

2006  
**Fingertip  
Facts**



**Jan. 1, 2006 - Dec. 31, 2006**

# Table of Contents

Who We Are .....	3
Mission Statement .....	4
Advisory Board .....	5
Board of Directors .....	5-6
Executive Management .....	7
Management .....	7
Employees .....	7
Santee Cooper Regional Water System .....	8
Lake Information .....	8
Comparative Highlights .....	9
Santee Cooper Power:	
Where It Comes From .....	10-13
Reliability .....	12
Safety .....	12
Satisfaction Ratings .....	13
Santee Cooper Power:	
Where It Goes: .....	14
2006 Energy Sales .....	14
Sales and System Peak Loads .....	15
Transmission and Distribution .....	15
Total Energy Supply .....	16-17
Generation and Purchases .....	18-19
System Map .....	20-21
GOFER .....	22
Economic Development .....	23
Green Power .....	24-25
Additional Environmental Programs .....	26-27
Customers .....	28
Glossary .....	29-37
Degree Day Data .....	30
Santee Cooper Locations .....	38
2007 Calendar .....	39

*Front cover: Innovation has played a key role in Santee Cooper's successes. In 2006, employees implemented breakthrough strategies to meet the growing demand for energy, use fuel more efficiently and reliably, save money, conserve energy, boost economic development and protect our environment while overcoming significant challenges related to the growth of South Carolina.*

## Who We Are

**S**antee Cooper (formal name: South Carolina Public Service Authority) is South Carolina's state-owned electric and water utility, the nation's fourth-largest publicly owned electric utility of its type based on generation and the third-largest based on megawatt-hour sales to ultimate customers.

The source of power for more than 2 million South Carolinians, Santee Cooper provides direct service to more than 156,000 retail customers in Berkeley, Georgetown and Horry counties. Santee Cooper is the primary source of power distributed by the state's 20 electric cooperatives to more than 668,000 customers located in all of the state's 46 counties. Santee Cooper also supplies power to 32 large industrial facilities, the cities of Bamberg and Georgetown and the Charleston Air Force Base.

Through the Santee Cooper Regional Water System, wholesale water is sold to the Lake Moultrie Water Agency. The agency then sells the water to four Lowcountry water systems supplying water to more than 125,000 water users.

Santee Cooper was the first utility in the state to offer Green Power, electricity generated by renewable resources like solar and decomposing garbage in selected landfills.

The utility is governed by an 11-member board of directors that is appointed by the governor, certified by the Senate Public Utilities Review Committee and confirmed by the state Senate. The board is comprised of directors representing each of the six congressional districts and the three counties where Santee Cooper serves retail customers directly (Berkeley, Georgetown and Horry), two directors with previous electric cooperative experience and a chairman appointed at large.

The mission  
of Santee Cooper  
is to be the state's  
leading resource  
for improving  
the quality of life  
for the people  
of South Carolina.

To fulfill this mission,  
Santee Cooper is committed to:

- being the lowest cost producer and distributor of reliable energy, water, and other essential services
- providing excellent customer service
- maintaining a quality work force through effective employee involvement and training
- operating according to the highest ethical standards
- protecting our environment
- being a leader in economic development

## Advisory Board

### **Mark Sanford**

Governor

### **Mark Hammond**

Secretary of State

### **Henry D. McMaster**

Attorney General

### **Richard A. Eckstrom**

Comptroller General

### **Thomas Ravenel**

State Treasurer<sup>1</sup>

<sup>1</sup>Elected in November 2006 and sworn in January 2007.

---

## Board of Directors

### **O.L. Thompson III**

Chairman

At-large

Mt. Pleasant, S.C.

*President and chief executive officer of O.L. Thompson Construction Co. Inc. that includes Thompson Trucking Co. and Wando Concrete.*

### **G. Dial DuBose**

First Vice Chairman

3rd Congressional  
District

Easley, S.C.

