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November 17, 2006

Mr. Mitchell Perkins Director South Carolina Energy Office 1201 Main Street, Suite 1010 Columbia, South Carolina 29201

Re:

Annual Update to Integrated Resource Plan (2004) from the South Carolina

Public Service Authority

Dear Mr. Perkins:

Enclosed is the annual update (dated November 2006) to Santee Cooper's Integrated Resource Plan (IRP). This update provides a status of DMS Programs and the Generation Resource Plan as required by the South Carolina Code, Section 58-37-40.

If you have any questions, please call me at (843) 761-4123.

Sincerely,

Sylleste H. Davis

Manager, Wholesale Markets

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2004 INTEGRATED RESOURCE PLAN ANNUAL UPDATE

South Carolina Public Service Authority

Originally submitted: December 2005

Updated: November 2006

TABLE OF CONTENTS

		$\underline{\mathbf{P}}_{\mathcal{S}}$	PAGE		
I.	Update to:	Load Forecast	;		
II.	Update to:	Existing Capacity5	,		
III.	Update to:	Projections of Load, Capacity, and Reserves6	}		
IV.	Update to:	Generation Expansion Plan8			
V.	Update to:	Demand Side Management (DSM) Activities9			
VI.	Undate to:	Environmental. 10	ı		

2004 Integrated Resource Plan Annual Update

As required by South Carolina Code, Section 58-37-40, this report provides an annual update to the South Carolina Public Service Authority ("Santee Cooper") 2004 Integrated Resource Plan submitted December 8, 2005.

I. Update to: Load Forecast

Load Forecast LF0501 was completed and published in October 2005, and provides an update to the 2004 Load Forecast.

Projected Energy & Summer/Winter Peak Demands

	Summer Peak (MW)	Winter Peak (MW)	Energy Sales (GWH)
2005	5,189	5,252	27,672
2005	5,305	5,393	28,258
2007	5,421	5,534	28,848
2008	5,538	5,676	29,448
2009	5,659	5,821	30,069
2010	5,772	5,960	30,646
2011	5,886	6,098	31,235
2012	6,003	6,240	31,833
2013	6,122	6,385	32,441
2014	6,243	6,532	33,059
2015	6,364	6,679	33,678
2016	6,486	6,827	34,301
2017	6,610	6,977	34,934
2018	6,736	7,129	35,577
2019	6,864	7,284	36,229

^{*}Source is 2005 Load Forecast

Historical Sales and System Peak Loads

Year	Sales (GWH)	System Peak Load (1) (MW)
2005	25,064	
2004	24,451	5,088
2003	24,060	5,373
2002	24,121	4,795
2001	22,400	4,803
2000	22,139	3,876
1999	20,286	3,729
1998	19,466	3,523
1997	18,437	3,336
1996	17,548	3,441
1995	16,022	3,102

⁽¹⁾ Excludes firm off-system sales to other utilities

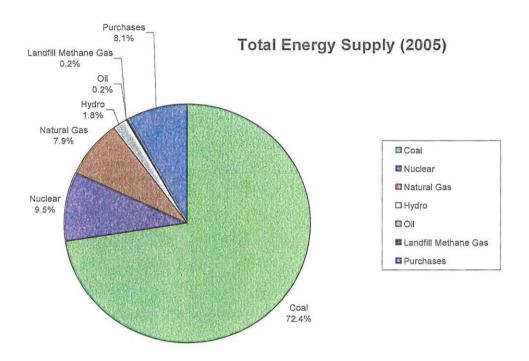
II. Update to: Existing Capacity

The Authority's generating facilities consist of the following facilities:

