



July 23, 2009  
NND-09-0188

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. 052

Reference: Letter from Chandu P. Patel (NRC) to Alfred M. Paglia (SCE&G), Request for Additional Information Letter No. 052 Related to SRP Section 03.05.01.05 for the Virgil C. Summer Nuclear Station Units 2 and 3 Combined License Application, dated June 26, 2009.

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 23<sup>rd</sup> day of July, 2009.

Sincerely,

Ronald B. Clary  
General Manager  
New Nuclear Deployment

AMM/RBC/am

D083  
NR0

Enclosure:

c (with enclosure):

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

**NRC RAI Letter No. 052 Dated June 26, 2009**

**SRP Section: 03.05.01.05 – Site Proximity Missiles (Except Aircraft)**

Question from AP1000 Projects Branch 1 (NWE1)

**NRC RAI Number: 03.05.01.05-1**

RG 1.206 provides guidance regarding the information that is needed to ensure potential hazards in the site vicinity are identified and evaluated to meet the siting criteria in 10 CFR 100.20 and 10 CFR 100.21. A postulated failure of a V.C. Summer Unit 1 turbine could result in missiles representing an external hazard to the safe operation of V.C. Summer Units 2 and 3; this has not been addressed in the V.C. Summer Units 2 and 3 COL FSAR. Provide a discussion of the potential failure of a V.C. Summer turbine at Unit 1 and address the potential turbine generated missile impacts on Units 2 and 3.

**VCSNS RESPONSE:**

A discussion of the potential for postulated missiles from the failure of a VCSNS Unit 1 turbine representing an external hazard to the safe operation of VCSNS Units 2 and 3 has been provided in FSAR Subsection 3.5.1.3. Based on the information presented in this subsection, the potential failure of a turbine at VCSNS Unit 1 and its impact on Units 2 and 3 has been eliminated based on the guidance of Regulatory Guide 1.115. As noted, the probability of impact is less than the hazard rate of  $10^{-7}$  per year, which is considered an acceptable risk rate for the loss of an essential system from a single event.