2) Alabama Power Company, pursuant to Section 103 of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess but not operate the facility at the designated location in Houston County, Alabama in accordance with the procedures and limitations set forth in this renewed 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 byproducts, 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; and
- (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.
- C. This renewed 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 incorporate below:
  - (1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at reactor core power levels not in excess of 2775 megawatts thermal.

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 203 , are hereby incorporated in the renewed license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

- (3) Delete per Amendment 144
- (4) Delete Per Amendment 149
- (5) Delete per Amend 144

#### 5.1 Responsibility

5.1.1 The plant manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

The plant manager or his designee shall approve, prior to implementation, each proposed test, experiment or modification to systems or equipment that affect nuclear safety.

5.1.2 A Senior Reactor Operator (SRO) shall be responsible for the control room command function. During any absence of the responsible SRO from the control room while the unit is in MODE 1, 2, 3, or 4, an individual with an active SRO license shall be designated to assume the control room command function. During any absence of the responsible SRO from the control room while the unit is in MODE 5 or 6, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function. A single individual may be responsible for the control room command function for both units.

#### 5.2 Organization

#### 5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements including the generic titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications shall be documented in the FSAR or the SNC Quality Assurance Topical Report;
- The plant manager shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;
- c. A specified corporate officer shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and
- d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures.

#### 5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A non-licensed operator shall be assigned to each reactor containing fuel and an additional non-licensed operator shall be assigned for each control room from which a reactor is operating in MODES 1, 2, 3, or 4. With both units in MODES 5 or 6 or defueled, a total of three non-licensed operators are required.

(continued)

Farley Units 1 and 2

Amendment No. 207 (Unit 1) Amendment No. 203 (Unit 2)

#### 5.2 Organization

#### 5.2.2 <u>Unit Staff</u> (continued)

- At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room. A single SRO may fill this position for both units.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A radiation protection technician shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Deleted.

(continued)

Amendment No. 207 (Unit 1) Amendment No. 203 (Unit 2)

#### 5.2 Organization

#### 5.2.2 Unit Staff (continued)

- f. The operations manager or at least one assistant operations manager shall hold an SRO license.
- g. The Shift Technical Advisor (STA) shall provide advisory technical support to the responsible SRO in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift. The same individual may fill this position for both units.

#### 5.0 ADMINISTRATIVE CONTROLS

#### 5.3 Unit Staff Qualifications

Each member of the unit staff, including plant manager, shall meet or exceed the 5.3.1 minimum qualifications of ANSI N18.1-1971 for comparable positions and the supplemental requirements specified in 10 CFR 55, except for (1) the senior individual in charge of radiation protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975. Personnel who complete an accredited program which has been endorsed by the NRC shall meet the requirements of the accredited program in lieu of the above. The operations manager shall meet or exceed the above requirements except that Technical Specification 5.2.2.f shall specify the requirements regarding the holding of an SRO license.

#### 5.5 Programs and Manuals

The following programs shall be established, implemented, and maintained.

#### 5.5.1 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating, and Radioactive Effluent Release Reports required by Specification 5.6.2 and Specification 5.6.3.

Licensee initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
  - 1. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and
  - a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;
- b. Shall become effective after the approval of the plant manager; and
- c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

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Farley Units 1 and 2

Amendment No. 207 (Unit 1) Amendment No. 203 (Unit 2)

#### 5.7 High Radiation Area

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., radiation protection personnel) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the radiation protection supervision in the RWP.
- 5.7.2 In addition to the requirements of Specification 5.7.1, areas accessible to personnel with radiation levels, as measured at 30 cm from the radiation source or from any surface that the radiation penetrates, such that a major portion of the body could receive in one hour a dose greater than 1000 mrem, shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Foreman on duty or radiation protection supervision. Doors shall remain locked

(continued)

Farley Units 1 and 2

Amendment No.207 (Unit 1) Amendment No.203 (Unit 2)



#### 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. 50-424

# VOGTLE ELECTRIC GENERATING PLANT, UNIT 1

# AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 183 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) Renewed 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 14, 2016, as supplemented by letters dated May 17, 2016, and October 26, 2016, 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-68 is hereby amended to read as follows:
  - (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 183, 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: January 13, 2017



#### 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. 166 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) Renewed 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 14, 2016, as supplemented by letters dated May 17, 2016, and October 26, 2016, 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;
  - 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.
- 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-81 is hereby amended to read as follows:
  - (2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 166, 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Mich T. Mulday

Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: January 13, 2017

# ATTACHMENT TO LICENSE AMENDMENT NOS. 183 and 166

#### VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

#### RENEWED FACILITY OPERATING LICENSE NOS. NPF-68 AND NPF-81

### DOCKET NOS. 50-424 AND 50-425

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	Insert Pages
<u>License</u> License No. NPF-68, page 4 License No. NPF-81, page 3	<u>License</u> License No. NPF-68, page 4 License No. NPF-81, page 3
<u>TSs</u> 5.1-1 5.2-1 5.2-2 5.2-3	<u>TSs</u> 5.1-1 5.2-1 5.2-2 5 2-3
5.2-4	
5.3-1	5.3-1
5.5-1	5.5-1
5.7-1	5.7-1

#### (1) <u>Maximum Power Level</u>

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) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 183, 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) <u>Mitigation Strategy License Condition</u>

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 and 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 my 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 1 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. 166 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

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#### 5.0 ADMINISTRATIVE CONTROLS

#### 5.1 Responsibility

5.1.1 The plant manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

The plant manager or his designee shall approve, prior to implementation, each proposed test, experiment, or modification to systems or equipment that affect nuclear safety.

