



July 2, 2009  
NND-09-0178

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-0001

ATTN: Document Control Desk

Subject: V. C. Summer Nuclear Station Units 2 and 3  
Docket Numbers 52-027 and 52-028  
Combined License Application – Environmental Report Audit  
Information Needs: GW-7 Part 4

- Reference:
1. Letter from S.A. Byrne to Document Control Desk, Submittal of a Combined License Application for V. C. Summer Nuclear Station Units 2 and 3, dated March 27, 2008.
  2. Letter from Ronald B. Clary to Document Control Desk, Submittal of Revision 1 to Part 3 (Environmental Report) of the Combined License Application for the V. C. Summer Nuclear Station Units 2 and 3, dated February 13, 2009.
  3. Letter from Patricia J. Vokoun to Ronald B. Clary, Requests for Additional Information Related to the Environmental Review for the Combined License Application for the V. C. Summer Nuclear Station, Units 2 and 3, dated June 22, 2009.

By letter dated March 27, 2008, South Carolina Electric & Gas Company (SCE&G) submitted a combined license application (COLA) for two Westinghouse AP1000 units, designated V.C. Summer Nuclear Station (VCSNS) Units 2 and 3, to be located at the existing VCSNS site in Fairfield County, South Carolina. Subsequently the Environmental Report (ER), Part 3 of the application, was revised and submitted to the NRC (reference 2).

During the week of March 9, 2009, the NRC conducted an Environmental Audit to gather information to assist in the review of the ER. The purpose of this letter is to submit a portion of the ER Information Needs identified by the NRC as GW-7 Part 4. This ER Info Needs item also provides information related to the RAI GW-5 issued by the NRC (reference 3).

Please address any questions to Mr. Alfred M. Paglia, Manager, Nuclear Licensing, New Nuclear Deployment, P. O. Box 88, Jenkinsville, S.C. 29065; by telephone at 803-345-4191; or by email at [apaglia@scana.com](mailto:apaglia@scana.com).

1083  
MLD

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

Executed on this 2nd day of July 2009



Ronald B. Clary  
General Manager  
New Nuclear Deployment

ARR/RBC/ar

Enclosures

c (with Enclosures):

Patricia Vokoun  
Carl Berkowitz  
FileNet

c (without Enclosures):

Luis A. Reyes  
John Zeiler  
Chandu Patel  
Stephen A. Byrne  
Ronald B. Clary  
Bill McCall  
Kenneth J. Browne  
Randolph R. Mahan  
Kathryn M. Sutton  
Rich Louie  
John J. DeBlasio  
April Rice

## VCSNS UNITS 2 and 3

### Response to NRC Information Needs Item

Information Item Number: GW-7 Part 4 Revision: 0

#### Statement of the Information Item:

Information Item GW-7 Part 4:

Provide an expert to describe baseline groundwater quality at the site along with spatial and temporal changes.

SCE&G Follow Up Action:

Provide tritium trend plots for groundwater measurements.

#### Response:

V C Summer Nuclear Station Unit 1 operates a Waste Treatment Facility in accordance with SCDHEC issued NPDES permits. Five groundwater monitoring wells were sampled and analyzed for chemical contaminants as part of the requirements for this permit. During the period of 1995 to 2006, these samples were analyzed for tritium as part of the station's supplemental Radiological Environmental Monitoring Program. In 2007, these monitoring wells were included in the station's Offsite Dose Calculation Manual and the sample frequency increased to quarterly from semi-annually. The results of these analyses are given in picocuries/liter. If the "Activity" column is blank then the result is less than the MDA (minimum detectable activity). The well locations are given using both the ODCM (site #) and the NPDES (GW-#) identifiers.

#### COLA Revisions:

No COLA revision is required as a result of the response to this Information Needs item.

