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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 9, 2009

Mr. Jeffrey B. Archie Vice President, Nuclear Operations South Carolina Electric & Gas Company Virgil C. Summer Nuclear Station Post Office Box 88 Jenkinsville, SC 29065

SUBJECT:

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1, ISSUANCE OF AMENDMENT REGARDING ADOPTION OF TSTF-511, REV. 0, "ELIMINATE WORKING HOUR RESTRICTIONS FROM TS 5.2.2 TO

SUPPORT COMPLIANCE WITH 10 CFR 26 (TAC NO: ME0763)

Dear Mr. Archie:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 181 to Renewed Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1, in response to your letter dated March 2, 2009 (Agencywide Document and Management System (ADAMS) Accession No. ML090650476). The amendment deletes those portions of the renewed operating license Appendix A Technical Specifications (TS) that have been superseded by Title 10 to the *Code of Federal Regulations* (10 CFR), Part 26, Subpart I. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." The availability of this TS improvement was announced in the *Federal Register* on December 30, 2008, (73 FR 79923) as part of the consolidated line item improvement process.

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

Sincerely,

Lobert Matri Robert E. Martin, Senior Project Manager

Plant Licensing Branch II-1

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-395

Enclosures:

1. Amendment No. 181 to NPF-12

2. Safety Evaluation

cc w/enclosures: Distribution via Listserv



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SOUTH CAROLINA ELECTRIC & GAS COMPANY SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

DOCKET NO. 50-395

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No.181 Renewed License No. NPF-12

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by South Carolina Electric & Gas Company (the licensee), dated March 2, 2009, 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 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 Appendix A Technical Specifications, as indicated in the attachment to this license amendment; and paragraphs 2.C.(2) of Renewed Facility Operating License No. NPF-12 is hereby amended to read as follows:
 - 2.C(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 181, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. South Carolina Electric & Gas Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective as of its date of issuance and shall be implemented by October 1, 2009.

FOR THE NUCLEAR REGULATORY COMMISSION

Melanie C. Wong, Chief Plant Licensing Branch II-1

Melani Chy

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachments: Changes to the Technical

Specifications

Date of Issuance: June 9, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 181

TO RENEWED FACILITY OPERATING LICENSE NO. NPF-12

DOCKET NO. 50-395

Replace the following pages of the Appendix A Technical Specifications 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> Page 3	<u>License</u> Page 3		
<u>TS</u>	<u>TS</u>		
6-1a	6-1a		

- (3) SCE&G, 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 amended through Amendment No. 33;
- (4) SCE&G, 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 neutron sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) SCE&G, 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 of components; and
- (6) SCE&G, 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.
- 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 incorporated below:

(1) Maximum Power Level

SCE&G is authorized to operate the facility at reactor core power levels not in excess of 2900 megawatts thermal in accordance with the conditions specified herein and in Attachment 1 to this renewed license. The preoccupation tests, startup tests and other items identified in Attachment 1 to this renewed license shall be completed as specified. Attachment 1 is hereby incorporated into this renewed license.

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

The technical Specifications contained in Appendix A, as revised through Amendment No.: 181 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. South Carolina Electric & Gas Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

ADMINISTRATIVE CONTROLS

- b. At least one licensed Reactor Operator shall be 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 shall be in the Control Room.
- c. A health physics technician shall be on site when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. Deleted.

Amendment No. 18, 51, 79, 181

The health physics technician composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 181TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-12

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-395

1.0 INTRODUCTION

By application dated March 2, 2009, to the U.S. Nuclear Regulatory Commission (NRC, the Commission) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML090650476), South Carolina Electric and Gas Company (SCE&G, the licensee) requested changes to the Appendix A Technical Specifications (TSs) for the Virgil C. Summer Nuclear Station (VCSNS), Unit No. 1.

The proposed changes would delete paragraph e of VCSNS TS 6.2.2, "Unit Staff."

The licensee stated that the application is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." The availability of this TS improvement was announced in the *Federal Register* on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process (CLIIP).

2.0 REGULATORY EVALUATION

The history of NRC regulations pertaining to prevention of worker impairment is summarized in the *Federal Register* notice containing the final rule that amended 10 CFR Part 26 (73 FR 16966, March 31, 2008). 10 CFR Part 26, Subpart I provides the regulatory requirements for managing worker fatigue at nuclear power plants.