*Real estate consultant at  
Nalley Commercial Properties  
in Easley, S.C.*

### **Clarence Davis**

Second Vice Chairman

2nd Congressional District  
Columbia, S.C.

*Partner in Nelson Mullins Riley &  
Scarborough LLP, a Columbia-  
based law firm.*

**Paul G. Campbell Jr.**

Berkeley County  
Goose Creek, S.C.

*Retired plant manager of Alcoa-Mt. Holly. Alcoa is a producer and manager of primary aluminum, fabricated aluminum and alumina facilities.*

**William A. Finn**

1st Congressional  
District  
Charleston, S.C.

*Chairman of AstenJohnson, a specialty textile company for the printing and papermaking industries based in Charleston, S.C.*

**J. Calhoun Land IV**

6th Congressional  
District  
Manning, S.C.

*Partner in Land, Parker and Welch, a general practice Manning law firm.*

**Dr. John Molnar**

Horry County  
Myrtle Beach, S.C.

*Medical Director for Grand Strand Regional Medical Center, Emergency Department.*

**James W. Sanders**

5th Congressional  
District  
Gaffney, S.C.

*Pastor of Bethel Baptist Church in Gaffney for 56 years and active in numerous civic and business organizations.*

**David Springs**

Georgetown County  
Murrells Inlet, S.C.

*Retired consulting engineer for electric cooperatives and municipal utilities with Southern Engineering Co. of Georgia.*

**Cecil Viverette**

At-Large  
Hilton Head Island, S.C.

*Retired president and CEO of Rappahannock Electric Cooperative in Virginia.*

**Barry Wynn**

4th Congressional  
District  
Spartanburg, S.C.

*President of Colonial Trust Co., a private trust company specializing in investment management and estate services.*

## Executive Management

Lonnie N. Carter .....	President and Chief Executive Officer
Bill McCall .....	Executive Vice President and Chief Operating Officer
Elaine G. Peterson .....	Executive Vice President and Chief Financial Officer
James E. Brogdon Jr. ....	Senior Vice President and General Counsel
R.M. Singletary .....	Senior Vice President of Corporate Services

## Management

### Senior Vice Presidents:

Terry L. Blackwell .....	Power Delivery
Maxie C. Chaplin .....	Generation

### Vice Presidents:

S. Tom Abrams .....	Planning & Power Supply
Jeffrey D. Armfield .....	Business Services and Treasurer
Wm. Glen Brown Jr. ....	Human Resource Management
Zack W. Dusenbury .....	Retail Operations
Glenda W. Gillette .....	Controller
Thomas L. Kierspe .....	Engineering and Construction Services
L. Phil Pierce .....	Fossil and Hydro Generation
Suzanne H. Ritter .....	Corporate Planning and Bulk Power
Laura G. Varn .....	Corporate Communications and Media Relations

Thomas L. Richardson.....	Auditor
Pamela J. Williams .....	Corporate Secretary and Associate General Counsel

## Employees

Number of regular employees..... 1,748  
*As of December 31, 2006*

# Santee Cooper Regional Water System

Date construction began .....	February 1993
Date construction completed .....	September 1994
Construction cost .....	\$34.7 million
Commercial operation began .....	Oct. 1, 1994
Capacity of plant .....	30 million gallons per day (mgd)

(Capacity has been demonstrated at 36 mgd.

Additional pumping capacity will be added as needed  
to provide a firm capacity of 36 mgd.)