Generating Facilities Jefferies Hydroelectric Generating	Location	Initial Date in <u>Service</u>	Winter Peak Capability (MW)	Summer Peals Capability (MIW)	Energy Source
Station	Moncks Corner	1942	128	128	Hydro
Wilson Dam Generating Station	Lake Marion	1950	2	2	Hydro
Jefferies Generating Station	Moncks Corner				
Nos. 1 and 2		1954	92	92	Oil
Nos. 3 and 4		1970	306	306	Coal
Grainger Generating Station Nos. 1 and 2	Conway	1966	170	170	Coal
Combustion Turbines Nos. 1 and 2	Myrtle Beach	1962	22	20	Oil/Gas
Combustion Turbines Nos. 3 and 4	Myrtle Beach	1972	50	40	Oil
Combustion Turbine No. 5	Myrtle Beach	1976	35	30	Oil
Combustion Turbine No. 1	Hilton Head Island	1973	25	20	Oil
Combustion Turbine No. 2	Hilton Head Island	1974	25	20	Oil
Combustion Turbine No. 3	Hilton Head Island	1979	70	57	Oil
Winyah Generating Station	Georgetown				
No. 1		1975	295	295	Coal
No. 2		1977	295	295	Coal
No. 3		1980	295	295	Coal
No. 4		1981	270	270	Coal
Summer Nuclear Station(1)	Jenkinsville	1983	318(2)	318(2)	Nuclear
Cross Generating Station	Cross				
Unit 1		1995	620	620	Coal
Unit 2		1983	540	540	Coal
Horry Landfill Gas Station	Conway	2001	3	3	LMG(3)
Lee County Landfill Gas Station	Bishopville	2005	5	5	LMG
Richland County Landfill Gas Station	Elgin	2006	5	5	LMG
Rainey Generating Station	Starr				
Unit 1		2002	508	447	Gas
Unit 2A		2002	168	146	Gas
Unit 2B		2002	168	146	Gas
Unit 3		2004	85	74	Gas
Unit 4		2004	85	74	Gas
Unit 5		2004	85	74	Gas
Diesel Generating Units		2003(4)	17	17	Oil
Total Capability			4.687	4.509	

⁽¹⁾ Virgil C. Summer Nuclear Station ("Summer Nuclear Station").
(2) Represents the Authority's one-third ownership interest.
(3) Landfill Methane Gas ("LMG")
(4) Year Purchased by the Authority.

In 2005, Santee Cooper met its energy requirements using the following resources:



III. Update to: Projections of Load, Capacity, and Reserves

Santee Cooper continues to operate using planning reserve targets of 10% and 13% for the winter and summer months, respectively. The load forecast, as well as reserve margin and capacity information, is contained in the table that follows:

Seasonal Projections of Load, Capacity, and Reserves

Solid Soli	W=Winter, S=Summer	w	s	W	S	W	s	W	S	W	s	W	s	w	s	W	s	w	S	W	S
1 Santee Cooper System Peak 5,394 5,307 5,534 5,423 5,675 5,586 5,822 5,659 5,980 5,773 6,100 5,887 6,241 6,003 6,385 6,123 6,532 6,244 6,679 6,368 2 1 Interruptible Load (288) (299) (29		05/06	2006	06/07	2007	07/08	2008	08/09	2009	09/10	2010	10/11	2011	11/12	2012	12/13	2013	13/14	2014	14/15	2015
2 Interruptible Load (298) (299) (29	Forecast Requirements																				
3 Firm Sales 26 26 26 26 26 26 26 26 26 26 26 26 26	1 Santee Cooper System Peak	5,394	5,307	5,534	5,423	5,675	5,538	5,822	5,659	5,960	5,773	6,100	5,887	6,241	6,003	6,385	6,123	6,532	6,244	6,679	6,366
4 Total Reserved Load 5,122 5,034 5,262 5,150 5,402 5,265 5,549 5,386 5,687 5,500 5,827 5,614 5,968 5,700 6,112 5,850 6,259 5,971 6,406 6,093 5 Load Not Requiring Reserve (619) (61	2 Interruptible Load	(298)	(299)	(298)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)	(299)
5 Load Not Requiring Reserve (619) (3 Firm Sales	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>
6 Total Load Requiring Reserve 4,503 4,415 4,643 4,531 4,783 4,646 5,138 4,975 5,276 5,089 5,416 5,203 5,507 5,319 5,701 5,439 5,848 5,560 5,995 5,682 Cumulative System Capacity 7 Available Generating Capacity 4,722 4,544	4 Total Reserved Load	5,122	5,034	5,262	5,150	5,402	5,265	5,549	5,386	5,687	5,500	5,827	5,614	5,968	5,730	6,112	5,850	6,259	5,971	6,406	6,093
Cumulative System Capacity 7 Available Generating Capacity 8 Catawba Entitlement 9 Projected Resource Additions 10 10 592 592 600 607 1,196 1,196 5,350 5,35	5 Load Not Requiring Reserve	<u>(619)</u>	<u>(619)</u>	<u>(619)</u>	<u>(619)</u>	<u>(619)</u>	(619)	(411)	(411)	<u>(411)</u>	(411)	<u>(411)</u>	(411)	<u>(411)</u>	<u>(411)</u>	(411)	<u>(411)</u>	(411)	<u>(411)</u>	(411)	(411)
7 Available Generating Capacity 4,722 4,544 4,722 4,54	6 Total Load Requiring Reserve	4,503	4,415	4,643	4,531	4,783	4,646	5,138	4,975	5,276	5,089	5,416	5,203	5,557	5,319	5,701	5,439	5,848	5,560	5,995	5,682
7 Available Generating Capacity 4,722 4,544 4,722 4,54																					
8 Catawba Entitlement 208 208 208 208 208 208 208 208 208 208	Cumulative System Capacity																				
9 Projected Resource Additions 0 10 592 592 600 607 1,196 1,196 1,196 1,202 1,204 1,204 1,204 1,804 1,	7 Available Generating Capacity	4,722	4,544	4,722	4,544	4,722	4,544	4,722	4,544	4,722	4,544	4,722	4,544	4,722	4,544	4,722	4,544	4,722	4,544	4,722	4,544
10 Available Generating Capacity 4,930 4,762 5,522 5,344 5,530 5,359 5,918 5,740 5,924 5,748 5,926 5,748 6,526 6,3	8 Catawba Entitlement	208	208	208	208	208	208														
10 Available Generating Capacity 4,930 4,762 5,522 5,344 5,530 5,359 5,918 5,740 5,924 5,748 5,926 5,748 6,526 6,3	O. Brainetad Panauran Additions	0	40	EDO	502	600	607	1 100	1 100	1 202	1 204	4 ግብላ	4 204	4 204	1 204	1 804	1 804	1 004	1 904	1 904	1 20/
Cumulative Purchase Contracts 11 Long Term 411 411 411 411 411 411 411 411 411 41	9 Flujecieu Nesource Additions	U	10	332	JJZ	000	007	1,150	1,130	1,202	1,204	1,204	1,204	1,004	1,004	1,004	1,004	1,004	1,004	1,004	1,00-1
11 Long Term 411 411 411 411 411 411 411 411 411 41	10 Available Generating Capacity	4,930	4,762	5,522	5,344	5,530	5,359	5,918	5,740	5,924	5,748	5,926	5,748	6,526	6,348	6,526	6,348	6,526	6,348	6,526	6,348
11 Long Term 411 411 411 411 411 411 411 411 411 41																					
12 Mid Term Contract 175 175	Cumulative Purchase Contracts																				
	11 Long Term	411	411	411	411	411	411	411	411	411	411	411	411	411	411	411	411	411	411	411	411
13 Proj Short Term Contract 60 265 105 5 35 135 70 75	12 Mid Term Contract	175	175																		
	13 Proj Short Term Contract	60	265				105				5	35	135							70	75
14 Cumulative Production Capacity 5,576 5,613 5,933 5,755 5,941 5,875 6,329 6,151 6,335 6,164 6,372 6,294 6,937 6,759 6,937 6,759 6,937 6,759 7,007 6,834	14 Cumulative Production Capacity	5,576	5,613	5,933	5,755	5,941	5,875	6,329	6,151	6,335	6,164	6,372	6,294	6,937	6,759	6,937	6,759	6,937	6,759	7,007	6,834
Reserves	Reserves																				
15 Generating Reserves 454 579 671 605 539 610 780 765 648 664 545 680 969 1,029 825 909 678 788 601 741	15 Generating Reserves	454	579	671	605	539	610	780	765	648	664	545	680	969	1,029	825	909	678	788	601	741
16 % Reserve Margin 10% 13% 14% 13% 11% 13% 15% 15% 12% 13% 10% 13% 17% 19% 14% 17% 12% 14% 10% 13%	16 % Reserve Margin	10%	13%	14%	13%	11%	13%	15%	15%	12%	13%	10%	13%	17%	19%	14%	17%	12%	14%	10%	13%

^{*}based on 2005 Load Forecast

IV. Update to: Generation Expansion Plan

As noted in the 2004 Integrated Resource Plan, a 600 MW coal-fired unit (Cross 3) is scheduled for commercial operation in January 2007, with another 600 MW coal-fired unit (Cross 4) scheduled for January 2009. The construction of these units is well underway and projected COD dates are expected to be met.

In 2005, the Generation Resource Plan was updated and recommended the following, in addition to the Cross 3 and 4 units, for the 2010-2019 time period:



- > (1) 168 MW simple cycle combustion turbine to be operational in 2011,
- > Purchased power amounts of 100 MW and 250 MW for 2012 and 2013 respectively,
- > (1) 600 MW class supercritical pulverized coal unit to be built and operational no later than January 2014, and,
- A 45% ownership share of two (2) 1100 MW class Westinghouse Nuclear units located at the V.C. Summer

Nuclear site to be built and operational no later than January 2016 and January 2019, respectively.

