



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

August 3, 2015

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

SUBJECT: JOSEPH M. FARLEY, UNITS 1 AND 2, VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2, AND EDWIN I. HATCH, UNITS 1 AND 2, ISSUANCE OF AMENDMENTS (TAC NOS. MF5484, MF5485, MF5486, MF5487, MF5488, AND MF5489)

Dear Mr. Pierce:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No.199 to Joseph M. Farley Nuclear Plant (Farley) Unit 1, Renewed Facility Operating License No. NPF-2; Amendment No.195 to Farley, Unit 2, Renewed Facility Operating License No. NPF-8; Amendment No. 175 to Vogtle Electric Generating Plant (VEGP), Unit 1, Renewed Facility Operating License NPF-68; Amendment No. 157 to VEGP, Unit 2, Renewed Facility Operating License NPF-81; Amendment No. 274 to Edwin I. Hatch Nuclear Plant (Hatch), Unit 1, Renewed Facility Operating License DPR-57; and Amendment No. 219 to Hatch, Unit 2, Renewed Facility Operating License NPF-5.

The amendments consist of changes to the implementation schedule of the Cyber Security Plan from December 31, 2016 to December 31, 2017, in response to your application dated December 30, 2014.

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

C. R. Pierce

- 2 -

If you have any questions, please call me at 301-415-1009.

Sincerely,

A handwritten signature in black ink, appearing to read "Shawn Williams", with a stylized flourish at the end.

Shawn A. Williams, Senior 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, 50-366

Enclosures:

1. Amendment No. 199 to NPF-2
2. Amendment No. 195 to NPF-8
3. Amendment No. 175 to NPF-68
4. Amendment No. 157 to NPF-81
5. Amendment No. 274 to DPR-57
6. Amendment No. 219 to NPF-5
7. Safety Evaluation

cc w/encls: 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. 199
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 December 30, 2014, 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.

Enclosure 1

2. Accordingly, the second paragraph in Section 2.D. of Renewed Facility Operating License No. NPF-2, is hereby amended to read as follows:
 - D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 186, as supplemented by a change approved by License Amendment No. 199.
3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-2

Date of Issuance: August 3, 2015



**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. 195
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 December 30, 2014, 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.

Enclosure 2

2. Accordingly, the second paragraph in Section 2.D of Renewed Facility Operating License No. NPF-8, is hereby amended to read as follows:
 - D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 181, as supplemented by a change approved by License Amendment No. 195.
3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-8

Date of Issuance: August 3, 2015



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. 175
Renewed License No. NPF-68

1. The U. S. 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 December 30, 2014, 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 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.

Enclosure 3

2. Accordingly, the second paragraph in Section 2.D of Renewed Facility Operating License No. NPF-68 is hereby amended to read as follows:
 - D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 162, as supplemented by a change approved by License Amendment No. 175.
3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-68

Date of Issuance: August 3, 2015



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. 157
Renewed License No. NPF-81

1. The U. S. 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 December 30, 2014, 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 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.

Enclosure 4

2. Accordingly, the second paragraph in Section 2.E of Renewed Facility Operating License No. NPF-81 is hereby amended to read as follows:
 - E. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 144, as supplemented by a change approved by License Amendment No. 157.
3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-81

Date of Issuance: August 3, 2015



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. 274
Renewed License No. DPR-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Edwin I. Hatch Nuclear Plant, Unit No. 1 (the facility) Renewed Facility Operating License No. DPR-57 filed by Southern Nuclear Operating Company, Inc. (the licensee), acting for itself, Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the owners), dated December 30, 2014, 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.

Enclosure 5

2. Accordingly, the second paragraph in Section 2.C.(4.a) of Renewed Facility Operating License No. DPR-57 is hereby amended to read as follows:

(4.a) Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 265, as supplemented by a change approved by License Amendment No. 274.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Robert Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. DPR-57

Date of Issuance: August 3, 2015



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. 219
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), December 30, 2014, 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.

