



July 30, 2009
NND-09-0209

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 – Response to NRC
Environmental Report (ER) Requests for Additional Information
(RAI): CR-2 and 6, LU-1, and AqEco-1

Reference: 1. 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.
2. 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 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 1).

The enclosure to this letter provides the SCE&G response to RAI items CR-2 and 6, LU-1, and AqEco-1 transmitted by the NRC via reference 2.

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.

D083
NRO

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

Executed on this 30th 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
William M. Cherry
Randolph R. Mahan
Kathryn M. Sutton
Rich Louie
John J. DeBlasio
April Rice

**VCSNS UNITS 2 and 3
Environmental Report Review
Response to NRC Requests for Additional Information**

NRC RAI Letter Dated June 22, 2009

NRC RAI Number: CR-2 **Revision:** 0

Reference ER Information Needs Item: CR-6

Question Summary (RAI):

Provide a description of how SCE&G and Santee Cooper intend to address impacts to cultural resources from modifications to existing transmission lines as well as construction of new transmission lines. Include correspondence with State Historic Preservation Officer (SHPO) and consulting parties associated with the cultural resource investigations.

Full Text (supporting information):

To evaluate each respective impact resulting from construction of transmission lines, staff will need documentation describing how potential cultural resources will be identified, and if they are identified, how impacts to these will be addressed.

VCSNS Response:

SCE&G and Santee Cooper have discussed in recent conference calls with SHPO and the NRC their respective cultural resource assessment processes when constructing in new and existing transmission line rights of way (ROW). Both SCE&G and Santee Cooper also emphasized their response to discoveries made during construction, i.e. contacting and engaging qualified cultural resource investigators to assess the discovery and consulting with SHPO regarding mitigation if any is determined to be needed. The Transmission Line Siting Studies for both Santee Cooper and SCE&G, transmitted in letter number NND-08-0026 dated September 4, 2008, reflect the cultural resource implications for each company's potential lines associated with Units 2 & 3. To further delineate and define the process for assessing impacts and protecting cultural resources during transmission line construction for Units 2 and 3, both SCE&G and Santee Cooper have agreed to pursue a formal Programmatic Agreement(s) (PA) with SHPO. The details of the PA(s) will involve on-going communications and agreements with SHPO and NRC and will result in a final PA(s), which will, when executed, fully address the impacts and/or treatment of cultural resources in both existing and new ROW by both Santee Cooper and SCE&G.

Associated COLA Revisions:

No COLA revision is required as a result of the response to this RAI.

Associated Attachments:

None

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NRC RAI Letter Dated June 22, 2009

NRC RAI Number: CR-6 **Revision:** 0

Reference ER Information Needs Item: CR-14

Question Summary (RAI):

Provide documentation describing the methodology used to identify interested parties as part of the process of identification of historic properties and assessment of effects for transmission lines.

Full Text (supporting information):

Obtaining interested-party input on historic properties is necessary for the review.

VCSNS Response:

ER Section 2.5.3 summarizes the consultations held with interested parties including: Fairfield County Museum, Fairfield County Archives, the State Historic Preservation Office and others. No known unlisted sites of interest at the VCSNS site were provided by the Museum or Archives. Consultations with SHPO are ongoing and, as noted in response to RAI CR-2 and CR-7, SCE&G and Santee Cooper are pursuing a Programmatic Agreement with SHPO. It is envisioned that in the process of developing the Programmatic Agreement any additional interested parties will be identified. Also of note is that the NRC licensing process provides opportunities for interested parties to be notified of the federal action and to participate as appropriate.

Associated COLA Revisions:

No COLA revision is required as a result of the response to this RAI.

Associated Attachments:

None

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NRC RAI Letter Dated June 22, 2009

NRC RAI Number: RAI LU-1 **Revision:** 0

Reference ER Information Needs Item: N/A

Question Summary (RAI):

Quantify the acreage of wetlands expected to be impacted in proposed or expanded transmission corridors, using consistent data sources.

(Note that this RAI is similar to RAI AqEco-5 and Ter Eco-3).

Full Text (supporting information):

Wetland acreages are better characterized in more recent State datasets. South Carolina Department of Natural Resources (SCDNR) Gap Analysis Program (GAP) analysis data should be used for consistency with the transmission line siting studies docketed separately. These data are important for the accurate characterization of land uses in the affected transmission corridors at the site and in the vicinity of VCSNS.

VCSNS Response:

SCE&G Response

Section 6.3, Chart 6.3.1, of SCE&G's V.C. Summer Nuclear Station Units 2 and 3 Transmission Line Siting Study ("Siting Report") lists the expected acreage of wetlands and stream buffer impacts for each of the proposed transmission line corridors. SCE&G used the most recent available statewide land use and land cover data to quantify likely impacts that will result from constructing the VCSNS-St. George, VCSN-Killian and VCSNS-Lake Murray 230 kV Lines. The S.C. Department of Natural Resources GAP Analysis Program data¹ was used to quantify likely land cover and land use impacts associated with the potential routes described in the "Siting Report". The GAP data was updated by the use of satellite imagery² to account for visible land use changes throughout the siting study areas for the future lines. The updates are primarily associated with changes in vegetation and development that have occurred since the date of the GAP data. The U.S. Fish and Wildlife Service National Wetlands Inventory

¹ SC-GAP Project, South Carolina 27-Class Land Cover. South Carolina Cooperative Fish and Wildlife Research Unit, USGS Biological Resources Division, South Carolina Department of Natural Resources. 2001.

² Geo 23m – Resource Satellite [Satellite Imagery]. Acquisition Date 3 May 2006. GeoEye. 27 Oct. 2007 <<http://www.geoeye.com>>.

