



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

February 22, 2016

Mr. George A. Lippard, III  
Vice President, Nuclear Operations  
South Carolina Electric & Gas Company  
Virgil C. Summer Nuclear Station  
P.O. Box 88, Mail Code 800  
Jenkinsville, SC 29065

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1 – SUPPLEMENTAL  
INFORMATION NEEDED FOR ACCEPTANCE OF LICENSE AMENDMENT  
REQUEST FOR IMPLEMENTATION OF WCAP-15376-P-A, REV. 1  
(CAC NO. MF7196)

Dear Mr. Lippard:

By letter dated December 16, 2015, the South Carolina Electric & Gas Company (SCE&G, the licensee) submitted a license amendment request to revise Virgil C. Summer Nuclear Station, Unit 1, Technical Specifications (TS). The licensee proposes to revise TS 3/4.3.1, "Reactor Trip System Instrumentation," and TS 3/4.3.2, "Engineered Safety Feature Actuation System Instrumentation," to implement the Allowed Outage Time, Bypass Test Time, and Surveillance Frequency changes approved by the U.S. Nuclear Regulatory Commission (NRC) in WCAP-15376-P-A, Rev. 1, "Risk-Informed Assessment of the Reactor Trip System (RTS) and Engineered Safety Features Actuation System (ESFAS) Surveillance Test Intervals and Reactor Trip Breaker Test and Completion Times."

The purpose of this letter is to provide the results of the NRC staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the NRC staff to make an independent assessment regarding the acceptability of the proposed amendment request in terms of regulatory requirements and the protection of public health and safety and the environment.

G. Lippard

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In order to make the application complete, the NRC staff requests that SCE&G supplement the application to address the information requested in the enclosure within 13 days of the date of this letter. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The information requested in this letter was discussed with your staff on January 28, 2016.

If you have any questions, please contact me at (301) 415-1009.

Sincerely,

A handwritten signature in black ink that reads "Shawn Williams". The signature is written in a cursive style with a long, sweeping tail on the final letter.

Shawn Williams, Senior Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-395

Enclosure:  
As stated

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SUPPLEMENTAL INFORMATION NEEDED

AMENDMENT REQUEST REGARDING WCAP 15376-P-A

SOUTH CAROLINA ELECTRIC & GAS COMPANY

VIRGIL C. SUMMER, UNIT NO. 1

DOCKET NO. 50-395

By letter dated December 16, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15356A048), the South Carolina Electric & Gas Company (SCE&G, the licensee) submitted a license amendment request to revise Virgil C. Summer Nuclear Station, Unit 1 (VCSNS). The proposed amendment would revise technical specification (TS) 3/4.3.1, Reactor Trip System Instrumentation (RTS), and Engineered Safety Feature Actuation System Instrumentation (ESFAS) to implement the allowed outage time, bypass time, and surveillance frequency changes approved by the Nuclear Regulatory Commission (NRC) in Westinghouse WCAP-15376-P-A, Rev. 1, "Risk-Informed Assessment of the RTS and ESFAS Surveillance Test Intervals and Reactor Trip Breaker Test and Completion Times," dated March 2003. The licensee stated that the proposed changes in this license amendment request are consistent with the NRC approved Technical Specification Task Force (TSTF) -411, Rev. 1.

The NRC staff has reviewed the application and concluded that the information delineated below is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment.

Supplement Request No. 1

TSTF-411, Revision 1, requires plant specific evaluations for certain ESFAS functions. In the ESFAS instrumentation bases of the technical specifications (TS), the TSTF-411 traveler includes a reviewer's note ("INSERT 7"):

"In Table 3.3.2-1, Functions 7.b and 7.c were not included in the generic evaluations approved in either WCAP-10271, as supplemented, or WCAP-15376. In order to apply the WCAP-10271, as supplemented, and WCAP-15376 TS relaxations to plant specific Functions not evaluated generically, licensees must submit plant specific evaluations for NRC review and approval."

A review of the proposed changes in the license amendment request (LAR), indicates that the Westinghouse Standard Technical Specifications Functions 7.b and 7.c appear to correspond to the V.C. Summer TS Function 8.a in the LAR Table 4.3.2, which is proposing to change the analog channel operational test frequency from quarterly to semi-annually.

A previous VCSNS license amendment No. 101 (ADAMS No. ML012250025), regarding the reactor trip system instrumentation and the ESFAS to include surveillance test intervals (STIs)

Enclosure

under topical report WCAP-10271 was issued on June 18, 1991. The NRC safety evaluation for license amendment No. 101 indicates that two ESFAS functions, 8.a and 6.h, had required a plant specific analyses.

With regard to the function 6.h, the LAR Table 4.3.2 is also proposing to change the analog channel operational test frequency from quarterly to semi-annually. WCAP-15376-P-A, Section 11, indicates that the WCAP-15376-P-A results are applicable to signals not evaluated under WCAP-10271 but shown to be applicable through subsequent evaluations. The NRC staff notes that the licensee evaluated Functions 6.h and 8.a to implement allowed outage time and bypass test time changes for license amendment No. 177 dated October 24, 2006 (ADAMS No. ML062430684). However, this evaluation is not applicable to the STI extensions proposed in the LAR. The LAR and the previous evaluations do not provide information on subsequent STI evaluations performed for functions 8.a. and 6.h to support their proposed STI extension.

Based on the review of the information in TSTF-411 traveler, the LAR, and the previous license amendments No. 101 and No. 177, and associated documentation, a plant-specific risk evaluation for functions 8.a and 6.h appear to be required, as well as information discussed in the TSTF-411 traveler for plant specific analyses. Please provide the required plant-specific risk evaluation results and technical justification, as well as the TSTF-411 traveler plant-specific analyses information for these two functions. In addition, please confirm that there are no other proposed functions in the LAR which have not been generically evaluated by the topical report WCAP-15376 and require a plant-specific analysis.

#### Supplement Request No. 2

Since the VCSNS Technical Specifications have not been converted to the Standard Technical Specifications, the NRC staff requests the license to identify the plant-specific systems, functions, and nomenclature for the proposed changes and identify the corresponding systems, functions, and nomenclature used in TSTF-411.

#### Supplement Request No. 3

Please describe the extent to which this is a solid state protection system used for RTS or ESFAS, or both RTS and ESFAS.

G. Lippard

- 2 -

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The information requested in this letter were discussed with your staff on January 28, 2015.

If you have any questions, please contact me at (301) 415-1009.

Sincerely,

*/RA/*

Shawn Williams, Senior Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing

Office of Nuclear Reactor Regulation  
Docket No. 50-395

Enclosure:  
As stated

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**ADAMS Accession No.: ML16032A170 \*by internal memo (ML16033A246) \*\*by e-mail**

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