Enclosure 6

2. Accordingly, the second paragraph in Section 2.C.(3).(b.1) of Renewed Facility Operating License No. NPF-5 is hereby amended to read as follows:

(b.1) Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 209, as supplemented by a change approved by License Amendment No. 219.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Robert Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-5

Date of Issuance: August 3, 2015

JOSEPH M. FARLEY
ATTACHMENT TO
LICENSE AMENDMENT NO. 199
TO RENEWED FACILITY OPERATING LICENSE NO. NPF-2
DOCKET NO. 50-348
AND
TO LICENSE AMENDMENT NO. 195
TO RENEWED FACILITY OPERATING LICENSE NO. NPF-8
DOCKET NO. 50-364

Replace the following pages of the Renewed Facility Operating with the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change. The changes made to NPF-2, pages 9, 10, 11, and 12, are only repagination due to carryover from the additional license condition on page 8.

Remove

License

NPF-2, pages 8, 9, 10, 11, 12
NPF-8, page 7

Insert

License

NPF-2, pages 8, 9, 10, 11, 12
NPF-8, page 7

(5) Updated Final Safety Analysis Report Supplement

The Updated Final Safety Analysis Report supplement, as revised, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4) following issuance of this renewed license. Until that update is complete, Southern Nuclear may make changes to the programs and activities described in the supplement without prior Commission approval, provided that Southern Nuclear evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements of that section.

The Southern Nuclear Updated Final Safety Analysis Report supplement, submitted pursuant to 10 CFR 54.21(d), describes certain future activities to be completed prior to the period of extended operation. Southern Nuclear shall complete these activities no later than June 25, 2017, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

(6) Reactor Vessel Material Surveillance Capsules

All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion.

- D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Southern Nuclear Operating Company Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan," and was submitted on May 15, 2006.

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 186, as supplemented by a change approved by License Amendment No. 199.

- E. This renewed license is subject to the following additional conditions for the protection of the environment:

- (1) Southern Nuclear shall operate the facility within applicable Federal and State air and water quality standards and the Environmental Protection Plan (Appendix B).
- (2) Before engaging in an operational activity not evaluated by the Commission, Southern Nuclear will prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than evaluated in the Final Environmental Statement, Southern Nuclear shall provide a written evaluation of such activities and obtain prior approval of the Director, Office of Nuclear Reactor Regulation, for the activities.

F. Alabama Power Company shall meet the following antitrust conditions:

- (1) Alabama Power Company shall recognize and accord to Alabama Electric Cooperative (AEC) the status of a competing electric utility in central and southern Alabama.
- (2) Alabama Power Company shall offer to sell to AEC an undivided ownership interest in Units 1 and 2 of the Farley Nuclear Plant. The percentage of ownership interest to be so offered shall be an amount based on the relative sizes of the respective peak loads of AEC and the Alabama Power Company (excluding from the Alabama Power Company's peak load that amount imposed by members of AEC upon the electric system of Alabama Power Company) occurring in 1976. The price to be paid by AEC for its proportionate share of Units 1 and 2, determined in accordance with the foregoing formula, will be established by the parties through good faith negotiations. The price shall be sufficient to fairly reimburse Alabama Power Company for the proportionate share of its total costs related to the Units 1 and 2 including, but not limited to, all costs of construction, installation, ownership and licensing, as of a date, to be agreed to by the two parties, which fairly accommodates both their respective interests. The offer by Alabama Power Company to sell an undivided ownership interest in Units 1 and 2 may be conditioned, at Alabama Power Company's option, on the agreement by AEC to waive any right of partition of the Farley Plant and to avoid interference in the day-to-day operation of the plant.
- (3) Alabama Power Company will provide, under contractual arrangements between Alabama Power Company and AEC, transmission services via its electric system (a) from AEC's electric system to AEC's off-system members; and (b) to AEC's electric system from electric systems other than Alabama Power Company's and from AEC's electric system to electric systems other than Alabama Power Company's. The contractual arrangements covering such transmission services shall embrace rates and charges reflecting conventional accounting and ratemaking concepts followed by the Federal Energy Regulatory Commission (or its successor in function) in testing the reasonableness of rates and charges for transmission services. Such contractual arrangements shall contain provisions

protecting Alabama Power Company against economic detriment resulting from transmission line or transmission losses associated therewith.