Miles of pipeline .....	26 miles
Size of elevated storage tank .....	1 million gallons
Size of ground storage .....	5 million gallons
Water supply .....	Lake Moultrie
Water sold to:	

- City of Goose Creek
- Berkeley County Water & Sanitation Authority
- Moncks Corner Public Works Commission
- Summerville Commissioners of Public Works

Water users: .....	125,000
Counties served: .....	Berkeley and Dorchester

## Lake Information

	Lake Marion	Lake Moultrie
Acres	100,607	59,874
Maximum elevation	76.8 feet	75.5 feet
Gallons of water in Lakes Marion and Moultrie: 756 billion		
Length of dams and dikes: 41 miles		
Length of Tailrace Canal: 4 miles		
Length of Diversion Canal: 6.5 miles		
Pinopolis Lock: 75 feet deep, 180 feet long, 60 feet wide		

# Comparative Highlights

	2006	2005	Percent Change
Power Generated (GWh) .....	24,556	24,166	1.6
Purchases, Net			
Interchange, Etc. (GWh) .....	941	999	-5.8
System Energy			
Requirements (GWh) .....	25,497	25,165	1.3
Territorial Peak			
Demand (MW) .....	5,195	5,371	-3.3
Operating Revenue			
(thousands of dollars) .....	\$1,413,343	\$1,350,081	4.7

## Sources of Income – 2006

	Percent
Wholesale .....	52
Military and Large Industrial .....	25
Residential, Commercial, Small Industrial, and Other .....	19
Other Income .....	3
Other Electric Revenue .....	1
TOTAL INCOME .....	100

## Distribution of Income – 2006

	Percent
Operating Expenses (except depreciation)* .....	70
Debt Service .....	19
Additions to Plant, Inventories, Etc .....	10
Taxes* .....	1
TOTAL EXPENSES .....	100

\*Does not include payments made from Special Reserve Fund

# Santee Cooper Power

## Where It Comes From:

<u>Generating Facilities</u>	<u>Location</u>
Jefferies (128 MWs)	
Hydro Units 1, 2, 3, 4, & 6 .....	Moncks Corner
Santee Spillway (2 MWs) .....	Pineville
Jefferies Station (398 MWs)	
Units 1 and 2 .....	Moncks Corner
Units 3 and 4 .....	Moncks Corner
Grainger Station (170 MWs)	
Units 1 and 2 .....	Conway
Myrtle Beach Combustion Turbines (90 MWs)	
Units 1 and 2 .....	Myrtle Beach
Units 3 and 4 .....	Myrtle Beach
Unit 5 .....	Myrtle Beach
Hilton Head Combustion Turbines (97 MWs)	
Unit 1 .....	Hilton Head Island
Unit 2 .....	Hilton Head Island
Unit 3 .....	Hilton Head Island
Winyah Station (1155 MWs)	
Unit 1 .....	Georgetown
Unit 2 .....	Georgetown
Unit 3 .....	Georgetown
Unit 4 .....	Georgetown
V.C. Summer Nuclear Station <sup>1</sup> (318 MWs) ..	Jenkinsville

<sup>1</sup>Santee Cooper's one-third ownership share.

<b>Summer Generating Capability</b>	<b>Fuel</b>	<b>Began Commercial Operation</b>
128 MWs .....	Hydro .....	1942
2 MWs .....	Hydro .....	1950
92 MWs .....	Oil .....	1954
306 MWs .....	Coal .....	1970
170 MWs .....	Coal .....	1966
20 MWs .....	Oil/Gas .....	1962
40 MWs .....	Oil .....	1972
30 MWs .....	Oil .....	1976
20 MWs .....	Oil .....	1973
20 MWs .....	Oil .....	1974
57 MWs .....	Oil .....	1979
295 MWs .....	Coal .....	1975
295 MWs .....	Coal .....	1977
295 MWs .....	Coal .....	1980
270 MWs .....	Coal .....	1981
318 MWs .....	Nuclear .....	1983

