

November 7, 2002

Mr. Stephen A. Byrne
Senior Vice President, Nuclear Operations
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
Post Office Box 88
Jenkinsville, South Carolina 29065

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1 - ISSUANCE OF
AMENDMENT RE: CONTROL ROOM NORMAL AND EMERGENCY AIR
HANDLING SYSTEM - EXCLUSION OF TECHNICAL SPECIFICATION 3.0.4
REQUIREMENTS FROM TS 3/4.7.6 IN MODES 5 AND 6 (TAC NO. MB5203)

Dear Mr. Byrne:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 161 to Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1. The amendment changes the Technical Specifications (TSs) in response to your application dated May 8, 2002.

This amendment will change TS 3.7.6 to exclude the control room normal and emergency air handling system from having to include TS 3.0.4 requirements when applying the action requirements of Limiting Condition for Operation 3.7.6 in Modes 5 and 6. Specifically, the change will allow operation in a manner that is already permitted by TS 3.7.6. For example, if one train of service water (i.e., a control room ventilation support system) became inoperable with the core defueled, core reload could commence and continue for 7 days. After that time, the plant could indefinitely continue operation in Mode 5 or 6 with one operable control room emergency air cleanup system in the recirculation mode.

A copy of the related Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's Biweekly *Federal Register* notice. This completes the staff's efforts on TAC No. MB5203.

Sincerely,

/RA/

Karen R. Cotton, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-395

Enclosures:

1. Amendment No. 161 to NPF-12
2. Safety Evaluation

cc w/encls: See next page

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Office of Nuclear Reactor Regulation

Docket No. 50-395

Package: ML023110128

Amendment: ML023110120

TS Pages: ML023120247

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1. Amendment No. 161 to NPF-12
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cc w/encls: See next page

Distribution: See next page

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SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

DOCKET NO. 50-395

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 161

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 May 8, 2002, 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 Technical Specifications (TSs), as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Facility Operating License No. NPF-12 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The TSs contained in Appendix A, as revised through Amendment No. 161, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the TSs and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John A. Nakoski, Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: November 7, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 161

TO FACILITY OPERATING LICENSE NO. NPF-12

DOCKET NO. 50-395

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal line(s) indicating the area(s) of change.

Remove Page

3/4 7-14

Insert Page

3/4 7-14

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 161 TO 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 May 8, 2002, South Carolina Electric & Gas Company (the licensee) requested a change to the Technical Specifications (TSs) for the Virgil C. Summer Nuclear Station, Unit 1. The proposed change will amend TS 3.7.6 to exclude the control room normal and emergency air handling system from having to include TS 3.0.4 requirements when applying the action requirements of limiting condition of operation (LCO), TS 3.7.6, in Modes 5 and 6. Specifically, the change will allow operation in a manner that is already permitted by TS 3.7.6. For example, if one train of service water (i.e., a control room ventilation support system) became inoperable with the core defueled, core reload could commence and continue for 7 days. After that time, the plant could indefinitely continue operation in Mode 5 or 6 with one operable control room emergency air cleanup system in the recirculation mode.

This safety evaluation addresses the acceptability of the proposed TS amendment.

2.0 REGULATORY EVALUATION

The U. S. Nuclear Regulatory Commission (NRC) staff finds that the licensee in Section 5.2 of its submittal identified the applicable regulatory requirements. The regulatory requirements that the staff used as a basis for its acceptance are as follows:

Appendix A, "General Design Criteria for Nuclear Power Plants," to Title 10 *Code* of Federal Regulations* (10 CFR) 50, "Domestic Licensing of Production and Utilization Facilities," which establishes the principal design criteria for the design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety.

General Design Criterion 19 (GDC-19), "Control Room," of Appendix A requires that a control room be provided from which actions can be taken to operate the nuclear reactor safely under normal operating conditions and maintain the reactor in a safe condition under accident conditions, including a loss-of-coolant

accident (LOCA). Adequate radiation protection is to be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of specified values.

The regulatory basis for TS 3/4.7.6, "Control Room Normal and Emergency Air Handling System," operability is to ensure that the ambient temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system and the control room will remain habitable for operations personnel during and following all credible accident conditions. The operability of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix "A" to 10 CFR 50.

3.0 TECHNICAL EVALUATION

The NRC staff reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment, which are described in Sections 4.0 and 5.0 of the licensee's submittal.

In performing the evaluation, the NRC staff considered the requirements of LCO 3.0.4 as it applies TS 3/4.7.6. The V. C. Summer Station LCO 3.0.4 states:

Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual specifications

Currently, LCO 3.0.4 applies to all modes of operation for TS 3/4.7.6. The licensee has requested that Modes 5 and 6 be exempt from LCO 3.0.4. The exemption will be achieved by adding an item c to the action statement in TS 3/4.7.6 for Modes 5 and 6:

- c. The provisions of Specification 3.0.4 are not applicable

The addition of this statement has the impact of allowing the plant to enter Mode 5, "COLD SHUTDOWN," or Mode 6, "REFUELING," without meeting the requirements of the LCO specified by TS 3.7.6. However, once the plant is in the new operating mode, the action statements for the mode would still apply if the LCO is not met.

The LCO defined by TS 3.7.6 is that "Two independent control room normal and emergency air handling systems shall be OPERABLE." For Modes 5 and 6, the action statement for one independent control room normal and emergency air handling system inoperable is defined by Action a and for both systems inoperable is defined by Action b:

- a. With one control room normal and emergency air handling system inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and

maintain operation of the remaining OPERABLE control room emergency air cleanup system in the recirculation mode.

- b. With both control room emergency air cleanup systems inoperable, or with the OPERABLE control room emergency air cleanup system, required to be in the recirculation mode by ACTION (a), not capable of being powered by an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

Since Actions a and b will continue to apply in Modes 5 and 6, there is assurance that at least one control room normal and emergency air handling system will be available or operating in the recirculation mode and, thus, the requirements of GDC 19 to provide a habitable environment for the control room operators will be met or operations that could lead to increased exposure such as fuel movement or core alterations will be suspended. An entry into Mode 5 or Mode 6 when the plant is operating in accordance with either of these two action statements does not introduce additional risk of exposure to the control room operator or the general public.

In addition, the staff finds that compliance with actions that permit continued operation of the unit for an unlimited period of time in a mode or other specified condition provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the mode change. Therefore, in such cases, entry into a mode or other specified condition in the applicability may be made in accordance with the provisions of the actions. However, this should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated Mode or other specified condition in the applicability.

The NRC staff also noted that NUREG 1431, "Standard Technical Specifications Westinghouse Plants," establishes the applicability of LCO 3.0.4 to Modes 1, 2, 3, and 4. It specifically eliminates the applicability of LCO 3.0.4 to Modes 5 and 6. Thus, the licensee's request is consistent with the Standard TS. In addition, the request reduces unnecessary regulatory burden and maintains safety.

The NRC staff has reviewed the changes and finds them acceptable.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves 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 NRC has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 42829). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in

10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The NRC 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 NRC's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: E. B. Forrest, NRR

Date: November 7, 2002

South Carolina Electric & Gas Company

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