5.1.2 A Senior Reactor Operator (SRO) shall be responsible for the control room command function while either unit is in MODES 1, 2, 3, or 4, or it is acceptable to designate an SRO as responsible for the control room command function for each unit. While both units are in MODE 5, 6, or defueled, an SRO or Reactor Operator (RO) shall be designated to assume the control room command function.

#### 5.2 Organization

#### 5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements including the generic titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications shall be documented in the FSAR or the SNC Quality Assurance Topical Report;
- The plant manager shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;
- c. A specified corporate officer shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and
- d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures.

#### 5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A non-licensed operator shall be assigned to each reactor and an additional non-licensed operator shall be assigned for the control room when a reactor is operating in MODES 1,

(continued)

Vogtle Units 1 and 2

Amendment No.183(Unit 1) Amendment No.166(Unit 2)

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#### 5.2.2 Unit Staff (continued)

2, 3, or 4. With both units in MODES 5 or 6 or defueled, a total of three non-licensed operators are required for the two units.

b. At least one licensed RO shall be present in the control room when fuel is in the reactor.

A single SRO licensed on both units may fulfill this function for both units.

In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed SRO shall be present in the control room.

- c. The shift crew composition may be less than the minimum requirement of 10 CFR 50.54 (m)(2)(i) and 5.2.2.a and g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. ------NOTE-----NOTE----- A single radiation protection technician may fulfill this position for both units.

A radiation protection technician shall be on site when fuel is in the reactor. | The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

e. Deleted.

(continued)

Vogtle Units 1 and 2

Amendment No. 183 (Unit 1) Amendment No. 166 (Unit 2)

#### 5.2 Organization

#### 5.2.2 Unit Staff (continued)

- f. The operations manager or at least one assistant operations manager shall hold an SRO license.
- g. An individual shall be assigned who provides technical support in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This individual shall be available for duty when the plant is in modes 1-4. At other times, this individual is not required. In addition, this individual shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift. This position may also be filled by the shift supervisor or the individual with an SRO license provided that person meets the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

#### **5.0 ADMINISTRATIVE CONTROLS**

#### 5.3 Unit Staff Qualifications

Each member of the unit staff, including plant manager, shall meet or exceed the 5.3.1 minimum qualifications of Regulatory Guide 1.8, Revision 2, 1987, and, for licensed staff, 10 CFR 55.59. Prior to meeting the recommendations of Regulatory Guide 1.8, Revision 2, personnel may be trained to perform specific tasks and will be qualified to perform those tasks independently. Personnel who complete an accredited program which has been endorsed by the NRC shall meet the requirements of the accredited program in lieu of the above. The operations manager shall meet or exceed the above requirements except that Technical Specification 5.2.2.f shall specify the requirements regarding the holding of an SRO license.

#### 5.5 Programs and Manuals

The following programs shall be established, implemented, and maintained.

#### 5.5.1 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The ODCM shall also contain the Radioactive Effluent Controls and Radiological Environmental Monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release Reports required by Specification 5.6.2 and Specification 5.6.3.

Licensee initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
  - 1. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s),
  - a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;
- b. Shall become effective after the approval of the plant manager; and
- c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page

(continued)

Vogtle Units 1 and 2

Amendment No.183(Unit 1) Amendment No.166(Unit 2)

#### 5.7 High Radiation Area

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area, and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., radiation protection technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by radiation protection supervision in the RWP.
- 5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr shall be provided with locked or continuously guarded doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of Operations or radiation protection supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for

(continued)

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Vogtle Units 1 and 2

Amendment No183(Unit 1) Amendment No166(Unit 2)



#### 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. 282 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 March 14, 2016, as supplemented by letters dated May 17, 2016, and October 26, 2016, 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) <u>Technical Specifications</u>

The Technical Specifications (Appendix A) and the Environmental Protection Plan (Appendix B), as revised through Amendment No. 282, 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 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: January 13, 2017

# ATTACHMENT TO LICENSE AMENDMENT NO. 282

### EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 1

#### 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.

Insert Pages
<u>License</u> 4
<u>TSs</u> 3.4-20 3.6-35
5.0-1
5.0-2
5.0-4
5.0-5
5.0-7
5.0-22

for sample analysis or instrumentation 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 sate reactor core power levels not in excess of 2804 megawatts thermal.

