



July 9, 2010  
NND-10-0268

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

Attention: Document Control Desk

Subject: V. C. Summer Nuclear Station Units 2 and 3  
Docket Numbers 52-027 and 52-028  
Comments on the Draft Environmental Impact Statement for Combined  
Licenses for V. C. Summer Nuclear Station Units 2 and 3

Reference: 1. Letter from Ronald B. Clary to Document Control Desk, Submittal of  
Revision 2 to Part 3 (Environmental Report) of the Combined License  
Application for the V. C. Summer Nuclear Station Units 2 and 3, dated  
July 2, 2010

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 enclosures to this letter provide comments from SCE&G and Santee Cooper on the Draft Environmental Impact Statement issued for the project in April 2010.

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).

Sincerely,

Ronald B. Clary  
Vice President  
New Nuclear Deployment

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Enclosure

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## VCSNS Units 2 & 3 DEIS Comments from SCE&G

Location	Comment	
Page 1-10, line 25-26	Fairfield Unit 1 (Fa-1) site should be referred to as the Fa-1 site (Fairfield County greenfield site).	
Page 2-1, line 23	"Monticous Road" should be Monticello Road	
Page 2-18, line 22	Wastes would include blowdown and discharges from the radwaste building as well as sanitary and industrial waste.	
Page 2-29, line 12	DEIS states, "All VCSNS Units 2 and 3 cooling water would discharge to Parr Reservoir." This statement implies open-cycle cooling. Suggested language would be "blowdown from cooling towers would discharge to Parr Reservoir."	
Page 2-40	Table 2-14 the approximate percentages are incorrect for Open Water (should be 0.242), Urban Land (should be 0.107), and Wetlands (should be 0.012).	
Page 2-47	The reference for Figure 2-15 should be SCE&G 2009a.	
Page 2-48, line 14	Should read " <u>is</u> protected under"	
Page 2-55, lines 13-15	<p>"...water... is released...to provide power at Parr Shoals Dam..."</p> <p>Comment - Water released from Monticello Reservoir from the FPSF provides power at the FPSF, not at Parr Shoals Dam or Parr Hydro.</p>	
Page 2-55, line 17	"...reversing the flow in Parr Reservoir." Comment – Net flow reversal would only happen when the pump back flow from the FPSF exceeds the natural downstream flow in the river.	
Page 2-60 line 11	Samples were collected by SCE&G and analyzed by Carnagey	
Page 2-61, line 10	SCDNR no longer restricts fishing to 2 days per week.	
Page 2-62, line 33	SCE&G collected samples and they were analyzed by CBS	
Page 2-87, line 8	Delete "for each unit." There is only one nuclear operating unit.	
Page 2-87, line 22	Town of Jenkinsville is now incorporated.	
Page 2-96, line 6	Change to "...four new cooling towers..."	
Page 2-96, line 7	Change to "...VCSNS site <i>and</i> the Unit 1 containment building..."	
Page 2-96, line 27	Jenkinsville is now incorporated.	
Page 2-106, line 10	Clarification - Lexington/Richland School District 5 includes portions of Richland County	

Location	Comment	
Page 2-130, line 19	Replace "Santee Cooper" with "SCE&G".	
Page 2-135, line 9	The DEIS states "when the water in the reservoir is warmer than the surrounding land and the winds are blowing from the water towards the Unit 1 tower", however, when water is warmer than the land, the air rises, causing the wind to blow from the Unit 1 tower (i.e. land) <i>towards</i> the water.	
Page 2-141, line 4	Delete reference to discharges into the circulating water system. There are no discharges to this closed system, but rather to Monticello and Parr Reservoirs.	
Page 3-9, line 33	Insert "port" after "diffuser".	
Page 3-28, line 4, also lines 12-13	Line 4 - Delete after semicolon "this water is known as blowdown." Lines 12-13 - Delete sentence "The blowdown water from each cooling tower would collect in a basin..." This water is not blowdown water at this point.	
Page 4-13, line 19	The statement that any withdrawal other than for Unit 1 needs FERC approval is not accurate. FERC approval is required for withdrawal for cooling water for additional nuclear power plants.	
Page 4-15, line 16	Discharge to Parr Reservoir does not require FERC approval. Construction of the discharge structure within the FERC Project Boundary Line does require approval.	
Page 4-18, line 30	"turbidity curtains" should be silt fence.	
Page 4-26, line 9	"turbidity curtains" should be silt fence.	
Page 4-45 Line 2	Batch plant operated per SCDHEC regulations not SCDNR.	
Page 4-49, line 18	Stagger of unit completion not done to avoid swings in employment levels it is due to power needs.	
Page 4-56, line 8	How is the stated capacity of Monticello Reservoir derived? This appears to be referring to potable water capacity.	
Page 4-56, line 23	Suggest clarification that Monticello Reservoir is not a source of "public water" except for VCSNS Unit 1.	
Page 4-79, line 22	Releases from all of the sources listed are not released from the Unit 1 stack. Example: oil incinerator.	
Page 5-4, lines 29-30	Suggest change in wording to "...from the old Frees Creek basin and indirectly..." Frees Creek no longer exists.	
Page 5-9, line 33	Suggest changing sentence to read: "Based on the Parr Reservoir eastern channel width of approximately 600 feet, the largest mixing zone size could be 300 ft across the channel	

