

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

April 13, 2015

Mr. Thomas D. Gatlin Vice President, Nuclear Operations South Carolina Electric & Gas Company Virgil C. Summer Nuclear Station Post Office Box 88, Mail Code 800 Jenkinsville, SC 29065

SUBJECT:

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1 – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE BASIS CHANGES IN STEAM GENERATOR TUBE RUPTURE ANALYSIS (TAC NO. MF4699)

Dear Mr. Gatlin:

By letter dated August 27, 2014, the South Carolina Electric & Gas Company (SCE&G, the licensee) submitted a license amendment request (LAR) to revise Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1. SCE&G is proposing to revise the licensing basis to incorporate a supplemental analysis to the steam generator tube rupture accident.

The NRC staff has determined that additional information is needed to continue the review as discussed in the Enclosure. We request that SCE&G respond to these RAIs within 30 days of the date of this letter. Please note that the NRC staff's review is continuing and further requests for information may be developed.

Sincerely,

Shawn Williams, Senior Project Manager Plant Licensing Branch II-1

Show Willeanis

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-395

Enclosure:

Request for Additional Information

cc w/encl: Distribution via Listserv

# REQUEST FOR ADDITIONAL INFORMATION

# LICENSE AMENDMENT REQUEST

#### LICENSE BASIS CHANGES IN STEAM GENERATOR TUBE RUPTURE ANALYSIS

### VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

### **DOCKET NO. 50-395**

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the Virgil C. Summer Nuclear Station License Amendment Request (LAR), dated August 27, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14245A408) and supplements dated October 31, 2014, and February 12, 2015 (ADAMS Accession Nos. ML14308A075 and ML15055A143, respectively). The NRC staff has determined that the following requests for additional information (RAI) are required to complete the review.

# RAI No. 1

In the NRC staff's Safety Evaluation dated October 4, 2010 (ADAMS Accession No. ML102160020), approving the Alternative Source Term (AST), Section 3.1.1 it states: "However, because of the apparent uncertainties discussed above, the NRC staff notes that these data may not be considered acceptable for use in other dose assessments of other meteorological applications without further NRC review and approval."

Therefore, please provide the most recent 3 years, with 90% recovery rate (per RG 1.230), of current meteorological data so that the staff can perform an assessment of the proposed X/Qs.

#### RAI No. 2

The NRC staff's previous approval for the Steam Generator Tube Rupture (SGTR) AST did not include an atmospheric dispersion factor for the low population zone from 0-2 hours; however, the reanalysis used a value of 5.06E-5. The application stated that this value was derived from a fuel handling accident analysis. Since a fuel handling accident is different from a SGTR, please justify the use of this value for the SGTR accident analysis.

# RAI No. 3

Page 35 of the August 27, 2014, submittal, states that the atmospheric dispersion factors are presented in Table 11. A review of Table 11 shows that the values used are the same as those contained in the following application:

Letter from SCE&G to NRC, "License Amendment And Related Technical Specification Changes to Implement Full-Scope Alternative Source Term in Accordance with 10 CFR 50.67," February 17, 2009. (ADAMS Accession No. ML090720887)

In the NRC staff's approval of this application it states, "Therefore, the X/Q values should not be considered acceptable for use in other dose assessments or other meteorological applications without further NRC review and approval."

Given that the staff previously stated that these values should not be considered acceptable, please provide justification for using these values and demonstrate that these values are still appropriate with a more recent data set that does not have the uncertainties that were inherent in the previously provided data set.

Mr. Thomas D. Gatlin
Vice President, Nuclear Operations
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
Post Office Box 88, Mail Code 800
Jenkinsville, SC 29065

SUBJECT:

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1 – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE BASIS CHANGES IN STEAM GENERATOR TUBE RUPTURE ANALYSIS (TAC NO. MF4699)

Dear Mr. Gatlin:

By letter dated August 27, 2014, the South Carolina Electric & Gas Company (SCE&G, the licensee) submitted a license amendment request (LAR) to revise Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1. SCE&G is proposing to revise the licensing basis to incorporate a supplemental analysis to the steam generator tube rupture accident.

The NRC staff has determined that additional information is needed to continue the review as discussed in the Enclosure. We request that SCE&G respond to these RAIs within 30 days of the date of this letter. Please note that the NRC staff's review is continuing and further requests for information may be developed.

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:

Request for Additional Information

cc w/encl: Distribution via Listserv

DISTRIBUTION

PUBLIC RidsNrrDorlDpr Resource

RidsNrrLASFigueroa Resource

UShoop, NRR KBucholtz, NRR LPL2-1 R/F

RidsNrrDorlLpl2-1 Resource RidsNrrDRA Resource

JWhite, NRO

RidsAcrsAcnw\_MailCTR Resource RidsRgn2MailCenter Resource RidsNrrPMSummer Resource

KErwin, NRO

ADAMS Accession No.: ML15076A118

\* by email

OFFICE	LPL2-1/PM	LPL2-1/LA	NRR/DRA/ARCB/BC	LPL2-1/BC	LPL2-1/PM
NAME	SWilliams	SFigueroa	UShoop	RPascarelli (RMartin for)	SWilliams
DATE	04/08/15	04/08/15	04/08/15	04/09/15	04/13/15

OFFICIAL RECORD COPY