Continued on pages 12-13

# Santee Cooper Power

## Where It Comes From:

<b>Generating Facilities</b>	<b>Location</b>
Cross Station <sup>1</sup> (1,740 MWs)	
Unit 1 .....	Cross
Unit 2 .....	Cross
Unit 3 .....	Cross
Horry County Generating Station (3 MWs) .....	Conway
Rainey Station (961 MWs)	
Combined Cycle Unit 1 .....	Iva
Combustion Turbine 2A .....	Iva
Combustion Turbine 2B .....	Iva
Combustion Turbine 3 .....	Iva
Combustion Turbine 4 .....	Iva
Combustion Turbine 5 .....	Iva
Lee County Generating Station (5 MWs).....	Bishopville
Richland County Generating Station (5 MWs) .....	Elgin
Saluda Diesel Generating Units (17 MWs) .....	Various

<sup>1</sup> Cross Unit 4 is under construction and will add 580 MWs to Santee Cooper's system in 2009.

## Reliability

<b>Area rated</b>	<b>Percent</b>
Distribution .....	99.996
Transmission .....	99.998
Generation .....	94.09

## Safety

In 2006, Santee Cooper had a 96.8 percent incident-free safety rating with 56 injuries and preventable motor vehicle accidents.

<b>Summer Generating Capability</b>	<b>Fuel</b>	<b>Began Commercial Operation</b>
620 MWs .....	Coal.....	1995
540 MWs .....	Coal.....	1983
580 MWs .....	Coal.....	2007
3 MWs .....	Landfill methane gas .....	2001
447 MWs .....	Gas .....	2002
146 MWs .....	Gas .....	2002
146 MWs .....	Gas .....	2002
74 MWs .....	Gas .....	2004
74 MWs .....	Gas .....	2004
74 MWs .....	Gas .....	2004
5 MWs .....	Landfill methane gas .....	2005
5 MWs .....	Landfill methane gas .....	2006
17 MWs.....	Oil .....	2003 <sup>1</sup>
<b>5,089 MWs – Total summer generating capability</b>		

<sup>1</sup>Year purchased by Santee Cooper.

(Santee Cooper received FERC approval in February 2007 to operate the Buzzard Roost Hydroelectric Station in Greenwood County. Its 15 MWs brings Santee Cooper's new total summer generating capability to 5,104 MWs.)

## **Satisfaction Ratings**

<b>Category</b>	<b>Percent</b>
Industrial .....	100
Residential .....	98
Commercial .....	98
Wholesale .....	100
Overall .....	98
Average national satisfaction rating .....	87

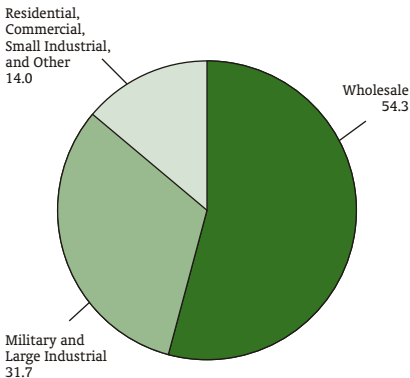
# Santee Cooper Power

Where It Goes:

2006 Energy Sales

Customer Type	Gigawatt-hour Total	Number of Customers
Wholesale .....	13,805 .....	4
Military and Large Industrial .....	8,049 .....	32
Residential, Commercial, Small Industrial, and Other .....	3,568 .....	156,462
Total .....	25,422 .....	156,498

## 2006 Energy Sales (% kilowatt-hours)



## Sales and System Peak Loads

Year	Sales (GWh)	System Peak (MW)
2006.....	25,422 .....	5,195
2005 .....	25,064.....	5,371
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 .....	20,281.....	3,729
1998 .....	19,466.....	3,523
1997 .....	18,437.....	3,336

## Transmission and Distribution

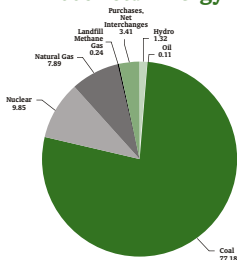
Miles of Transmission Lines .....	4,560
Miles of Distribution Lines .....	2,541
Transmission Substations.....	83
Central Electric Power System Delivery Points.....	346
Interconnections with Other Utilities .....	18
Municipal Customers .....	2