(2) <u>Technical Specifications</u>

The Technical Specifications (Appendix A) and the Environmental Plan (Appendix B), as revised through Amendment No. 282 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) <u>Fire Protection</u>

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

# SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.4.9.4	Only required to be met in MODES 1, 2, 3, and 4 during startup of a recirculation pump.	
	Verify the difference between the reactor coolant temperature in the recirculation loop to be started and the RPV coolant temperature is $\leq$ 50°F.	Once within 15 minutes prior to starting an idle recirculation pump
SR 3.4.9.5	NOTENOTE Only required to be met when tensioning/ detensioning the reactor vessel head bolting studs.	
	Verify reactor vessel flange and head flange temperatures are within the limits specified in the PTLR.	Once within 30 minutes prior to tensioning/ detensioning the reactor vessel head bolting studs and in accordance with the Surveillance Frequency Control Program
		(continued)

ACTIONS
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	CONDITION	R	EQUIRED ACTION	COMPLETION TIME
C.	(continued)	C.2	Suspend CORE ALTERATIONS.	Immediately
		AND		
		C.3	Initiate action to suspend OPDRVs.	Immediately

# SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.4.1.1	Verify all secondary containment equipment hatches are closed and sealed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.2	Verify one secondary containment access door in each access opening is closed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.3	NOTE	In accordance with
	<ul> <li>Verify secondary containment can be drawn down to ≥ 0.20 inch of vacuum water gauge in</li> <li>≤ 10 minutes using required standby gas treatment (SGT) subsystem(s).</li> </ul>	In accordance with the Surveillance Frequency Control Program
		(continued)

### 5.1 Responsibility

5.1.1	The plant manager shall be responsible for overall unit operation and for delegation in writing of the succession of this responsibility during his absence.
5.1.2	The plant manager or his designee shall approve, prior to implementation, each proposed test, experiment or modification to systems or equipment that affect nuclear safety.
5.1.3	A Senior Reactor Operator (SRO) shall be responsible for the control room command function. During any absence of the responsible SRO from the control room while either unit is in MODE 1, 2, or 3, an individual with an active SRO license shall be designated to assume the control room command function. During any absence of the responsible SRO from the control room while both units are in MODE 4 or 5, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function.

#### 5.2 Organization

#### 5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including generic titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Plant Hatch Unit 1 FSAR or the SNC Quality Assurance Topical Report;
- The plant manager shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;
- c. A specified corporate officer shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and
- d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures.

#### 5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A total of three plant equipment operators (PEOs) for the two units is required in all conditions. At least one of the required PEOs shall be assigned to each reactor containing fuel.

(continued)

#### 5.2 Organization

### 5.2.2 <u>Unit Staff</u> (continued)

- f. The operations manager or at least one assistant operations manager shall hold an SRO license.
- g. The Shift Technical Advisor (STA) shall provide advisory technical support to the shift supervisor in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

#### 5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff, including plant manager, shall either meet or exceed the minimum qualifications of ANSI N18.1-1971, or shall meet or exceed the minimum qualifications of the accredited program requirements for those positions stipulated in Enclosure 1 to letter NL-07-1925. The operations manager | shall meet or exceed the above requirements except that Technical Specification 5.2.2.f shall specify the requirements regarding the holding of an SRO license. The senior individual in charge of radiation protection shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

#### 5.5 Programs and Manuals

The following programs and manuals shall be established, implemented, and maintained.

#### 5.5.1 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release Reports required by Specification 5.6.2 and Specification 5.6.3, respectively.

Licensee initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
  - 1. Sufficient information to support the change(s) and appropriate analyses or evaluations justifying the change(s), and
  - A determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.106, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and does not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the onsite review committee and the approval of the plant manager; and
- c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

(continued)

#### 5.7 High Radiation Area

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601, in lieu of the requirements of 10 CFR 20.1601a, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area. Entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., radiation protection technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates < 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility radiation protection supervision in the RWP.
- 5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, but less than 500 Rads in 1 hour measured at 1 meter from the radiation source or from any surface that the radiation penetrates, shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Supervision on duty or radiation protection supervision.



#### 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. 50-366

# EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2

# AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 227 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 March 14, 2016, as supplemented by letters dated May 17, 2016, and October 26, 2016, 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.

- 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) <u>Technical Specifications</u>

The Technical Specifications (Appendix A) and the Environmental Protection Plan (Appendix B), as revised through Amendment No. 227, 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 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Miler T. Markley

Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: January 13, 2017

# ATTACHMENT TO LICENSE AMENDMENT NO. 227

### EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2

#### 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	Insert Pages
<u>License</u>	<u>License</u>
4	4
<u>TSs</u>	<u>TSs</u>
1.1-5	1.1-5
3.6-34	3.6-34
5.0-1	5.0-1
5.0-2	5.0-2
5.0-4	5.0-4
5.0-5	5.0-5
5.0-7	5.0-7
5.0-22	5.0-22

- (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<sup>2</sup> specified or incorporated below:

#### (1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at steady sate 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. 227 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

Amendment No. 227

<sup>&</sup>lt;sup>2</sup> The original licensee authorized to possess, use, and operate the facility with Georgia Power Company (GPC). Consequently, certain historical references to GPC remain in certain license conditions.