- (4) Alabama Power Company shall furnish such other bulk power supply services as are reasonably available from its system.
- (5) Alabama Power Company shall enter into appropriate contractual arrangements amending the 1972 Interconnection Agreement as last amended to provide for a reserve sharing arrangement between Alabama Power Company and AEC under which Alabama Power Company will provide reserve generating capacity in accordance with practices applicable to its responsibility to the operating companies of the Southern Company System. AEC shall maintain a minimum level expressed as a percentage of coincident peak one-hour kilowatt load equal to the percent reserve level similarly expressed for Alabama Power Company as determined by the Southern Company System under its minimum reserve criterion then in effect. Alabama Power Company shall provide to AEC such data as needed from time to time to demonstrate the basis for the need for such minimum reserve level.
- (6) Alabama Power Company shall refrain from taking any steps, including but not limited to, the adoption of restrictive provisions in rate filings or negotiated contracts for the sale of wholesale power, that serve to prevent any entity or group of entities engaged in the retail sale of firm electric power from fulfilling all or part of their bulk power requirements through self-generation or through purchases from some other source other than Alabama Power Company. Alabama Power Company shall further, upon request and subject to reasonable terms and conditions, sell partial requirements power to any such entity. Nothing in this paragraph shall be construed as preventing an applicant from taking reasonable steps, in accord with general practice in the industry, to ensure that the reliability of its system is not endangered by any action called for herein.
- (7) Alabama Power Company shall engage in wheeling for and at the request of any municipally-owned distribution system:
 - a. of electric energy from delivery points of Alabama Power Company to said distribution system(s); and
 - b. of power generated by or available to a distribution system as a result of its ownership or entitlement² in generating facilities, to delivery points of Alabama Power Company designated by the distribution system.

² "Entitlement" includes, but is not limited to, power made available to an entity pursuant to an exchange agreement.

Such wheeling services shall be available with respect to any unused capacity on the transmission lines of Alabama Power Company, the use of which will not jeopardize Alabama Power Company's system. The contractual arrangements covering such wheeling services shall be determined in accordance with the principles set forth in Condition (3) herein.

Alabama Power Company shall make reasonable provisions for disclosed transmission requirements of any distribution system(s) in planning future transmission. "Disclosed" means the giving of reasonable advance notification of future requirements by said distribution system(s) utilizing wheeling services to be made available by Alabama Power Company.

- (8) The foregoing conditions shall be implemented in a manner consistent with the provisions of the Federal Power Act and the Alabama Public Utility laws and regulations thereunder and all rates, charges, services or practices in connection therewith are to be subject to the approval of regulatory agencies having jurisdiction over them.

Southern Nuclear shall not market or broker power or energy from Joseph M. Farley Nuclear Plant, Units 1 and 2. Alabama Power Company shall continue to be responsible for compliance with the obligations imposed on it by the antitrust conditions contained in this paragraph 2.F. of the renewed license. Alabama Power Company shall be responsible and accountable for the actions of its agent, Southern Nuclear, to the extent said agent's actions may, in any way, contravene the antitrust conditions of this paragraph 2.F.

G. Mitigation Strategy License Condition

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

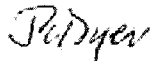
- (a) Fire fighting response strategy with the following elements:
1. Pre-defined coordinated fire response strategy and guidance
 2. Assessment of mutual aid fire fighting assets
 3. Designated staging areas for equipment and materials
 4. Command and control
 5. Training of response personnel
- (b)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

(c) Actions to minimize release to include consideration of:

1. Water spray scrubbing
2. Dose to onsite responders

- H. In accordance with the requirement imposed by the October 8, 1976 order of the United States Court of Appeals for the District of Columbia Circuit in Natural Resources Defense Council vs. Nuclear Regulatory Commission, No. 74-1385 and 74-1586, that the Nuclear Regulatory Commission "shall make any licenses granted between July 21, 1976 and such time when the mandate is issued subject to the outcome of such proceeding herein," this renewed license shall be subject to the outcome of such proceedings.
- I. This renewed operating license is effective as of the date of issuance and shall expire at midnight on June 25, 2037.

FOR THE NUCLEAR REGULATORY COMMISSION



J. E. Dyer, Director
Office of Nuclear Reactor Regulation

Attachments:

1. Appendix A - Technical Specifications
2. Preoperational Tests, Startup Tests and Other Items Which Must Be Completed Prior to Proceeding to Succeeding Operational Modes
3. Appendix B - Environmental Protection Plan
4. Appendix C - Additional conditions

Date of Issuance: May 12, 2005

(23) Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4) following issuance of this renewed license. Until that update is complete, Southern Nuclear may make changes to the programs and activities described in the supplement without prior Commission approval, provided that Southern Nuclear evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements of that section.

