

October 16, 2009 NND-09-0289

U.S. Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

ATTN: Document Control Desk

Subject:

Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 Combined License Application (COLA) - Docket Numbers 52-027 and 52-028 Supplemental Response to NRC Request for Additional Information (RAI) Letter No. 061

Reference:

- 1) Letter from Tanya Simms (NRC) to Alfred M. Paglia (SCE&G), Request for Additional Information Letter No. 061 Related to SRP Section 9.2.1 for the Virgil C. Summer Nuclear Station Units 2 and 3 Combined License Application, dated August 17, 2009.
- 2) Letter from Ronald B. Clary (SCE&G) to Document Control Desk (NRC), Response to NRC Request for Additional Information (RAI) Letter No. 061, dated September 16, 2009.

The enclosure to this letter provides the South Carolina Electric & Gas Company (SCE&G) supplemental response to RAI 09.02.01-7. For convenience, the response for RAI 09.02.01-7 provided with Reference 2 is repeated and the supplemental information is provided as green underlined text in the VCSNS Response section. The enclosure also identifies a FSAR change that will be incorporated in a future revision of the VCSNS Units 2 and 3 COLA.

Should you have any questions, please contact Mr. Al Paglia by telephone at (803) 345-4191, or by email at <a href="mailto:apaglia@scana.com">apaglia@scana.com</a>.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 16 day of Ocrober, 2009.

Sincerely,

Ronald B. Clary
Vice President

New Nuclear Deployment

D083

Document Control Desk Page 2 of 2 NND-09-0289 1 1 1 1 1 1 1 1 1

JCL/RBC/jg

Enclosure

Luis A. Reyes c: Chandu P. Patel Tanya Simms John Zeiler Stephen A. Byrne Jeffrey B. Archie Ronald B. Clary Bill McCall William M. Cherry Randolph R. Mahan Kathryn M. Sutton Amy M. Monroe Courtney W. Smyth John J. DeBlasio William Hutchins Grayson Young FileNet

Enclosure 1 Page 1 of 2 NND-09-0289

NRC RAI Letter No. 061 Dated August 17, 2009

SRP Section: 9.2.1 – Station Service Water System

**QUESTIONS from Balance of Plant Branch 1 (SBPA)** 

NRC RAI Number: 09.02.01-7

The applicant's response dated March 4, 2009 provided adequate detail for most of RAI 09.02.01-3. A complete description is not provided to demonstrate that the RWS is designed to be a highly reliable and robust system capable of operating during a loss of normal ac power to provide RWS makeup flow under normal and abnormal conditions for support of cold shutdown conditions for up to seven (7) days. The staff requests the following items;

- 1) The Ancillary RWS system is mentioned once in the above noted RAI responses and provided FSAR markup, but no drawings or detailed text are described in the FSAR. More details concerning the Ancillary RWS need to be provided in the FSAR.
- 2) In FSAR Section 14.2.9.4.24, "Raw Water System," testing does not included the water treatment facility or Ancillary RWS which is the primary water supply to the SWS cooling towers. Provide a description of the type of testing planned for the water treatment facility.
- 3) The RAI response stated that the RWS piping and structures are designed and constructed in accordance with nationally recognized codes and standards (such as ASME B31.1, AWWA and IBC). The COL FSAR, however, did not include any recognized codes and standards such as ASME B31.1, "Power Piping," for the RWS including underground piping. The COL FSAR needs to contain such standards.

## **VCSNS RESPONSE:**

- 1) The ancillary raw water system is that portion of RWS which is normally supplied with filtered water from an offsite water treatment facility. The ancillary raw water system loads are each under 1,000 gpm with piping sized accordingly. The portion of RWS referred to as "ancillary RWS" consist only of piping to supply water from the offsite facility to various site and AP1000 loads as shown on VCSNS FSAR Figure 9.2-201.
- 2) The offsite water treatment facility could be considered to be equivalent to a municipal water supply. Makeup to SWS can also be provided from the raw water pumps without reliance on the offsite water treatment facility. DCD Section 14.2.9.2.6 "Service Water System Testing" includes testing of the SWS cooling tower water level and controls. The SWS testing will verify the capability of the level control system, and thus the availability of water from the RWS. Therefore no

Enclosure 1 Page 2 of 2 NND-09-0289

additional testing is required to be described beyond what is currently provided in the AP1000 DCD and VCSNS Units 2 and 3 FSAR.

3) DCD Table 3.2-3 (sheet 30 of 65) indicates that RWS is a safety Class E system. DCD Subsection 3.2.2.7 indicates that Class E is used for nonsafety-related structures, systems, and components that do not have a specialized industry standard or classification. Accordingly, it is consistent to not include the standards used for RWS design and construction within the scope of the FSAR. However, in the interest of clarity, the FSAR will be revised as indicated below to include the requested information.

## **ASSOCIATED VCSNS COLA REVISIONS:**

Revise COLA Part 2, Subsection 9.2.11.2.2 as shown below.

Add the following sentence at the end of the last paragraph in FSAR Subsection 9.2.11.2.2:

"The RWS piping is designed to ASME Standard B31.1."

## **ASSOCIATED ATTACHMENTS:**

None