# 1.1 Definitions (continued)

PHYSICS TESTS	PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are:		
	a.	Described in Chapter 14, Initial Tests and Operation, of the FSAR;	
	b.	Authorized under the provisions of 10 CFR 50.59; or	
	C.	Otherwise approved by the Nuclear Regulatory Commission.	
PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)	The PTLR is the unit specific document that provides the reactor vessel pressure and temperature limits, including heatup and cooldown rates, for the current reactor vessel fluence period. These pressure and temperature limits shall be determined for each fluence period in accordance with Specification 5.6.7.		
RATED THERMAL POWER (RTP)	RTP shall be a total reactor core heat transfer rate to the reactor coolant of 2804 MWt.		
REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME	The RPS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RPS trip setpoint at the channel sensor until de-energization of the scram pilot valve solenoids. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.		
SHUTDOWN MARGIN (SDM)	SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming that:		
	a.	The reactor is xenon free;	
	b.	The moderator temperature is 68°F; and	
	С.	All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.	
STAGGERED TEST BASIS	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during <i>n</i> Surveillance Frequency intervals, where <i>n</i> is the total number of systems, subsystems, channels, or other designated components in the associated function.		
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the		
	(continued)		

HATCH UNIT 2

Amendment No. 227

ACTIONS
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	CONDITION	R	EQUIRED ACTION	COMPLETION TIME
C.	(continued)	C.2	Suspend CORE ALTERATIONS.	Immediately
		AND		
		C.3	Initiate action to suspend OPDRVs.	Immediately

# SURVEILLANCE REQUIREMENTS

	FREQUENCY	
SR 3.6.4.1.1	Verify all secondary containment equipment hatches are closed and sealed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.2	Verify one secondary containment access door in each access opening is closed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.3	NOTE The number of standby gas treatment (SGT) subsystem(s) required for this Surveillance is dependent on the secondary containment configuration, and shall be one less than the number required to meet LCO 3.6.4.3, "Standby Gas Treatment (SGT) System," for the given configuration. 	In accordance with the Surveillance Frequency Control Program

#### 5.1 Responsibility

5. <b>1</b> .1	The plant manager shall be responsible for overall unit operation and for
	delegation in writing of the succession of this responsibility during his absence.

- 5.1.2 The plant manager or his designee shall approve, prior to implementation, each proposed test, experiment or modification to systems or equipment that affect nuclear safety.
- 5.1.3 A Senior Reactor Operator (SRO) shall be responsible for the control room command function. During any absence of the responsible SRO from the control room while either unit is in MODE 1, 2, or 3, an individual with an active SRO license shall be designated to assume the control room command function. During any absence of the responsible SRO from the control room while both units are in MODE 4 or 5, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function.

#### 5.2 Organization

#### 5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including generic titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Plant Hatch Unit 2 FSAR or the SNC Quality Assurance Topical Report;
- b. The plant manager shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;
- c. A specified corporate officer shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and
- d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures.

#### 5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A total of three plant equipment operators (PEOs) for the two units is required in all conditions. At least one of the required PEOs shall be assigned to each reactor containing fuel.

(continued)

#### 5.2 Organization

- 5.2.2 <u>Unit Staff</u> (continued)
  - f. The operations manager or assistant operations manager shall hold an SRO license.
  - g. The Shift Technical Advisor (STA) shall provide advisory technical support to the shift supervisor in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

#### 5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff, including plant manager, shall either meet or exceed the minimum qualifications of ANSI N18.1-1971, or shall meet or exceed the minimum qualifications of the accredited program requirements for those positions stipulated in Enclosure 1 to letter NL-07-1925. The operations manager | shall meet or exceed the above requirements except that Technical Specification 5.2.2.f shall specify the requirements regarding the holding of an SRO license. The senior individual in charge of radiation protection shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

#### 5.5 Programs and Manuals

The following programs and manuals shall be established, implemented, and maintained.

#### 5.5.1 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release Reports required by Specification 5.6.2 and Specification 5.6.3, respectively.

Licensee initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
  - 1. Sufficient information to support the change(s) and appropriate analyses or evaluations justifying the change(s), and
  - A determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.106, 40 CFR 190,10 CFR 50.36a, and 10 CFR 50, Appendix I, and does not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the onsite review committee and the approval of the plant manager; and
- c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

#### 5.0 ADMINISTRATIVE CONTROLS

#### 5.7 High Radiation Area

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601, in lieu of the requirements of 10 CFR 20.1601a, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area. Entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., radiation protection technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates < 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

> Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility radiation protection supervision in the RWP.
- 5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, but less than 500 Rads in 1 hour measured at 1 meter from the radiation source or from any surface that the radiation penetrates, shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Supervision on duty or radiation protection supervision.