The Southern Nuclear Updated Final Safety Analysis Report supplement, submitted pursuant to 10 CFR 54.21(d), describes certain future activities to be completed prior to the period of extended operation. Southern Nuclear shall complete these activities no later than June 25, 2017, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

(24) Reactor Vessel Material Surveillance Capsules

All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion.

- D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Southern Nuclear Operating Company Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan," and was submitted on May 15, 2006.

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 181, as supplemented by a change approved by License Amendment No. 195

- E. Deleted per Amendment 144

- F. Alabama Power Company shall meet the following antitrust conditions:

- (1) Alabama Power Company shall recognize and accord to Alabama Electric Cooperative (AEC) the status of a competing electric utility in central and southern Alabama.

VOGTLE ELECTRIC GENERATING PLANTS
ATTACHMENT TO
TO LICENSE AMENDMENT NO. 175
RENEWED FACILITY OPERATING LICENSE NO. NPF-68
DOCKET NO. 50-424
AND
TO LICENSE AMENDMENT NO. 157
RENEWED FACILITY OPERATING LICENSE NO. NPF-81
DOCKET NO. 50-425

Replace the following pages of the Renewed Facility Operating License with the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

License

NPF-68, page 5
NPF-81, page 6

Insert

License

NPF-68, page 5
NPF-81, page 6

7. Spent fuel pool mitigation measures

- (c) Actions to minimize release to include consideration of:
1. Water spray scrubbing
 2. Dose to onsite responders

(11) Additional Conditions

The Additional Conditions contained in Appendix D, as revised through Amendment No. 173, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Additional Conditions.

- D. The facility requires exemptions from certain requirements of 10 CFR Part 50 and 10 CFR Part 70. These include (a) an exemption from the requirements of 10 CFR 70.24 for two criticality monitors around the fuel storage area, and (b) an exemption from the requirements of Paragraph III.D.2(b)(ii) of Appendix J of 10 CFR 50, the testing of containment air locks at times when containment integrity is not required. The special circumstances regarding exemption b are identified in Section 6.2.6 of SSER 5.

An exemption was previously granted pursuant to 10 CFR 70.24. The exemption was granted with NRC materials license No. SNM-1967, issued August 21, 1986, and relieved GPC from the requirement of having a criticality alarm system. GPC and Southern Nuclear are hereby exempted from the criticality alarm system provision of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this license.

These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. The exemptions in items b and c above are granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Southern Nuclear Operating Company Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan," with revisions submitted through May 15, 2006.

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 162, as supplemented by a change approved by License Amendment No. 175

- F. GPC shall comply with the antitrust conditions delineated in Appendix C to this license.

An exemption was previously granted pursuant to 10 CFR 70.24. The exemption was granted with NRC materials license No. SNM-1981, issued July 13, 1988, and relieved GPC from the requirement of having a criticality alarm system. GPC and Southern Nuclear are hereby exempted from the criticality alarm system provision of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this license.

These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. The exemption in item b above is granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Southern Nuclear Operating Company Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan," with revisions submitted through May 15, 2006.

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 144, as supplemented by a change approved by License Amendment No. 157

- F. GPC shall comply with the antitrust conditions delineated in Appendix C to this license.
- G. Southern Nuclear shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility, as approved in the SER (NUREG-1137) through Supplement 9 subject to the following provision:

Southern Nuclear may make changes to the approved fire protection program without prior approval of the Commission, only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- H. Deleted.
- I. The Owners shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

EDWIN I HATCH
ATTACHMENT TO
TO LICENSE AMENDMENT NO. 274
RENEWED FACILITY OPERATING LICENSE NO.DPR-57
DOCKET NO. 50-321
AND
TO LICENSE AMENDMENT NO. 219
RENEWED FACILITY OPERATING LICENSE NO. NPF-5
DOCKET NO. 50-366

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

Remove

License
DPR-57, Page 5
NPF-5, Page 5

Insert

License
DPR-57, Page 5
NPF-5, Page 5

would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(4.a) Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan is entitled: "Southern Nuclear Operating Company Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan," with revisions submitted through May 15, 2006.

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 265, as supplemented by a change approved by License Amendment No. 274

(4.b) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:**
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:**
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:**
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders

- (4.c) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.**

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 from GPC to the Commission dated July 22, 1986. Southern Nuclear may make changes to the fire protection program without prior Commission approval only if the changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(b.1) Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan is entitled: "Southern Nuclear Operating Company Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan," with revisions submitted through May 15, 2006.