Location	Comment	
	and 1200 ft along the channel.”	
Page 6-16, line 24	Fairfield Unit 1 site should be “FA-1” site.	
Page 7-3, Table 7-1, Project Name column	Parr Steam Plant was decommissioned. The appropriate term for the facility is Parr Combustion Turbines.	
Page 7-5, , Table 7-1	SCE&G Combined Site Emergency Operations Facility is now operational.	
Page 7-25, line 26-27	Incomplete sentence.	
Page 7-26, line 22, 26 & 30	Parr Steam Plant was decommissioned. The appropriate term for the facility is Parr Combustion Turbines.	
Page 7-29, line 35	Parr Steam Plant was decommissioned. The appropriate term for the facility is Parr Combustion Turbines.	

## VCSNS Units 2 & 3 DEIS Comments from Santee Cooper

### Section 2 Comments

(Note: Comments related to transmission lines are based on Revision 1 of the Santee Cooper transmission line siting study incorporated into Environmental Report Revision 2- Reference 1.)

#### 2.2.2 Transmission-Line Corridors

- Pg 2-8, lines 14-30: Discussion of Transmission lines do not match/reference MACTEC 2008, although similar; VCSNS-Varnville discussion omits Pomaria substation. Information provided in Rev 1 of siting study.
- Pg 2-10, Figure 2-5: Santee Cooper lines/substations/routing need to be adjusted based on Rev 1 of siting study.
- Pg 2-11 & 2-13, Table 2-3: MACTEC 2008 includes discussions/data pertaining to both Land Use and Land Cover in Sections 3.3 and 3.4, respectively, but information found on page 2-11 or included in Table 2-3 is not from MACTEC 2008 and should not be cited as such. Rev 1 includes current land use/land cover acreages in areas of proposed new ROW.

#### 2.4.1.2 Terrestrial Resources – Transmission Lines

- Pg 2-45, lines 3-5, 14-15: Information updated in Rev 1 of siting study.

#### 2.4.1.3 Important Terrestrial Species and Habitats

- Pg 2-51, last paragraph: This paragraph needs revising for Santee Cooper. Most of the information in this paragraph does NOT pertain to Santee Cooper and reference to Santee Cooper and MACTEC 2008 should be removed. Section 3.6 (page 3-28) and Sec 4.6 (pg 4-15) of MACTEC 2008 indicate that a majority of the Santee Cooper lines have been routed within existing transmission line corridors. Santee Cooper conducted a threatened and endangered species survey on the 2.44 miles of proposed new ROW in July 2008. Santee Cooper plans to conduct additional protected species surveys along new ROW segments.
- Pg 2-53, line 18: Reference to MACTEC 2008 should be removed as Palustrine forest wetlands were not distinguished there.
- Pg 2-53, line 25: Rev 1 of the siting study indicates that wetlands and jurisdictional waters in areas of new ROW will be delineated and verified by the USACE prior to development.

#### 2.4.2.2 Aquatic Resources – Transmission Lines

- Pg 2-65, lines 35-36: Information updated in Rev 1.
- Pg 2-66, Table 2-20: MACTEC 2008 identifies Little amphiantus as a federally protected species, it is not included in either Table 2-20 or Table 2-17
- Pg 2-67, 1<sup>st</sup> paragraph: MACTEC 2008 indicated that the # of stream crossings were estimated

#### 2.7.3 Historic and Cultural Resources within Transmission-Line Corridors

- Pg 2-130, line 6: Need to indicate Santee Cooper transmission lines have been routed primarily within existing corridors and reference MACTEC 2008.