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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO

# JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

# AMENDMENT NO. 207 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-2

### AMENDMENT NO. 203 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-8

<u>AND</u>

# VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

# AMENDMENT NO. 183 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-68

# AMENDMENT NO. 166 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-81

<u>AND</u>

# EDWIN I HATCH, UNIT NOS. 1 AND 2

# AMENDMENT NO. 282 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-57

# AMENDMENT NO. 227 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-5

# SOUTHERN NUCLEAR OPERATING COMPANY, INC.

# DOCKET NOS. 50-348, 50-364, 50-424, 50-425, 50-321, AND 50-366

# 1.0 INTRODUCTION

By application dated March 14, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16074A185), as supplemented by letters dated May 17, 2016, and October 26, 2016 (ADAMS Accession Nos. ML16138A324 and ML16300A429, respectively), Southern Nuclear Operating Company (SNC, the licensee) requested changes to the Technical Specifications (TSs) in the Renewed Facility Operating Licenses (RFOLs) for the Joseph M. Farley Nuclear Plant (FNP), Units 1 and 2; Vogtle Electric Generating Plant, Units 1 and 2 (VEGP); and Edwin I. Hatch Nuclear Plant (HNP), Unit Nos. 1 and 2. The supplemental letters dated May 17, 2016, and October 26, 2016, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC or the Commission) staff's original

Enclosure 7

proposed no significant hazards consideration determination as published the *Federal Register* on May 24, 2016 (81 FR 32809).

The amendments consist of changes that insert generic personnel titles in lieu of plant-specific personnel titles. In addition, the term "plant-specific titles" is replaced with "generic titles" in TS 5.2.1.a for each plant. This change also revises HNP, Unit Nos. 1 and 2, TS 5.1 to be consistent with the corresponding FNP, Units 1 and 2, and VEGP, Units 1 and 2, TS 5.1, and make it consistent with the corresponding Improved Standard Technical Specifications section. Finally, several corrections were made to the HNP, Unit Nos. 1 and 2, TSs to fix administrative errors from amendments approved previously.

### 2.0 REGULATORY EVALUATION

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, "Technical specifications," requires TSs for nuclear reactors to include items in the following categories: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. The regulation does not specify the particular requirements to be included in a plant's TSs. The regulation in 10 CFR 50.36(c)(5), "Administrative controls," states, in part:

Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operating of the facility in a safe manner.

NUREG-1431, Revision 4.0, "Standard Technical Specifications – Westinghouse Plants: Specifications" (ADAMS Accession No. ML12100A222), contains the Standard Technical Specifications (STS) for Westinghouse plants. NUREG-1433, Revision 4.0, "Standard Technical Specifications – General Electric BWR/4 Plants: Specifications" (ADAMS Accession No. ML12104A192), contains the STS for General Electric Boiling Water Reactor/4 (BWR/4) plants. The changes reflected in Revision 4.0 in both NUREGs result from the experience gained from plant operation using the improved STS and extensive public technical meetings and discussions among the NRC staff and various nuclear power plant licensees and the Nuclear Steam Supply System Owners Groups. The revised position titles in both NUREG-1431, Revision 4.0 and NUREG-1433, Revision 4.0, were compared to proposed changes in TS Section 5.0, "Administrative Controls."

Technical Specifications Task Force (TSTF) Traveler TSTF-65-A, Revision 1, "Use of generic titles for utility positions" (ADAMS Accession No. ML040080572), proposes the use of generic personnel titles as provided by American National Standards Institute/American Nuclear Society (ANSI/ANS)-3.1 in lieu of plant-specific personnel titles. TSTF-65-A provides a direct link between personnel qualifications in the licensee's TSs and the STS-required personnel qualifications. TSTF-65-A was approved on December 2, 1997, during a public meeting between the NRC and the TSTF, but no written approval from the NRC exists. TSTF-65-A was incorporated into Revision 2 of NUREG-1431 (ADAMS Accession No. ML011090393) and Revision 2 of NUREG-1433 (ADAMS Accession No. ML011090341), both issued in April 2001.

### 3.0 TECHNICAL EVALUATION

In general, there are two classes of changes to the TSs: (1) changes needed to reflect contents of 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. These amendments deal with the second class of change; namely, administrative changes.

The TS revisions proposes changes that are editorial, administrative, or provide clarification. In order for these changes to be acceptable, the NRC staff must determine that the editorial, administrative, and clarification changes continue to meet the requirements in 10 CFR 50.36.

In the application, the licensee submitted proposed changes to TS 5.1, TS 5.2, TS 5.3, TS 5.5, and TS 5.7. In its March 14, 2016, application, the licensee stated that for the replacement of plant-specific titles with generic titles, the proposed title changes do not have any safety implications, as the responsibilities and requirements of the position are unchanged.

The NRC staff reviewed the proposed changes to the FNP, VEGP, and HNP TSs against the changes approved in TSTF-65-A and the current versions of the TSs in NUREG-1431, Revision 4.0 (for FNP and VEGP) or NUREG-1433, Revision 4.0 (for HNP).