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 209, as supplemented by a change approved by License Amendment No. 219

(b.2) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

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



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. 199 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-2

AMENDMENT NO. 195 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-8

AND

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

AMENDMENT NO. 175 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-68

AMENDMENT NO. 157 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-81

AND

EDWIN I HATCH, UNITS 1 AND 2

AMENDMENT NO. 274 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-57

AMENDMENT NO. 219 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, 50-366

1.0 INTRODUCTION

By application dated December 30, 2014, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14365A352) the Southern Nuclear Operating Company (SNC, the licensee) requested a change to the renewed facility operating licenses (FOL) for Joseph M. Farley Nuclear Plant, Units 1 and 2; Vogtle Electric Generating Plant, Units 1 and 2 (VEGP), and Edwin I. Hatch Nuclear Plant (Hatch), Units 1 and 2. The proposed change would revise the date of Cyber Security Plan (CSP) Implementation Schedule Milestone 8 and the existing license conditions in the FOL. Milestone 8 of the CSP implementation schedule concerns the full implementation of the CSP.

Portions of the letter dated December 30, 2014, contain sensitive unclassified non-safeguards information and those portions are withheld from public disclosure in accordance with the provisions of 10 CFR 2.390(d)(1).

Enclosure 7

2.0 REGULATORY EVALUATION

The NRC staff reviewed and approved the licensee's existing CSP implementation schedule on July 28, 2011, by License Amendment No. 186 to Renewed Facility Operating License No. NPF-2 and Amendment No. 181 to Renewed Facility Operating License No. NPF-8 for the Joseph M. Farley Nuclear Plant, Units 1 and 2, respectively; Amendment No. 265 to Renewed Facility Operating License DPR-57 and Amendment No. 209 to Renewed Facility Operating License NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2, respectively; and Amendment No. 162 to Facility Operating License NPF-68 and Amendment No. 144 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2, respectively, concurrent with the incorporation of the CSP into the current licensing bases. The NRC staff considered the following regulatory requirements and guidance in its review of the current license amendment request to modify the existing CSP implementation schedule:

- Title 10 to the *Code of Federal Regulations* Section 73.54 states, in part: "Each [CSP] submittal must include a proposed implementation schedule. Implementation of the licensee's cyber security program must be consistent with the approved schedule."
- The license amendments noted above, dated July 28, 2011, which approved the licensee's CSP and implementation schedule, include the following statement: "The licensee shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p)."
- In a publicly-available NRC memorandum dated October 24, 2013 (ADAMS Accession No. ML13295A467), the NRC staff listed criteria that it would consider during its evaluations of licensees' requests to postpone their cyber security program implementation date (commonly known as Milestone 8).

The NRC staff does not regard the CSP milestone implementation dates as regulatory commitments that can be changed unilaterally by the licensee, particularly in light of the regulatory requirement at 10 CFR 73.54, that "[i]mplementation of the licensee's cyber security program must be consistent with the approved schedule." As the NRC staff explained in its letter to all operating reactor licensees dated May 9, 2011 (ADAMS Accession No. ML110980538), the implementation of the plan, including the key intermediate milestone dates and the full implementation date shall be in accordance with the implementation schedule submitted by the licensee and approved by the NRC. All subsequent changes to the NRC-approved CSP implementation schedule, thus, will require prior NRC approval as required by 10 CFR 50.90.

3.0 TECHNICAL EVALUATION

3.1 Licensee's Requested Change

License Amendment No. 186 to Renewed Facility Operating License No. NPF-2 and Amendment No. 181 to Renewed Facility Operating License No. NPF-8 for the Joseph M. Farley Nuclear Plant, Units 1 and 2, respectively; Amendment No. 265 to Renewed Facility Operating License DPR-57 and Amendment No. 209 to Renewed Facility Operating License NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2, respectively; and Amendment No. 162 to Facility Operating

License NPF-68 and Amendment No. 144 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2, respectively, were issued on July 28, 2011. The NRC staff approved the licensee's CSP implementation schedule, as discussed in the safety evaluation issued with those amendments. The implementation schedule had been submitted by the licensee based on a template prepared by the Nuclear Energy Institute (NEI), which the NRC staff found acceptable for licensees to use to develop their CSP implementation schedules (ADAMS Accession No. ML110600218). The licensee's proposed implementation schedule for the Cyber Security Program identified completion dates and bases for the following eight milestones:

- 1) Establish the Cyber Security Assessment Team (CSAT);
- 2) Identify Critical Systems (CSs) and Critical Digital Assets (CDAs);
- 3) Install a data diode device between lower level devices and higher level devices;
- 4) Implement the security control "Access Control For Portable And Mobile Devices";
- 5) Implement observation and identification of obvious cyber related tampering to existing insider mitigation rounds;
- 6) Identify, document, and implement cyber security controls in accordance with "Mitigation of Vulnerabilities and Application of Cyber Security Controls" for CDAs that could adversely impact the design function of physical security target set equipment;
- 7) Ongoing monitoring and assessment activities for those target set CDAs whose security controls have been implemented;
- 8) Fully implement the CSP.

Currently, Milestone 8 of the licensee's CSP requires SNC to fully implement the CSP by December 31, 2016. In the December 30, 2014, application, SNC proposed to change the Milestone 8 completion date to December 31, 2017. The licensee's application addressed the eight criteria in the NRC's October 24, 2013, guidance memorandum.

The licensee provided the following information pertinent to each of the criteria identified in the NRC guidance memorandum.

- 1) Identification of the specific requirement or requirements of the cyber security plan that the licensee needs additional time to implement.

The licensee stated that Sections 3, *Analyzing Digital Computer Systems and Networks*, and 4, *Establishing, Implementing, and Maintaining the Cyber Security Program*, of the SNC CSP describe the requirements for application and maintenance of cyber security controls listed in NEI 08-09, Revision 6, *Cyber Security Plan for Nuclear Power Reactors*, Appendices D and E. The licensee provided a list of activities required to implement the CSP requirements.

- 2) Detailed justification that describes the reason the licensee requires additional time to implement the specific requirement or requirements identified.

The licensee stated the full assessment process compares CDAs to the technical cyber security controls described in NEI 08-09, Revision 6, Appendix D, and compares existing practices, programs and procedures to the Operational and Management Cyber Security Controls described in NEI 08-09, Revision 6, Appendix E. The output of this process includes identification of specific remediation actions required to close gaps and satisfy each control. Since the number of CDAs is in the thousands and large numbers of procedures are involved, the total number of

physical, logical, and programmatic changes required constitutes a significant project involving plant components and systems, and substantial planning. Additionally, changes to CDAs and procedures must be integrated into the plant operational schedule including on-line operations, maintenance and testing, as well as planning and execution of refueling outages. With this analysis concluding in June 2015, it is expected that insufficient time will remain to conduct modification and change management planning activities and execution.

- 3) A proposed completion date for Milestone 8 consistent with the remaining scope of work to be conducted and the resources available.

The licensee proposed a Milestone 8 completion date of December 31, 2017. The licensee also stated that this date is based on designing and planning all remediation actions in 2015 and implementation during 2016 - 2017. Finally the licensee stated this date also bounds the completion of all individual asset security control design remediation actions including those that require a refuel outage for implementation.

- 4) An evaluation of the impact that the additional time to implement the requirements will have on the effectiveness of the licensee's overall cyber security program in the context of milestones already completed.

The licensee stated the impact of the requested additional implementation time on the effectiveness of the overall cyber security program is considered to be very low, because the milestones already completed have resulted in a high degree of protection of safety-related, important-to-safety, and security CDAs against threat vectors associated with external connectivity (both wired and wireless), and portable digital media and devices. Additionally, extensive physical and administrative measures are already in place for CDAs because they are plant components, pursuant to the Physical Security Plan and Technical Specification Requirements.

- 5) A description of the licensee's methodology for prioritizing completion of work for critical digital assets associated with significant safety consequences and with reactivity effects in the balance of plant.

The licensee stated because CDAs are plant components, prioritization follows the normal work management process that places the highest priority on apparent conditions adverse to quality in system, structure, and component design function and related factors such as safety risk and nuclear defense-in-depth, as well as threats to continuity of electric power generation in the balance-of-plant. Further, in regard to isolation and control of portable media and mobile devices (PMMD) for safety-related, important-to-safety (including balance-of-plant) and security CDAs, maintenance of one-way or air gapped configurations and implementation of control of PMMD remains a high priority. This prioritization enabled completion of cyber security Interim Milestones 3 and 4 in 2012. High focus continues to be maintained on prompt attention to any emergent issue with these CDAs that would potentially challenge the established cyber protective barriers. Additionally, it should be noted that these CDAs encompass those associated with physical security target sets.