# Total Energy Supply

(Percentage)

Year	Hydro	Oil	Coal
2006	1.32	0.11	77.18
2005	1.85	0.21	72.86
2004	1.70	0.12	75.19
2003	2.67	0.10	75.73
2002	1.01	0.14	74.49
2001	0.96	0.23	79.79
2000	1.31	0.46	83.53
1999	1.45	0.72	81.57
1998	2.81	0.61	77.94
1997	2.84	0.15	80.25

## 2006 Total Energy



<b>Nuclear</b>	<b>Natural Gas</b>	<b>Landfill Methane Gas</b>	<b>Purchases, Net Interchanges</b>
9.85	7.89	0.24	3.41
9.51	7.91	0.17	7.49
10.77	6.57	0.09	5.56
9.74	4.74	0.09	6.93
9.82	9.02	0.06	5.47
9.75	0.76	0.02	8.50
9.22	*	*	5.47
11.71	*	*	4.55
13.39	*	*	5.25
12.59	*	*	4.29

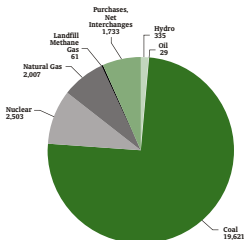
\*Not Applicable

# Generation and Purchases

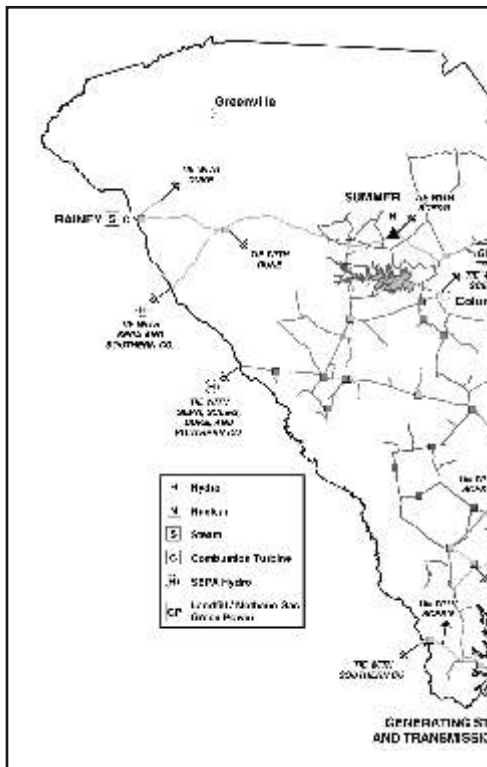
(Net Gigawatt-hours in Thousands)

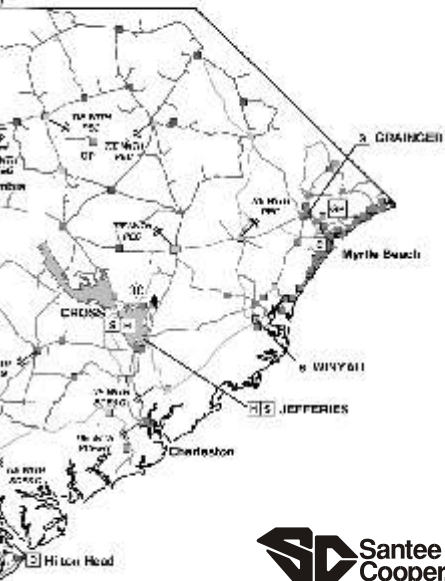
Year	Hydro	Oil	Coal
2006	335	29	19,621
2005	482	55	19,033
2004	432	31	19,160
2003	670	26	19,010
2002	253	35	18,628
2001	220	54	18,365
2000	301	106	19,133
1999	304	150	17,061
1998	571	125	15,849
1997	520	29	15,379

