



September 8, 2010  
NND-10-0334

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

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 - SCE&G Voluntary Submittal Related to the  
Environmental Report Chapter 8

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.  
2. Letter from Ronald B. Clary to Document Control Desk,  
Comments on the Draft Environmental Impact Statement  
(DEIS) for Combined Licenses for V. C. Summer Nuclear  
Station Units 2 and 3, dated July 9, 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 enclosure to this letter provides an update to the ER information in response to DEIS comments (reference 2) related to the Santee Cooper need for power analysis.

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).

D083  
NRO

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

Executed on this 8<sup>th</sup> day of September, 2010.

Sincerely,



Ronald B. Clary  
Vice President  
New Nuclear Deployment

ARR/RBC/ar

Enclosures

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## **VCSNS Units 2 & 3**

### **Environmental Report Chapter 8 Update for Santee Cooper**

**August 2010**

#### Section 8.2 – Introductory

Several recent developments have caused Santee Cooper to begin re-evaluating its capital improvement program and long-term power supply plan. First, the on-going economic downturn has reduced the overall demand for electricity, particularly in the near term. In addition, proposed federal regulation of carbon emissions would significantly increase the operating costs of coal-fired and gas-fired generating stations. Finally, in September 2009, Santee Cooper and Central Electric Power Cooperative, Inc. (“Central”) entered into an agreement which, among other things, would permit Central to purchase the electric power and energy requirements necessary to serve five cooperatives located in the upper part of South Carolina from a supplier other than Santee Cooper. However, Santee Cooper retains the obligation to serve this load until the earlier of (i) receipt of the requisite regulatory approvals or (ii) June 30, 2011. Central is currently anticipating all approvals to be completed in the fall of 2010. Should Central move forward with an alternate supplier, this load would transition from Santee Cooper to the new supplier over a seven year period beginning in 2013. Therefore, previously anticipated sales to Central would be reduced by the amount of the transitioned load. Based on these factors, on August 24, 2009, Santee Cooper suspended its efforts to further permit and develop the coal-fired units at the Pee Dee site.

#### Section 8.2.1 – Load Forecast

In light of the developments noted in Section 8.2, Santee Cooper is reviewing other aspects of its capital improvement program and long-term power supply plan. Currently, Santee Cooper is in active discussions with a number of utilities regarding long-term power sales arrangements, the total of which is over 2,000 MW. Of this, at least 300 MW are the subject of current contract negotiations and are reasonably expected to be finalized by the end of 2010. In addition, Santee Cooper is evaluating proposed environmental regulations to determine their potential impacts on the operation of existing generation resources. These regulations could result in the decision to mothball or retire up to approximately 450 MW of existing resources. Also, Santee Cooper previously included 250 MW of purchased renewable capacity and energy that was assumed to be under contract by 2020. So far, efforts to procure that capacity and energy have resulted in the negotiation for approximately 50 MW of the previously assumed 250 MW. Collectively, these efforts are reflected in an update to the forecast as shown in Table 8.2-1 “Forecast Update” and illustrated graphically in Figure 8.2-1.

Additionally, Figure 8.2-2 illustrates the results of the most recent 2009 Santee Cooper energy sales forecast updated to reflect the impact of the recent developments noted above.

Based on the updated forecast, Santee Cooper projects its energy sales to grow approximately 1.2% per year for the next 15 years, rising from 25,813 gigawatt-hours in 2009 to 30,729 gigawatt-hours in 2024. In part, this growth is attributable to Santee Cooper directly serving one of the state's fastest growing areas, Myrtle Beach. By way of illustration, Santee Cooper's growth rate in its direct service area averaged 3.5% in the 5 years preceding 2008 and prior to the economic downturn (Santee Cooper 2007). It should be noted that the projected growth rate does not include growth in Santee Cooper's direct-served large industrial sector. Growth in the large industrial sector beyond contract amounts is not assumed in the load forecast projections. In addition, these growth rates do not reflect any sales above the 300 MW mentioned above that might result from current power sales discussions.

**Table 8.2-1 Santee Cooper Energy Sales, Capacity, and Peak Demand**

Year	Energy Sales (gigawatt- hours)	Summer Capacity (megawatts)	Peak Demand (megawatts)
<b>Forecast Update</b>			
2010	28,146	6,144	5,486
2011	29,237	6,343	5,656
2012	29,732	6,350	5,773
2013	29,842	6,328	5,740
2014	29,583	6,322	5,688
2015	29,287	6,169	5,627
2016	29,274	6,209	5,766
2017	28,990	6,201	5,704
2018	28,668	6,193	5,634
2019	28,788	6,683	5,656
2020	29,149	6,683	5,743
2021	29,540	6,683	5,835
2022	29,931	6,683	5,928
2023	30,330	6,683	6,022
2024	30,729	6,683	6,116

Assumptions Include:

- (i) 50 MW of renewable generation;
- (ii) Retirements or mothball of 450 MW of coal-fired generation;
- (iii) Reduction in demand and energy due to transition of a portion of Central's load to another supplier; and
- (iv) Inclusion of long-term power sales arrangement of approximately 300 MW.