- 6) A discussion of the licensee's cyber security program performance up to the date of the license amendment request.

The licensee stated there have been no identified compromises of Safety, Security, and Emergency Preparedness functions by cyber means at any SNC plant. A formal Nuclear Oversight (NOS) audit was conducted in the fourth quarter of 2013 pursuant to the 24-month physical security program review required by 10 CFR 73.55(m). The NOS audit included review of cyber security program implementation. There were no significant findings related to overall cyber security program performance and effectiveness. All three SNC sites were also audited by the NRC during 2013, with all findings addressed under enforcement discretion.

- 7) A discussion of cyber security issues pending in the licensee's corrective action program (CAP).

The licensee stated that there are presently no significant nuclear cyber security issues pending in the CAP that constitute a threat to a CDA via cyber means or calling into question program effectiveness.

- 8) A discussion of modifications completed to support the cyber security program and a discussion of pending cyber security modifications.

The licensee provided a discussion of completed modifications and modifications pending at each site.

3.2 NRC Staff Evaluation

The NRC staff has evaluated the licensee's application using the regulatory requirements and the guidance above. The NRC staff's evaluation is below.

The licensee stated in its application that implementing the CSP requirements in Sections 3, *Analyzing Digital Computer Systems and Networks*, and 4, *Establishing, Implementing, and Maintaining the Cyber Security Program*, of the SNC CSP is the primary reason that an extension is needed for the Milestone 8 implementation date. The licensee provided a list of additional activities required to implement the CSP requirements.

The licensee indicated that the impact of the requested additional implementation time on the effectiveness of the overall cyber security program is considered to be very low, because the milestones already completed have resulted in a high degree of protection of safety-related, important-to-safety, and security CDAs against common threat vectors. Additionally, extensive physical and administrative measures are already in place for CDAs because they are plant components, pursuant to the Physical Security Plan and Technical Specification Requirements. The licensee provided details about the completed milestones and elements.

The NRC staff finds that the licensee's site is much more secure after implementation of Milestones 1 through 7 because the activities the licensee completed mitigate the most significant cyber attack vectors for the most significant CDAs.

The licensee proposed a Milestone 8 completion date of December 31, 2017. The licensee stated that this date is based on designing and planning all remediation actions in 2015 and implementation during 2016 - 2017. The licensee stated this date bounds the completion of all individual asset security control design remediation actions including those that require a refuel

outage for implementation. The NRC staff has had extensive interaction with the nuclear industry since licensees first developed their CSP implementation schedules. Based on this interaction, the NRC staff recognizes that CDA assessment work is much more complex and resource intensive than originally anticipated in part due to the NRC expanding the scope of the cyber security requirements to include balance of plant. The licensee has a large number of CDAs resulting in a significant effort to address security controls for each of the CDAs. With this analysis concluding in June 2015, it is expected that insufficient time will remain by December 31, 2016, to conduct modification and change management planning activities and execution. The NRC staff finds that the licensee's request for additional time to implement Milestone 8 is reasonable given the unanticipated complexity and scope of the work required to come into full compliance with its CSP.

The licensee stated CDAs are plant components; prioritization follows the normal work management process that places the highest priority on apparent conditions adverse to quality in system, structure, and component design function and related factors such as safety risk and nuclear defense-in-depth, as well as threats to continuity of electric power generation in the balance-of-plant. The NRC staff finds that based on the large number of digital assets described above and the limited resources with the appropriate expertise to perform these activities, the licensee's methodology for prioritizing work on CDAs is appropriate. The NRC staff further finds that the licensee's request to delay final implementation of the CSP until December 31, 2017, is reasonable given the complexity of the remaining work and the need to perform certain work, including design changes, during scheduled fuel outages.

3.3 NRC Staff Conclusion

The NRC staff concludes that the licensee's request to delay full implementation of its CSP until December 31, 2017, is reasonable for the following reasons: (i) the licensee's implementation of Milestones 1 through 7 provides mitigation for significant cyber attack vectors for the most significant CDAs as discussed by the NRC staff above; (ii) the scope of the work required to come into full compliance with the CSP implementation schedule was much more complicated than anticipated and not reasonably foreseeable; and (iii) the licensee has reasonably prioritized and scheduled the work required to come into full compliance with its CSP implementation schedule.