Geo 23m – Resource Satellite [Satellite Imagery]. Acquisition Date 7 Aug. 2006. GeoEye. 7 Nov. 2007 <<http://www.geoeye.com>>.

Geo 23m – Resource Satellite [Satellite Imagery]. Acquisition Date 29 Sept. 2006. GeoEye. 27 Oct. 2007 <<http://www.geoeye.com>>.

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Project (“NWI”) data³ was used to predict wetland impacts associated with construction of the lines. The wetland data contained in the Siting Report (Section 6.3; Chart 6.3.1) for the VCSNS transmission lines corridors are currently being reviewed and refined in response to RAI USACE-3. This refined analysis expands upon the NWI data utilizing recent USGS Digital Orthoquadrangle data⁴, USGS topographical maps and U.S. Department of Agriculture Soils data. Potential impacts to hydrographical resources were derived by intersecting the future line’s potential rights-of-way with USGS digital line graphs data.⁵ This information will be available upon completion of the review and will be contained in the response to RAI USACE-3.

Santee Cooper Response

Section 3.2.2, Table 3-6, of Santee Cooper’s V.C. Summer Nuclear Station Units 2 and 3 Transmission Line Siting Study (“Siting Report”) lists the expected acreage of wetlands and stream impacts for each of the proposed transmission line corridors. Santee Cooper used the most accurate available statewide land use and land cover data to quantify likely impacts that will result from constructing the VCSNS-Flat Creek and VCSNS-Varnville 230 kV Lines. The S.C. Department of Natural Resources GAP Analysis Program data⁶ was used to quantify likely land cover and land use impacts associated with these potential routes which are described in detail in the “Siting Report.” The U.S. Fish and Wildlife Service National Wetlands Inventory Project (“NWI”) data⁷ and USDA soil survey data was used to estimate wetland impacts associated with construction of the lines. The USGS National Hydrography Dataset⁸ digital line graphs data was used to

³ Land Use/Land Cover Data for 7.5’ Quadrangles (Multiple). U.S. Fish & Wildlife Service National Wetlands Inventory Project. South Carolina Department of Natural Resources. Dec. 2007 <<http://www.dnr.sc.gov>>.

Land Use/Land Cover Data for 7.5’ Quadrangles (Multiple). Draft Copies. Charlie Storrs, Regional Wetlands Coordinator (404.679.7129). U.S. Fish & Wildlife Service.

⁴ 2006 Digital Orthophoto Quadrangles.” South Carolina Department of Natural Resources GIS Data Clearinghouse. 2006. Oct. 2007 <<https://www.dnr.sc.gov/pls/gisdata/quad.qselect>>.

⁵ USGS 7.5’ Series Hydrological Digital Line Graphs. GIS Data Clearinghouse, South Carolina Department of Natural Resources GIS Data Clearinghouse. 10 Jan. 2002. Dec. 2007 <<https://www.dnr.sc.gov/pls/gisdata/quad.qselect>>.

⁶ SC-GAP Project, South Carolina 27-Class Land Cover. South Carolina Cooperative Fish and Wildlife Research Unit, USGS Biological Resources Division, South Carolina Department of Natural Resources, Initiated June 1989, Published 1994.

⁷ Land Use/Land Cover Data for 7.5’ Quadrangles (Multiple). U.S. Fish & Wildlife Service National Wetlands Inventory Project. South Carolina Department of Natural Resources. Dec. 2007 <<http://www.dnr.sc.gov>>.

Land Use/Land Cover Data for 7.5’ Quadrangles (Multiple). Draft Copies. Charlie Storrs, Regional Wetlands Coordinator (404.679.7129). U.S. Fish & Wildlife Service.

⁸ USGS. 2008. “National Hydrography Dataset” website accessed July 2008: <http://nhdgeo.usgs.gov/viewer.htm>

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estimate potential impacts to hydrographical resources (streams, reservoirs, navigable waterways).

Associated COLA Revisions:

No COLA revision is required as a result of the response to this RAI.

Associated Attachments:

None

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NRC RAI Letter Dated June 22, 2009

NRC RAI Number: RAI AqEco-1 **Revision:** 0

Reference ER Information Needs Item: AQ-1

Question Summary (RAI):

Provide copies of the reports detailing winter and spring 2009 aquatic surveys for Mayo Creek and winter 2009 aquatic surveys for the Monticello Reservoir.

Full Text (supporting information):

To adequately describe the spatial and temporal distribution of aquatic biota within the site vicinity, complete quarterly data on the nearby water bodies is needed. Quarterly data on aquatic communities for Mayo Creek and Monticello Reservoir have not been provided.

VCSNS Response:

A new July 2009 Mayo Creek report is attached that includes both the Winter and Spring 2009 surveys (Tetra Tech NUS 2009).

The winter and spring ichthyoplankton surveys were provided as Normandeau (2009a) and Normandeau (2009b), respectively in response to RAI AqEco-2. The summer ichthyoplankton report will be provided when it becomes available. A final report, summarizing results of the entire study, will be prepared after the August 2009 sampling event and provided to NRC.

The report covering the Monticello winter survey for adult fish was provided in response to RAI AqEco-9.

Associated COLA Revisions:

No COLA revision is required as a result of the response to this RAI.

Associated Attachments:

Tetra Tech NUS 2009. "Mayo Creek Quarterly Fish Surveys – Winter and Spring 2009 – V.C. Summer Units 2 and 3 Combined Construction/Operating License Project." Tetra Tech NUS, Aiken, South Carolina. July.