In March 2006, the Santee Cooper Board of Directors (i) approved the 2005/2006 Generation Plan, (ii) authorized management to take actions necessary or appropriate to construct and install a 600 MW coal unit to begin operations as soon as possible but not later than January 2014, and (iii) authorized management to take actions necessary or appropriate to obtain a construction and operating permit for ownership shares of (2) 1100 MW nuclear units. In May 2006, the Board authorized management to take actions necessary to accelerate the construction schedule for the 2014 coal unit to as early as January 2012. Shortfalls in capacity and reserves requirements will be met using purchases as necessary.

V. Update to: Demand Side Management (DSM) Activities

1. Good Cents New and Improved Home Program

The Good Cents Program was developed to provide residential customers an incentive to build new homes to higher levels of energy efficiency and improve existing homes by upgrading heating and air conditioning equipment and the thermal envelope to high energy efficiency standards. All homes are evaluated to determine if they meet the standards set for the program. Inspections are completed during construction for new homes and at the completion of construction for new and improved homes.

Program participation in 2005 resulted in an estimated demand savings of 15,470 kW and estimated energy savings of 22,101,000 kWh. Total expenditures for the Good Cents Program incurred through Santee Cooper in 2005 were \$202,559.21. (Demand savings are based on summer peak demand reduction of 1.05 kW).

2. H₂O Advantage Water Heating Program

H₂O Advantage is a storage water heating program designed to shift the demand related to water heating off-peak. This is accomplished with the installation of an electronic timer or radio controlled switch on an 80 gallon water heater. This program began in 1990 and was offered for the last time in 2000. The contract spans 10 years so this program will no longer be impacting the system after 2010.

Program participation in 2005 resulted in an estimated demand savings of 853 kW. Total expenditures for the H₂O Advantage Program incurred through Santee Cooper in 2005 for existing participants were \$167,294.85.

3. Commercial Good Cents

Commercial Good Cents is offered to commercial customers building new facilities that improve the efficiency in the building thermal envelope, heating and cooling equipment, and lighting. Commercial customers that meet program standards are given an up-front rebate to encourage participation in the program.

Program participation in 2005 resulted in an estimated demand savings of 119 kW and estimated energy savings of 182,884 kWh. Total expenditures for the Commercial Good Cents Program incurred through Santee Cooper in 2005 were \$24,620.

4. Thermal Storage Cooling Program

The Thermal Storage Cooling Program shifts energy used by commercial customers for air conditioning from peak to off-peak hours by utilizing thermal energy stored in a medium such as ice or water. Rebates are offered to customers who install this type of equipment. There is currently one active participant in this program.

As part of Santee Cooper's demand control program, currently there are approximately 500 MW of load taking service under interruptible and economy power schedules. This load is excluded from the peak demand calculations for generation planning and reserves resource planning.

VI. Update to: Environmental

1. Green Power

Santee Cooper entered the arena of Green Power in 2001, being the first electric utility in South Carolina to offer electricity generated from renewable resources. In March 2006, the Richland County Generating Station was dedicated as Santee Cooper's third "Green Power" generating facility. A similar Green Power station at the Anderson Regional Landfill is currently under construction. Approval was given in September 2006 for the development of a new environmental program to offer to everyone in South Carolina, for the first time, the ability to purchase local renewable energy through a Green Tag program. This program allows all citizens and businesses in the state to do something positive to improve their environment, no matter their electric provider.

2. Renewables

In 2005, Santee Cooper announced a five-year, statewide and multi-tiered plan that would add solar projects at state universities and in various South Carolina regions, potential wind demonstration projects, and the continuation of landfills across South Carolina to the mix of renewables. In October 2006, Santee Cooper and Coastal Carolina University officially dedicated South Carolina's first solar Green Power site, a historic solar pavilion demonstration project that delivers on Santee Cooper's commitment to reinvest Green Power funds into future renewable energy projects in the state. Santee Cooper has also partnered with Clemson University to implement solar energy technology there.

3. Other

Santee Cooper's coal-fired power plants at Cross and Winyah generate a synthetic gypsum byproduct as a result of using scrubbing technology to reduce sulfur dioxide emissions. American Gypsum is currently constructing a new wallboard plant adjacent to Santee Cooper's Winyah Generating Station. By utilizing Santee Cooper's synthetic gypsum and excess steam in its gypsum wallboard production, the partners are converting waste that would otherwise be landfilled into a valuable building product.