3.1 Section 5.1, "Responsibility"

In the application dated March 14, 2016, the licensee proposed the following changes for TS 5.1:

FNP, Units 1 and 2, and VEGP, Units 1 and 2:

• Replace specific titles "Plant Manager" and "Vice President – Farley/Vogtle" with generic title "plant manager."

The TS 5.1 changes for FNP and VEGP are consistent with TSTF-65-A and NUREG-1431, Revision 4.0. The proposed changes do not eliminate any of the qualifications, responsibilities, or requirements for these positions, since the plant-specific personnel titles are currently identified in licensee-controlled documents, such as the SNC Quality Assurance Topical Report (QATR) (ADAMS Accession No. ML16187A263). The NRC staff concludes that the proposed changes are administrative in nature and that the proposed FNP and VEGP TS 5.1 maintains the administrative controls required by 10 CFR 50.36. Therefore, the proposed changes are acceptable.

HNP, Unit Nos. 1 and 2:

- Replace specific title "Plant Manager" with generic title "plant manager"
- Revise responsibilities to be consistent with FNP and VEGP, specifically:
  - Delete the current TS 5.1.1 that states the Vice President Hatch will have direct executive oversight over all aspects of Plant Hatch.

- Manager for certain plant support functions.
   Insert a TS (new TS 5.1.2) to include a requirement for the plant manager or his designee shall approve, prior to implementation, each proposed test, experiment or modification to systems or equipment that affects nuclear safety.
- Delete the current TS 5.1.3 that requires the Plant Manager or his designee to be responsible for the Radiological Environmental Monitoring Program and for the writing of the Annual Radiological Environmental Operating Report.
- Delete the current TS 5.1.4 that requires that the individuals listed in TS 5.1.1 through 5.1.3 are responsible for the accuracy of the procedures needed to implement the responsibilities.
- Renumber the current TS 5.1.5 to TS 5.1.3.

The TS 5.1 changes for HNP are consistent with TSTF-65-A and NUREG-1433, Revision 4.0. The new TS 5.1.2 adds the second sentence of TSTF-65-A TS 5.1.1 into the HNP TSs. The current SNC QATR states the roles and responsibilities of senior SNC management. As such, the information contained in the current TS 5.1.1 and TS 5.1.4, and the Site Support Manager support functions statement in the current TS 5.1.2, are redundant. Additionally, the Radiological Environmental Monitoring Program and the Annual Radiological Environmental Operating Report are already required to be submitted to the NRC in accordance with TS 5.6.2; therefore, the requirement is redundant. The NRC staff concludes that the proposed changes are administrative in nature and the revised HNP TS 5.1 maintains the administrative controls required by 10 CFR 50.36. Therefore, the proposed changes are acceptable.

# 3.2 Section 5.2, "Organization"

In the application dated March 14, 2016, the licensee proposed the following changes for TS 5.1:

FNP, Units 1 and 2, and VEGP, Units 1 and 2:

• Added the statements in TS 5.2.1.a:

...including the generic titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications...

and

... or in the SNC Quality Assurance Topical Report.

- Modify TS 5.2.1.b to replace plant-specific title "Plant Manager" with generic title "plant manager"
- Modify TS 5.2.1.c to replace plant-specific title "The Vice President Farley/Vogtle" with generic title "A specified corporate officer"

- Modify TS 5.2.2.d to replace plant-specific title "Health Physics Technician" with generic title "radiation protection technician"
- Modify TS 5.2.2.f to replace plant-specific title "Operations Manager" with generic title "operations manager"
- Modify TS 5.2.2.f to replace plant-specific title "Operations Superintendent" with generic title "assistant operations manager"
- Modify TS 5.2.2.g to replace plant-specific title "Shift Superintendent" with generic title "shift supervisor" for VEGP only

The proposed changes to TS 5.2 for FNP and VEGP are consistent with TSTF-65-A and NUREG-1431, Revision 4.0, except for the replacement of "plant-specific" titles with the term "generic" titles. The replacement of "plant-specific" titles with "generic titles" promotes consistency between the licensee's TSs and QATR, and does not affect the prerequisite qualifications, the assigned responsibilities, or the organizational reporting relationships described in the TSs or QATR documents. The NRC staff concludes that the proposed changes are administrative in nature and that the revised FNP and VEGP TS 5.2 maintains the administrative controls required by 10 CFR 50.36. Therefore, the proposed changes are acceptable.

HNP, Unit Nos. 1 and 2:

- Modify TS 5.2.1.a to replace "plant-specific" titles with "generic" titles
- Add the following statement in TS 5.2.1.a:

... or the SNC Quality Assurance Topical Report.