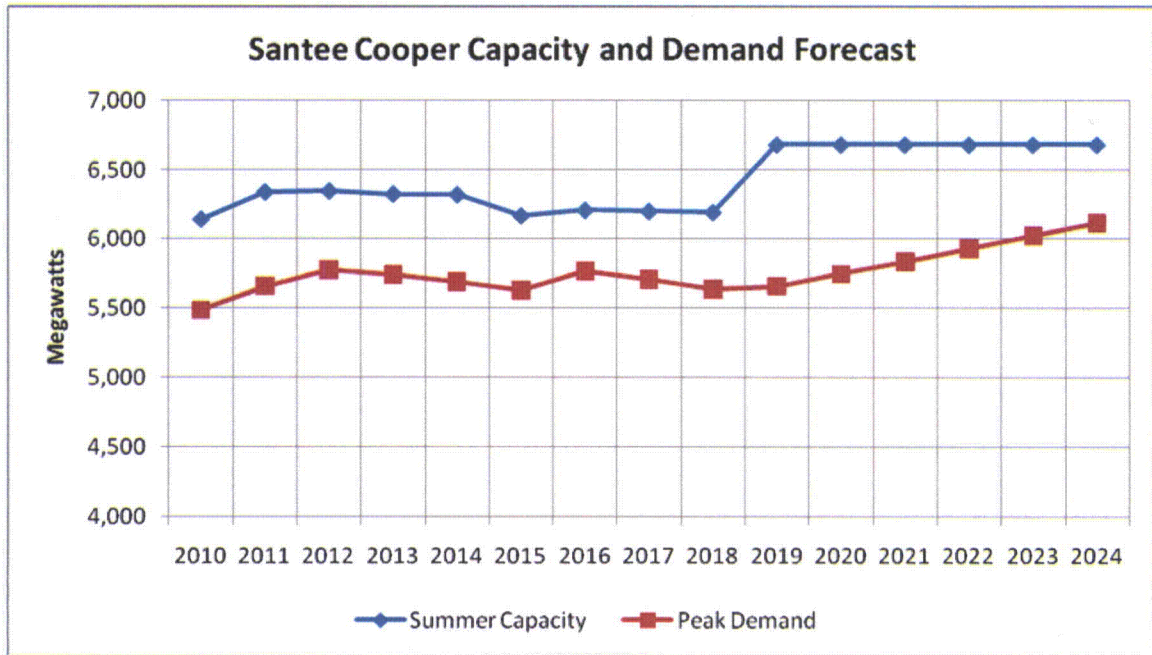


Figure 8.2-1

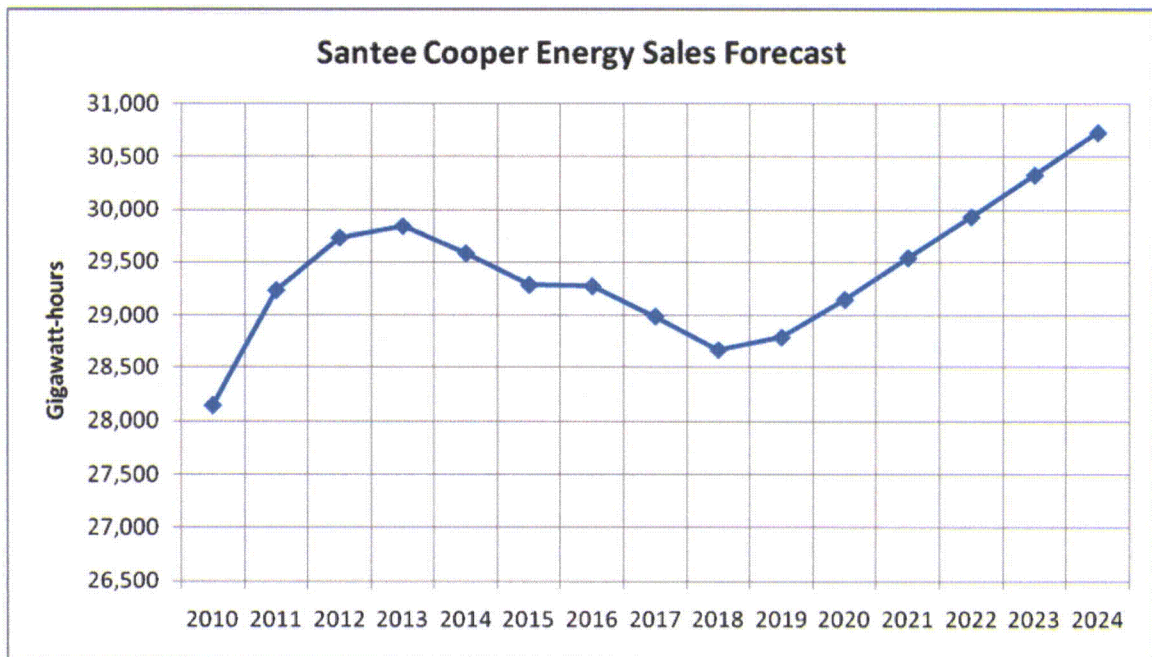


Figure 8.2-2

**Capacity Requirement Calculations based on NRC Method (Need in 2022)**

(1) Peak Demand	5,928
(2) Required Reserve (13%)	771
<b>(3) Total Demand = (1)+(2)</b>	<b>6,699</b>
(4) Cumulative Supply	6,683
(5) Santee share of VCS 2 and 3	1,004
<b>(6) Net Supply = (4)-(5)</b>	<b>5,679</b>
<b>(7) Total New Capacity Required = (3)-(6)</b>	<b>1,020</b>