- Pg 2-130, line 19: incorrectly references Santee Cooper, should be SCE&G
- Pg 2-130, line 26: Santee Cooper will comply with requirements necessary for Section 106 compliance and SCSHPO concurrence for the project as implemented by the SCSHPO agreement.

### Section 3 Comments

#### 3.2.2.3 Other Structures w/a permanent environmental interface

- Pg 3-16, line 9: Table 3-1: Information updated in Rev. 1

#### 3.3.2 Summary of Resource Commitments during Construction and Preconstruction

- Pg 3-25, Table 3-3: Discussion of New transmission line is accurate if the DEIS does not consider additional parallel ROW to be "New", otherwise this table should be updated as a result of Rev. 1 of siting study

### Section 4 Comments

#### 4.1.2 Transmission-Line Corridors and Other Offsite Areas

- Pg 4-7, line 9: Information updated in Rev. 1
- Pg 4-7, line 36: change to "apply for required USACE permits"
- Pg 4-8, line 19: Transmission discussion does not match MACTEC 2008 report. Also, needs to include Pomaria SS reference. Information updated in Rev. 1
- Pg 4-8, lines 30-36: Information should be updated as a result of Rev. 1
- Pg 4-9, Table 4-1: Length and Acres for Flat Creek and Varnville are updated in Rev. 1

#### 4.3.1.1 Terrestrial Resources – Site and Vicinity

- Pg 4-18, lines 1-3: MACTEC 2008 should be referenced here (Section 4.4), to indicate that land under the new transmission line "will be maintained in an early successional grassland or shrub/scrub vegetation".

#### 4.3.1.2 Terrestrial Resources – Transmission Lines

- Pg 4-24, last paragraph: Based on Table 3-9 in Section 3.3 of MACTEC 2008, new ROW consists of approximately 30 acres, not 45. However, the information in this paragraph should be updated as a result of Rev. 1.
- Pg 4-24, lines 20-22, adjust cleared ac. (45) MACTEC 2008 Table 3-9 pg 3-14 shows approx. 30 acres not 45. Remove SCE&G reference and entire ac (3534). Suggest separating SCE&G from this section about Santee Cooper Lines.
- Pg 4-26, line 13: Likely to require revision based on Rev. 1 of siting study
- Pg 4-26, second paragraph: Numbers will require revision based on Rev. 1 of siting study

4.3.2.2 Aquatic Resources – Transmission Lines

- Pg 4-33, These are SCE&G Trans lines. Remove Santee Cooper reference. Santee Cooper lines are discussed on pg 4-34.
- Pg 4-34, lines 5-30: Some numbers will require revision based on Rev. 1

**Section 5 Comments**

5.3.1.2 Terrestrial Resources – Transmission Lines

- Pg 5-17, lines 15-16: Santee Cooper also indicated that new transmission structures would be “raptor safe”.

5.3.2.2 Aquatic Resources – Transmission Lines

- Pg 5-31 lines 25-26: Suggest removing “restricts the use of heavy equipment”. MACTEC 2008 does indicate that measures, including implementation of appropriate BMPs, are taken to limit erosion and sedimentation entering nearby streams and water bodies.

5.8.3 Acute Effects of Electromagnetic Fields

- Pg 5-57 lines 29-30: MACTEC 2008 also states that Santee Cooper transmission lines will meet or exceed the requirements of the NESC (currently less than 5mA).

**Section 7 Comments**

7.3.2 Aquatic Ecosystem Impacts

- Pg 7-17 lines 13-16: a complete list of basins crossed by all the proposed transmission lines should also include the Broad River Basin and the Catawba River Basin.

**Section 8 Comments**

8.1.2 Santee Cooper Relevant Service Area

- Pg 8-4 line 4: Add “approximately” before “30 large industrial facilities...”
- Pg 8-4 lines 7-8: Suggest striking last sentence of this paragraph or change from winter peak demand to summer peak capacity of 6,091 as indicated in RAI response NND-09-0320 (SCE&G 2009d)

8.1.4.2 South Carolina Public Service Authority (Santee Cooper)

- Pg 8-7 line 27: Add “generation” between “The” and “resource”.
- Pg 8-7 line 35: Replace “IRPs” with “generation resource plans”.
- Pg 8-7 line 36: Replace “audits” with “review”

8.1.5 Description of the South Carolina Analytical Process

- Pg 8-9 line 26: Add “Resource” between “Generation” and “plan” and capitalize “plan”.