- Modify TS 5.2.1.b to replace plant-specific title "Plant Manager" with generic title "plant manager"
- Modify TS 5.2.1.c to replace plant-specific title "The Vice President Hatch" with generic title "A specified corporate officer"
- Modify TS 5.2.2.f to replace plant-specific title "Operations Manager" with generic title "operations manager"
- Modify TS 5.2.2.f to replace plant-specific title "Operations Superintendent" with generic title "assistant operations manager"

The proposed changes to TS 5.2 for HNP are consistent with TSTF-65-A and NUREG-1433, Revision 4.0. The proposed changes do not eliminate any of the qualifications, responsibilities, or requirements for these positions, since the plant-specific personnel titles are currently identified in licensee-controlled documents, such as the QATR. The NRC staff concludes that the proposed changes are administrative in nature and the revised HNP TS 5.2 maintains the administrative controls required by 10 CFR 50.36. Therefore, the proposed changes are acceptable.

### 3.3 Section 5.3, "Unit Staff Qualifications"

In the application dated March 14, 2016, the licensee proposed the following changes for TS 5.3:

FNP, Units 1 and 2, and HNP, Unit Nos. 1 and 2:

- Modify TS 5.3.1 to replace plant-specific title "The Vice President Farley/Hatch and Plant Manager" with generic title "plant manager"
- Modify TS 5.3.1 to replace plant-specific title "Health Physics" with generic title "radiation protection"
- Modify TS 5.3.1 to replace plant-specific title "Operations Manager" with generic title "operations manager"

VEGP, Units 1 and 2:

- Modify TS 5.3.1 to replace plant-specific title "The Vice President Vogtle and Plant Manager" with generic title "plant manager"
- Modify TS 5.3.1 to replace plant-specific title "Operations Manager" with generic title "operations manager"

The proposed changes to TS 5.3 for FNP, VEGP, and HNP are consistent with NUREG-1431, Revision 4.0, and NUREG-1433, Revision 4.0. TSTF-65-A does not contain revisions for TS 5.3; however, the proposed changes are consistent with the convention for the other changes from plant-specific to generic titles addressed in TSTF-65-A. The proposed changes do not eliminate any of the qualifications, responsibilities, or requirements for these positions, since the plant-specific personnel titles are currently identified in licensee-controlled documents, such as the QATR. The NRC staff concludes that the proposed changes are administrative in nature and the revised FNP, HNP, and VEGP TS 5.3 maintains the administrative controls required by 10 CFR 50.36. Therefore, the proposed changes are acceptable.

3.4 Section 5.5, "Programs and Manuals"

In its letter dated May 17, 2016, the licensee proposed the following changes for TS 5.5:

FNP, Units 1 and 2; HNP, Unit Nos. 1 and 2; and VEGP, Units 1 and 2:

• Modify TS 5.5.1.b to replace plant-specific title "The Vice President - Farley/Vogtle/Hatch" with generic title "plant manager"

The TS 5.5 changes for FNP, VEGP, and HNP are consistent with TSTF-65-A, NUREG-1431, Revision 4.0, and NUREG-1433, Revision 4.0. The proposed changes do not eliminate any of the qualifications, responsibilities, or requirements for these positions, since the plant-specific personnel titles are currently identified in licensee-controlled documents, such as the QATR. The NRC staff concludes that the proposed changes are administrative in nature and the revised TS 5.5 for FNP, VEGP, and HNP maintains the administrative controls required by 10 CFR 50.36. Therefore, the proposed changes are acceptable.

# 3.5 Section 5.7, "High Radiation Area"

In its letter dated May 17, 2016, the licensee proposed the following changes for TS 5.7:

FNP, Units 1 and 2:

 Modify TS 5.7.1 and TS 5.7.2 to replace plant-specific title "health physics" with generic title "radiation protection"

VEGP, Units 1 and 2, and HNP, Units 1 and 2:

- Modify TS 5.7.1 to replace plant-specific title "Health Physics Technicians" with generic title "radiation protection technician"
- Modify TS 5.7.1 and TS 5.7.2 to replace plant-specific title "Health Physics" with generic title "radiation protection"

The TS 5.7 changes for FNP, VEGP, and HNP are consistent with TSTF-65-A, NUREG-1431, Revision 4.0, and NUREG-1433, Revision 4.0. The proposed changes do not eliminate any of the qualifications, responsibilities, or requirements for these positions, since the plant-specific personnel titles are currently identified in licensee-controlled documents, such as the QATR. The NRC staff concludes that the proposed changes are administrative in nature and that the revised TS 5.7 for FNP, VEGP, and HNP maintains the administrative controls required by 10 CFR 50.36. Therefore, the proposed changes are acceptable.

#### 3.6 Additional Administrative Corrections

In the supplemental letter dated October 26, 2016, the licensee amended the application to include three administrative corrections to the HNP, Unit Nos. 1 and 2, TSs. These administrative corrections were submitted because the original application also contained only administrative corrections and adding the new corrections to a current application would be the most expedient method to correct the TS for HNP, Unit Nos. 1 and 2.