The NRC's regulatory requirements related to the content of the TS are contained in 10 CFR Part 50.36. 10 CFR 50.36 requires that the TS include items in the following categories: (1) safety limits, limiting safety systems settings, and limiting control settings; (2) limiting conditions for operation; (3) Surveillance Requirements; (4) design features; and (5) administrative controls. The administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

The NRC's guidance for the format and content of licensee Technical Specifications can be found in NUREG-1431, Revision 3.0, "Standard Technical Specifications Westinghouse Plants," referred to as Standard Technical Specifications (STS). Section 5 of STS contains administrative controls. Paragraph d of Section 5.2.2 of STS contains requirements for administrative procedures to limit the working hours of personnel who perform safety related functions. This paragraph represents NRC's guidance on how licensee TS requirements should address work hour controls. Licensees adhere to the guidance to varying degrees due to minor administrative differences and differences in each licensee's current licensing basis. The inconsistent level of adherence to NRC guidance has lead to inconsistent TS interpretation and implementation. This has also made it difficult for NRC to enforce the requirements.

The new requirements of 10 CFR Part 26, Subpart I supersede the guidance found in Paragraph d of Section 5.2.2 of all STS. Subpart I distinguishes between work hour controls and fatigue management and strengthens the requirements for both. Subpart I requires nuclear power plant licensees to ensure against worker fatigue adversely affecting public health and safety and the common defense and security by establishing clear and enforceable requirements for the management of worker fatigue. Licensees are required to implement Subpart I by October 1, 2009, as announced in the final rule that revised 10 CFR Part 26 (73 FR 16966, March 31, 2008). TSTF-511 proposed a change to STS that would delete Paragraph d of STS 5.2.2. This change was approved in Federal Register notice on December 30, 2008 (73 FR 79923).

2.1 Adoption of TSTF-511, Revision 0, by VCSNS, Unit No. 1

Proper adoption of TSTF-511 and implementation of 10 CFR Part 26, Subpart I by SCE&G will provide reasonable assurance that SCE&G will maintain limits on the working hours of personnel who perform safety related functions. SCE&G has committed to remove the plant-specific TS requirements concurrently with the implementation of the 10 CFR Part 26, Subpart I requirements.

3.0 TECHNICAL EVALUATION

Controls on work hours for personnel at nuclear power plants are necessary to prevent worker fatigue from adversely affecting public health and safety and the common defense and security. Work hour controls for VCSNS are currently located in Paragraph e of TS 6.2.2. When implemented, the regulatory requirements of 10 CFR 26, Subpart I replace the plant-specific TS requirements found in paragraph 6.2.2.e of VCSNS TS.

The licensee proposed deleting paragraph e of VCSNS TS 6.2.2. The licensee committed to implement the new requirements of 10 CFR Part 26, Subpart I concurrently with the deletion of the TS requirements on work hour controls. The NRC staff finds that reasonable controls for the implementation and subsequent evaluation of proposed changes pertaining to the above regulatory commitment are best provided by the licensee's administrative processes, including its commitment management program (see Regulatory Issue Summary 2000-017, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff"). The above regulatory commitments do not warrant the creation of regulatory requirements (items requiring prior NRC approval of subsequent changes).

The staff evaluated the licensee's proposed change against the applicable regulatory requirements listed in section 2. The staff also compared the proposed change to the change

made to STS by TSTF-511. The staff considered the licensee's commitment to implement 10 CFR Part 26, Subpart I concurrently with the deletion of TS work hour control requirements in its evaluation of the proposed change. Given the licensee's commitment, there is reasonable assurance that the licensee will comply with the regulations for work hour controls, either through TS requirements or through the requirements of 10 CFR part 26, Subpart I, at all times at VCSNS. Therefore, the licensee will continue to prevent worker fatigue from adversely affecting public health and safety and the common defense and security. Therefore, the staff finds the proposed change acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of South Carolina State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

This amendment changes recordkeeping, reporting, or administrative procedures. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

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

7.0 REFERENCES

- 1. SCE&G License Amendment Request to adopt TSTF-511, March 2, 2009
- 2. Federal Register Notice, Notice of Availability published on December 30, 2008, 73 FR 79923.
- 3. TSTF-511 Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26."

Principal contributors: V. Cusumano, NRR/DIRS

M. Hamm, NRR/DIRS

Date of Issuance: June 9, 2009

Mr. Jeffrey B. Archie Vice President, Nuclear Operations South Carolina Electric & Gas Company Virgil C. Summer Nuclear Station Post Office Box 88 Jenkinsville, SC 29065

SUBJECT:

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Sincerely,

/RA/

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

Docket No. 50-395

Enclosures:

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2. Safety Evaluation

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Amendment No: ML091210666

NRR-058

OFFICE	NRR/LPL2-1/PM	NRR/LPL2-1/LA	OGC	NRR/LPL2-1/BC
NAME	RMartin	SRohrer	BMizuno	MWong
DATE	06/ 09/09	06/08/09	05/08/09	06/08/09