Enclosure 2  
NND-10-0268

- Pg 8-10 lines 5-7: Change sentence to “Santee Cooper’s resource planning process includes an independent third-party review, and is subject to the State’s approval through issuance of a Board of Directors’ resolution.”
- Pg 8-10 lines 23 and 24: Change first part of sentence to “Santee Cooper’s Generation Resource Plan, which contains the load forecast developed by GDS Associates, was independently...”
- Pg 8-10 line 29: Replace “final” with “most recent”.

8.2.2.1 Factors Affecting Demand

- Pg 8-14 lines 25-27: The Santee Cooper 2009 IRP was forwarded as requested but the load forecast model did not account for the potential loss of sales to Central as this change was not finalized. The requisite regulatory approvals for the agreement between Central and a supplier other than Santee Cooper are now imminent; therefore, the load forecast is being updated accordingly. The Santee Cooper data in Tables 8-1 and 8-4 will need to be revised based on the updated load forecast.

8.3.2 Santee Cooper

- Pg 8-19 line 32: Delete “annually” and replace “forecasts through the IRP” with “generation resource plan”
- Pg 8-19 line 33: Delete “both” and replace “of the IRP as well as” with “and”.

8.3.2.1 Present and Planned Generating Capacity

- Pg 8-20 line 11: Delete “annually” and replace with “periodically”
- Pg 8-20 line 24: Delete “annually” and replace with “Periodically”

**Section 9 Comments**

9.3.3.3 Terrestrial and Wetland Resources

- Pg 9-57, lines 18-22: “all land clearing would be conducted according to...existing SCE&G OR Santee Cooper procedures

9.3.3.5 Aquatic Resources

- Pg 9-65, lines 4-6: Santee Cooper should not be identified with ground-disturbing activities at the site. In addition, per MACTEC 2008, Santee Cooper has committed to future coordination with the USFWS, which is likely to include a sampling plan identifying areas of suitable habitat for protected species along the ROW that may require additional field surveys.
- Pg 9-67, lines 16-17: Identical comment as pg 9-57, lines 18-22 above.

9.3.3.8 Historic and Cultural Resources

- Pg 9-80, line 28: change to the following “...staff assumes SCE&G and Santee Cooper would conduct their transmission-related...”

9.3.4.1 Land Use and Transmission-Line Corridors

- Pg 9-90, lines 32-35: Identical comment as pg 9-57, lines 18-22 above.

9.3.4.3 Terrestrial and Wetland Resources

- Pg 9-96, lines 24-27: Identical comment as pg 9-57, lines 18-22 above.

9.3.4.5 Aquatic Resources

- Pg 9-102, lines 11-14: Identical comment as pg 9-57, lines 18-22 above.

9.3.4.8 Historic and Cultural Resources

- Pg 9-115, lines 21-23: Identical comment as pg 9-80, line 28 above.

9.3.5.1 Land Use and Transmission-Line Corridors

- Pg 9-127, lines 19-22: Identical comment as pg 9-57, lines 18-22 above.

9.3.5.3 Terrestrial and Wetland Resources

- Pg 9-134, lines 6-9: Identical comment as pg 9-57, lines 18-22 above.

9.3.5.5 Aquatic Resources

- Pg 9-140, lines 34-37: Identical comment as pg 9-57, lines 18-22 above.

9.3.5.8 Historic and Cultural Resources

- Pg 9-153, lines 18-21: Identical comment as pg 9-80, line 28 above.

9.3.6.1 Land Use and Transmission-Line Corridors

- Pg 9-163, lines 22-25: Identical comment as pg 9-57, lines 18-22 above.
- Pg 9-163, line 30: acreage/length for transmission lines is for both SCE&G and Santee Cooper.

9.3.6.3 Terrestrial and Wetland Resources

- Pg 9-170, lines 3-6: Identical comment as pg 9-57, lines 18-22 above.

9.3.6.5 Aquatic Resources

- Pg 9-175, lines 26-29: Identical comment as pg 9-57, lines 18-22 above.

9.3.6.8 Historic and Cultural Resources

- Pg 9-189, lines 31-33: Identical comment as pg 9-80, line 28 above.