Based on review of the licensee's application, the NRC staff concludes that the licensee's implementation of Milestones 1 through 7 adds additional protection which provides mitigation for significant cyber attack vectors for the most significant CDAs; that the licensee's explanation of the need for additional time is compelling, and that it is acceptable for SNC to complete implementation of Milestone 8, full implementation of the CSP by December 31, 2017. The NRC staff also concludes that, upon full implementation of the licensee's cyber security program, the requirements of the licensee's CSP and 10 CFR 73.54 will be met. Therefore, the NRC staff finds the proposed change acceptable.

3.4 Revision to License Conditions

By letter dated December 30, 2014, the licensee proposed to modify Paragraph 2.D of Renewed Facility Operating License No. NPF-2 and Paragraph 2.D of Renewed Facility Operating License No. NPF-8 for the Joseph M. Farley Nuclear Plant, Units 1 and 2, respectively; Paragraph 2.D of Facility Operating License NPF-68 and Paragraph 2.D of Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2; and Paragraph 2.C.(4.a) of Renewed Facility Operating License DPR-57 and Paragraph 2.C.(3).(b.1) of Renewed Facility Operating License NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2, respectively; which provide license conditions to require the licensee to fully implement and maintain in effect all provisions of the NRC-approved CSP.

The license condition in Paragraph 2.D of Renewed Facility Operating License No. NPF-2 for Joseph M. Farley Nuclear Plant Unit 1 is modified as follows:

- D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 186, as supplemented by a change approved by License Amendment No. 199.

The license condition in Paragraph 2.D of Renewed Facility Operating License No. NPF-8 for Joseph M. Farley Nuclear Plant Unit 2 is modified as follows:

- D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 181, as supplemented by a change approved by License Amendment No. 195.

The license condition in Paragraph 2.D of FOL No. NPF-68 for Vogtle Electric Generating Plant Unit 1 is modified as follows:

- D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 162, as supplemented by a change approved by License Amendment No. 175.

The license condition in Paragraph 2.D of FOL No. NPF-81 for Vogtle Electric Generating Plant Unit 2 is modified as follows:

- D. Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 144, as supplemented by a change approved by License Amendment No. 157.

The license condition in Paragraph 2.C.(4.a) of Renewed FOL No. DPR-57 for Edwin I. Hatch Nuclear Plant Unit 1 is modified as follows:

(4.a) Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 265, as supplemented by a change approved by License Amendment No. 274.

The license condition in Paragraph 2.C.(3).(b.1) of Renewed FOL No. NPF-5 for Edwin I. Hatch Nuclear Plant Unit 2 is modified as follows:

(b.1) Physical Protection

Southern Nuclear shall fully implement and maintain in effect all provisions of the Commission-approved cyber security (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Southern Nuclear CSP was approved by License Amendment No. 209, as supplemented by a change approved by License Amendment No. 219.

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. Neither State officials had comments.

5.0 ENVIRONMENTAL CONSIDERATION

This amendment relates solely to safeguards requirements and does not involve any significant construction impacts. This amendment is an administrative change to extend the date by which the licensee must have its CSP fully implemented. Accordingly, this amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(12). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) 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 Contributors:
John Rycnya, NSIR/CSD

Date: August 3, 2015

C. R. Pierce

- 2 -

If you have any questions, please call me at 301-415-1009.

Sincerely,

/RA/

Shawn A. Williams, Senior 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, 50-366

Enclosures:

1. Amendment No. 199 to NPF-2
2. Amendment No. 195 to NPF-8
3. Amendment No. 175 to NPF-68
4. Amendment No. 157 to NPF-81
5. Amendment No. 274 to DPR-57
6. Amendment No. 219 to NPF-5
7. Safety Evaluation

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RidsNrrPMVogtle Resource
RidsNrrPMHatch Resource

ADAMS Accession No.: ML15180A334

*previously concurred

OFFICE	LPL2-1/PM	LPL2-1/PM	LPL2-1/LA	NSIR/CSD/BC
NAME	SWilliams*	RMartin*	SFigueroa	RFelts*
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