|             | Site 111 (GW-8) |                 | Site 112 (GW-9) |                 | Site 113 (GW-12) |          | Site 114 (GW-13A) |                 | Site 115 (GW-15) |                 |
|-------------|-----------------|-----------------|-----------------|-----------------|------------------|----------|-------------------|-----------------|------------------|-----------------|
|             | MDA             | Activity        | MDA             | Activity        | MDA              | Activity | MDA               | Activity        | MDA              | Activity        |
| <b>1995</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| May         | 4.56E+02        |                 | 4.56E+02        | <b>7.18E+02</b> | 4.56E+02         |          | 4.56E+02          | <b>2.30E+03</b> | 4.56E+02         | <b>1.89E+03</b> |
| Nov         | 4.70E+02        |                 | 4.70E+02        | <b>4.03E+03</b> | 4.70E+02         |          | 4.70E+02          | <b>3.00E+03</b> | 4.70E+02         | <b>4.45E+03</b> |
| <b>1996</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| May         | 4.70E+02        |                 | 4.70E+02        | <b>2.37E+03</b> | 4.70E+02         |          | 4.70E+02          | <b>2.14E+03</b> | 4.70E+02         | <b>5.89E+02</b> |
| Nov         | 4.78E+02        |                 | 4.78E+02        | <b>1.27E+04</b> | 4.78E+02         |          | 4.78E+02          | <b>2.10E+03</b> | 4.78E+02         | <b>5.96E+03</b> |
| <b>1997</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| May         | 4.82E+02        |                 | 4.82E+02        | <b>2.19E+03</b> | 4.82E+02         |          | 4.82E+02          | <b>4.64E+03</b> | 4.82E+02         | <b>2.58E+03</b> |
| Nov         | 4.80E+02        | <b>9.12E+02</b> | 4.80E+02        | <b>6.08E+03</b> | 4.80E+02         |          | 4.80E+02          | <b>1.93E+03</b> | 4.80E+02         | <b>6.55E+02</b> |
| <b>1998</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 5.05E+02        |                 | 5.05E+02        |                 | 5.05E+02         |          | 5.05E+02          | <b>7.35E+02</b> | 5.05E+02         |                 |
| Aug         | 5.06E+02        |                 | 5.06E+02        | <b>5.11E+03</b> | 5.06E+02         |          | 5.06E+02          |                 | 5.06E+02         | <b>1.13E+03</b> |
| <b>1999</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 4.58E+02        |                 | 4.58E+02        | <b>2.96E+03</b> | 4.58E+02         |          | 4.58E+02          |                 | 4.58E+02         |                 |
| Aug         | 4.75E+02        |                 | 4.75E+02        | <b>1.67E+03</b> | 4.75E+02         |          | 4.75E+02          | <b>4.80E+02</b> | 4.75E+02         |                 |
| <b>2000</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 4.72E+02        |                 | 4.72E+02        |                 | 4.72E+02         |          | 4.72E+02          |                 | 4.72E+02         |                 |
| Aug         | 4.89E+02        |                 | 4.89E+02        |                 | 4.89E+02         |          | 4.89E+02          |                 | 4.89E+02         |                 |
| <b>2001</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Mar         | 4.69E+02        |                 | 4.69E+02        |                 | 4.69E+02         |          | 4.69E+02          |                 | 4.69E+02         |                 |
| Aug         | 4.61E+02        |                 | 4.61E+02        |                 | 4.61E+02         |          | 4.61E+02          |                 | 4.61E+02         |                 |
| <b>2002</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 4.77E+02        |                 | 4.77E+02        |                 | 4.77E+02         |          | 4.77E+02          |                 | 4.77E+02         |                 |
| Aug         | 4.71E+02        |                 | 4.71E+02        |                 | 4.71E+02         |          | 4.71E+02          |                 | 4.71E+02         |                 |
| <b>2003</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 4.68E+02        |                 | 4.68E+02        |                 | 4.68E+02         |          | 4.68E+02          |                 | 4.68E+02         |                 |
| Aug         | 4.96E+02        |                 | 4.96E+02        |                 | 4.96E+02         |          | 4.96E+02          |                 | 4.96E+02         |                 |
| <b>2004</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 5.45E+02        |                 | 5.45E+02        | <b>8.91E+02</b> | 5.45E+02         |          | 5.45E+02          |                 | 5.45E+02         |                 |
| Aug         | 4.93E+02        |                 | 4.93E+02        | <b>1.50E+03</b> | 4.93E+02         |          | 4.93E+02          |                 | 4.93E+02         |                 |
| <b>2005</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Mar         | 5.66E+02        |                 | 5.66E+02        |                 | 5.66E+02         |          | 5.66E+02          |                 | 5.66E+02         |                 |
| Aug         | 4.73E+02        |                 | 4.73E+02        | <b>1.83E+03</b> | 4.87E+02         |          | 4.87E+02          |                 | 4.87E+02         |                 |
| <b>2006</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 4.96E+02        |                 | 4.96E+02        | <b>9.48E+02</b> | 4.96E+02         |          | 4.96E+02          |                 | 4.96E+02         |                 |
| Aug         | 4.86E+02        |                 | 4.86E+02        | <b>6.13E+02</b> | 4.86E+02         |          | 4.86E+02          |                 | 4.86E+02         |                 |
| <b>2007</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 4.74E+02        |                 | 4.74E+02        | <b>5.45E+02</b> | 4.74E+02         |          | 4.74E+02          |                 | 4.74E+02         |                 |
| May         | 4.67E+02        |                 | 4.67E+02        |                 | 4.67E+02         |          | 4.67E+02          |                 | 4.67E+02         |                 |
| Aug         | 4.71E+02        |                 | 4.71E+02        | <b>5.95E+02</b> | 4.71E+02         |          | 4.71E+02          |                 | 4.71E+02         |                 |
| Nov         | 4.67E+02        |                 | 4.67E+02        | <b>9.53E+02</b> | 4.67E+02         |          | 4.67E+02          |                 | 4.67E+02         |                 |
| <b>2008</b> |                 |                 |                 |                 |                  |          |                   |                 |                  |                 |
| Feb         | 4.93E+02        |                 | 4.93E+02        |                 | 4.93E+02         |          | 4.93E+02          |                 | 4.93E+02         |                 |
| May         | 4.68E+02        |                 | 4.68E+02        |                 | 4.68E+02         |          | 4.68E+02          |                 | 4.68E+02         |                 |
| Aug         | 4.86E+02        |                 | 4.86E+02        |                 | 4.86E+02         |          | 4.86E+02          |                 | 4.86E+02         |                 |
| Nov         | 4.75E+02        |                 | 4.75E+02        |                 | 4.75E+02         |          | 4.75E+02          |                 | 4.60E+02         |                 |