



December 16, 2008  
NND-08-0064

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  
Response to NRC Request for Additional Information (RAI) Letter No.  
004

Reference: Letter from Tanya Simms (NRC) to Alfred M. Paglia (SCE&G), Request  
for Additional Information Letter No. 004 Related to SRP Section 7.5 for  
the Virgil C. Summer Nuclear Station Units 2 and 3 Combined License  
Application, dated November 18, 2008.

The enclosure to this letter provides the South Carolina Electric & Gas Company  
(SCE&G) response to the RAI items included in the above referenced letter. The  
enclosure also identifies any associated changes 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 [apaglia@scana.com](mailto:apaglia@scana.com).

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

Executed on this 16 day of December, 2008.

Sincerely,

Ronald B. Clary  
General Manager  
New Nuclear Deployment

JMG/RBC/jg

D083  
NPD

Enclosure

c: Luis A. Reyes  
Ravindra G. Joshi  
John Zieler  
Stephen A. Byrne  
Ronald B. Clary  
Bill McCall  
Kenneth J. Browne  
Randolph R. Mahan  
Kathryn M. Sutton  
FileNet

**NRC RAI Letter No. 003 Dated October 23, 2008**

**SRP Section: 15.00.03 – Design Basis Accidents Radiological Consequences Analysis for Advanced Light Water Reactors**

Question from Siting and Accident Consequences Branch (RSAC)

**NRC RAI Number: 07.05-1**

Tables 7.5-1 and 7.5-8 of the AP1000 Design Control Document (DCD), Revision 16, Post-Accident Monitoring System, contain variables to monitor the meteorological parameters and environs radiation and radioactivity. These variables are defined as site specific. Define these variables in compliance with Regulatory Guide 1.97, Revision 3, as committed to in the combined license application, or justify an alternative approach.

Table 7.5-1 (Sheet 12 of 12) of the AP1000 DCD, Revision 16, identifies meteorological parameters as site specific. Additionally, Table 7.5-8 of the AP1000 DCD identifies "meteorology" and "boundary environs radiation and radioactivity" as site specific variables. However, the staff has not found where the combined license application addresses the parameters/variables. Explain where these variables are found.

**VCSNS RESPONSE:**

FSAR Section 7.5 will be revised to include the site specific information in two supplemental tables as shown below in a future revision of the FSAR.

This response is PLANT SPECIFIC.

**ASSOCIATED VCSNS COLA REVISIONS:**

The VCSNS COLA Part 2, FSAR Section 7.5 will be revised as follows:

This section of the referenced DCD is incorporated by reference with no ~~the following~~ departures and/or supplements.

VCS SUP 7.5-1

FSAR Table 7.5-201 supplements DCD Table 7.5-1 and provides variable data shown in DCD Table 7.5-1 as "site specific."

FSAR Table 7.5-202 supplements DCD Table 7.5-8 and provides variable data shown in DCD Table 7.5-8 as "site specific."

Table 7.5-201								
POST-ACCIDENT MONITORING SYSTEM <sup>(a)</sup>								
Variable	Range/ Status <sup>(b)</sup>	Type/ Category	Qualification		Number of Instruments Required	Power Supply	QDPS Indication	Remarks
			Environmental	Seismic				
<u>Boundary environs Radiation</u>  • <u>Airborne Radiohalogens and Particulates (portable sampling with onsite analysis capability)</u>  • <u>Radiation (portable instrumentation)</u>  • <u>Radioactivity (portable instrumentation)</u>	$10^{-9}$ to $10^{-3}$ $\mu\text{Ci/cc}$  $10^{-3}$ to $10^{-4}$ R/hr, photons $10^{-3}$ to $10^{-4}$ rads/hr, beta and low-energy photons  <u>Multichannel gamma ray spectrometer</u>	C3, E3	None	None	No minimum number of instruments is specified. A sufficient number are provided to outfit the Emergency Planning Field Teams.	Non-1E	No	
<u>Meteorological parameters</u>  • <u>Wind Speed</u>  • <u>Wind Direction</u>  • <u>Differential temperature</u>	0 – 144 mph  0°– 360°  - 40° F to 140° F	E3	None	None	$\begin{matrix} 2 \\ (1 \text{ at } 10 \text{ m and } 1 \text{ at } 60 \text{ m}) \end{matrix}$  $\begin{matrix} 2 \\ (1 \text{ at } 10 \text{ m and } 1 \text{ at } 60 \text{ m}) \end{matrix}$  $\begin{matrix} 2 \\ (1 \text{ at } 10 \text{ and } 1 \text{ at } 60 \text{ m}) \end{matrix}$	Non-1E	No	Differential temperature calculated from temperature measurements at 10 and 60 meters.

- a) This Table supplements DCD Table 7.5-1 and provides the site specific information to address the note in the remarks column of DCD Table 7.5-1.
- b) These Instruments conform to Regulatory Guide 1.97, Revision 3.

<u>Table 7.5-202</u>		
<u>SUMMARY OF TYPE E VARIABLES<sup>(a)</sup></u>		
<u>Function Monitored</u>	<u>Variable</u>	<u>Type/Category</u>
<u>Environs Radiation and Radioactivity</u>	<u>Plant Environs radiation levels and airborne radioactivity</u>	<u>E3</u>
<u>Meteorology</u>	<u>Wind speed, wind direction, and estimation of atmospheric stability (based on vertical temperature difference)</u>	<u>E3</u>

a) This Table supplements DCD Table 7.5-8 and provides the site specific information noted in the variable column of DCD Table 7.5-8

**ASSOCIATED ATTACHMENTS:**

None