#### 3.6.1 Unit 1, TS Page 3.4-20

HNP, Unit No. 1, TS page 3.4-20, currently does not contain a "(continued)" at the bottom right corner of the page to signify that the SRs for TS 3.4.9, "RCS Pressure and Temperature (P/T) Limits," continue onto TS page 3.4-21. The licensee added "(continued)" at the bottom right of page 3.4-20 to conform to the rest of the pages of the HNP, Unit No. 1, TS pages. Because the change is a small administrative change intended to conform page 3.4-20 to the format of the

rest of the HNP, Unit No. 1, TS pages, the NRC staff concludes that the requested change is acceptable.

#### 3.6.2 Staggered Test Basis

On March 7, 2016, the NRC staff issued HNP, Unit No. 2, Amendment No. 220 (ADAMS Accession No. ML16043A101), which, in part, added the definition STAGGERED TEST BASIS to TS Section 1.1, "Definitions," on TS page 1.1-5. Due to an unrelated change of page 1.1-5 issued on March 23, 2016, in Amendment No. 221 for HNP, Unit No. 2 (ADAMS Accession No. ML16062A099), the term STAGGERED TEST BASIS was deleted inadvertently. The October 26, 2016, supplement requested to restore the term STAGGERED TEST BASIS back to TS Section 1.1. The NRC staff reviewed the change and concludes that the definition provided in the October 26, 2016, is identical to the definition approved previously in Amendment No. 220. Therefore, the requested change is acceptable.

#### 3.6.3 Surveillance Requirement 3.6.4.1.3

Prior to Amendment Nos. 280 and 279 for HNP, Unit No. 1, and Amendment Nos. 224 and 223 for HNP, Unit No. 2, SR 3.6.4.1.3 stated:

Verify required SGT subsystems(s) will draw down the secondary containment to  $\ge 0.20$  inch of vacuum water gauge in  $\le 10$  minutes.

On September 29, 2016, the NRC issued Amendment Nos. 279 and 223 for HNP, Unit Nos. 1 and 2, respectively (ADAMS Accession No. ML16231A041), where the NRC staff approved SR 3.6.4.1.3 to state (with <u>underline</u> added for emphasis):

Verify secondary containment <u>can be drawn down</u> to  $\ge$  0.20 inch of vacuum water gauge in  $\le$  120 seconds <u>using required standby gas treatment (SGT)</u> <u>subsystem(s)</u>.

On September 30, 2016, the NRC issued Amendment Nos. 280 and 224 for HNP, Unit Nos. 1 and 2, respectively (ADAMS Accession No. ML16235A287), where the NRC staff approved SR 3.6.4.1.3 to state:

Verify required SGT subsystems(s) will draw down the secondary containment to  $\ge 0.20$  inch of vacuum water gauge in  $\le 10$  minutes.

The only requested change to SR 3.6.4.1.3 in Amendment Nos. 280 and 224 was an increase in the drawdown time from less than or equal to 120 seconds to less than or equal to 10 minutes. No other wording changes were requested. The SR 3.6.4.1.3 mark-up submitted for Amendment Nos. 280 and 224 failed to incorporate the changes from Amendment Nos. 279 and 223, as underlined above, and it was approved in that form.

The changes submitted in the October 26, 2016, supplement reincorporate the changes previously approved in Amendment Nos. 279 and 223. The NRC staff reviewed the revised SR 3.6.4.1.3 from the October 26, 2016, supplement and verified that they correctly incorporated all of the previously approved changes from Amendment Nos. 280 and 279 for

HNP, Unit No. 1, and Amendment Nos. 224 and 223 for HNP, Unit No. 2. Therefore, the NRC staff concludes that the requested changes are acceptable.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of Alabama official and the State of Georgia official were notified of the proposed issuance of the amendments on October 31, 2016. Neither State official had 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. 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 (81 FR 32809). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

#### 6.0 CONCLUSION

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

Principal Contributor: M. Orenak

Date: January 13, 2017

C. Pierce

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

Sincerely,

#### /RA/

Michael D. Orenak, Project Manager Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

# Docket Nos. 50-348, 50-364, 50-424, 50-425, 50-321, and 50-366

Enclosures:

- 1. Amendment No. 207 to NPF-2
- 2. Amendment No. 203 to NPF-8
- 3. Amendment No. 183 to NPF-68
- 4. Amendment No. 166 to NPF-81
- 5. Amendment No. 282 to DPR-57
- 6. Amendment No. 227 to NPF-5
- 7. Safety Evaluation

cc w/enclosures: Distribution via Listserv

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### ADAMS Accession No.: ML16291A030

OFFICE	NRR/DORL/LPL2-1/PM	NRR/DORL/LPL2-1/LA	NRR/DRA/APHB/BC	NRR/DSS/STSB/BC
NAME	MOrenak	KGoldstein	SWeerakkody	AKlein
DATE	12/05/2016	01/11/17	12/03/2016	01/06/17
OFFICE	OGC - NLO	NRR/DORL/LPL2-1/BC	NRR/DORL/LPL2-1/PM	
NAME	BMizano	MMarkley	Orenak	A STREET, STRE
DATE	01/09/17	1/13/2017	1/13/2017	

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