

July 6, 2004

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: SURVEILLANCE REQUIREMENT 4.2.4.2
(TAC NO. MC0834)

Dear Mr. Byrne:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 168 to Renewed Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1. The amendment changes the Technical Specifications in response to your application dated September 19, 2003.

This amendment revises Surveillance Requirement 4.2.4.2 to specifically identify the Power Distribution Monitoring System being used in determining the Quadrant Power Tilt Ratio with one inoperable Power Range Channel.

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

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. 168 to NPF-12
2. Safety Evaluation

cc w/enclosures: 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 RENEWED FACILITY OPERATING LICENSE

Amendment No. 168
Renewed License No. NPF-12

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by South Carolina Electric & Gas Company (the licensee), dated September 19, 2003, 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, as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-12 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 168, 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 within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Stephanie Coffin, Acting 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: July 6, 2004

ATTACHMENT TO LICENSE AMENDMENT NO. 168
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

3/4 2-14
B 3/4 2-5

Insert Pages

3/4 2-14
B 3/4 2-5

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 168 TO

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 September 19, 2003, South Carolina Electric & Gas Company (the licensee) requested changes to the Technical Specifications (TSs) for the Virgil C. Summer Nuclear Station (VCSNS). The proposed changes would revise Surveillance Requirement (SR) 4.2.4.2 to specifically identify the Power Distribution Monitoring System (PDMS) being used in determining the Quadrant Power Tilt Ratio (QPTR) with one inoperable Power Range Channel.

2.0 REGULATORY EVALUATION

It is stated in Title 10, *Code of Federal Regulations* (10 CFR) Section 50.36(c)(3) that SRs be performed in order to assure the necessary quality of systems and components be maintained, the facility operation will be within safety limits, and that the limiting condition for operation will be met.

3.0 TECHNICAL EVALUATION

By letter dated April 9, 1999, the staff approved Amendment No. 142 to use PDMS for performing surveillance of the QPTR above 25 percent rated thermal power (RTP). TS 3.3.3.11 was added to the VCSNS TSs identifying the PDMS uses and operability. TS 3.3.3.11 states that the PDMS shall be operable at power ranges above 25 percent RTP to meet the SR. TS 3.3.3.11 also indicates the usage of the movable incore detector system to monitor QPTR if the PDMS is declared inoperable.

The changes to SR 4.2.4.2 were not previously made as part of Amendment No. 142. The licensee is requesting approval of this amendment to clarify the use of the PDMS as a means of measuring the QPTR to satisfy the surveillance requirement. The proposed SR 4.2.4.2 will state that the QPTR shall be determined to be within the established limit when above 75 percent RTP, with one Power Range Channel inoperable, by using the PDMS or movable incore detectors to confirm that the normalized symmetric power distribution obtained from two sets of four symmetric thimble locations is consistent with the indicated QPTR at least once per 12 hours. Operation of the PDMS does not depend upon the operability of the Power Range

Channels and, therefore, usage of PDMS in performing the SR with one inoperable Power Range Channel is acceptable. The proposed change to SR 4.2.4.2 does not incur any adverse levels of safety and is administrative in the clarification of the use of the PDMS with one Power Range Channel inoperable. Therefore, the staff finds the change to SR 4.2.4.2 to be acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission'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 and changes SRs. The Nuclear Regulatory Commission 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 Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (69FR16623). 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

Based on its review of technical justification provided by the license, the staff concluded that the proposed TS change is in accordance with the current licensing basis and is therefore acceptable. Revision to SR 4.2.4.2 will clarify the use of the PDMS in performing surveillance of the QPTR above 75 percent RTP with one inoperable Power Range Channel. No change to the safety analysis was required due to this amendment reflecting only an administrative change to the VCSNS TS.

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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Garry L. Armstrong, Jr.

Date: July 6, 2004

Mr. Stephen A. Byrne
South Carolina Electric & Gas Company

VIRGIL C. SUMMER NUCLEAR STATION

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