## 2006 Generation and Purchases



<b>Nuclear</b>	<b>Natural Gas</b>	<b>Landfill Methane Gas</b>	<b>Purchases, Net Interchanges</b>
2,503	2,007	61	1,733
2,485	2,067	44	1,957
2,745	1,674	23	1,417
2,445	1,190	22	1,738
2,455	2,256	15	1,367
2,243	174	4	1,956
2,113	*	*	1,252
2,450	*	*	951
2,723	*	*	1,068
2,412	*	*	823





As of Dec. 31, 2006

# GOFER

GOFER, Give Oil For Energy Recovery, is Santee Cooper's used motor oil collection and recovery program. Santee Cooper started the GOFER program in 1990 to provide citizens throughout South Carolina a convenient place to properly dispose of used motor oil. Of the state's 46 counties, 37 have GOFER collection sites.

	2006	2005	2004
No. of collection sites in S.C. ....	451	574	574
No. of gallons collected .....	683,049	876,823	900,352
kWh conversion .....	6,950,707	8,922,551	9,648,172

County	Sites	County	Sites	County	Sites
Aiken .....	16	Edgefield .....	9	Marion.....	7
Allendale .....	5	Fairfield .....	10	McCormick.....	4
Bamberg .....	7	Florence.....	18	Newberry .....	12
Barnwell.....	12	Georgetown ....	15	Oconee .....	15
Beaufort .....	12	Greenville .....	10	Orangeburg.....	24
Berkeley.....	16	Greenwood .....	10	Pickens .....	12
Calhoun.....	10	Hampton.....	10	Richland .....	12
Chester .....	11	Horry .....	27	Saluda.....	7
Chesterfield.....	8	Jasper .....	6	Sumter.....	14
Clarendon.....	17	Kershaw .....	11	Union .....	10
Darlington.....	15	Laurens.....	10	Williamsburg ..	22
Dillon.....	12	Lee .....	10		
Dorchester.....	12	Lexington.....	13		

[www.scgofer.org](http://www.scgofer.org)

## Economic Development

With a corporate mission to improve the quality of life of every South Carolinian, Santee Cooper takes an active leadership role in economic development in the Palmetto State.

For more than 60 years, Santee Cooper's low-cost electricity has been a powerful attraction, bringing new industry and business to the state. Santee Cooper's support for communities, economic development organizations and electric cooperatives across South Carolina continues to foster economic growth in South Carolina.

In 1988, Santee Cooper and Central Electric Power Cooperative formed Palmetto Economic Development Corp. (PEDC) to help coordinate the state's economic development program. Santee Cooper collaborates with PEDC and the S.C. Department of Commerce as the South Carolina Power Team to ensure business clients receive the best information and resources available to develop the optimum plan for new business prospects.

In 2006, Santee Cooper launched additional economic-development initiatives, including dedicating funds specifically to site certification, strategic economic development planning and professional development opportunities.

Major developments in 2006 included American Gypsum beginning its construction of a \$125 million wallboard facility at our Winyah Station site, and Builders FirstSource announcing a \$5 million expansion project in the Loris Commerce Center.

Since coming together in 1988, the South Carolina Power Team has been involved in more than 400 new industrial locations and expansions, representing \$6.6 billion in capital investments and more than 37,000 new jobs.

# Green Power

Santee Cooper's Green Power program offers electricity generated by renewable resources like solar and methane gas from decomposing garbage in selected landfills. The first program of its kind in the state, 2006 was a banner year for Green Power in which its Green Tags and Solar Schools programs were announced and the Richland County Landfill and Coastal Carolina University Solar sites were dedicated.

Green Power sales .....15,984 MWh<sup>1</sup>

## Customers<sup>1</sup>

Residential .....1,527

Green Power Partners<sup>2</sup>/Commercial .....283

Industrial.....1

Customers reached through  
cooperatives and municipalities .....2,519

Sites	Generating Capacity	Commercial operation date
Horry County Solid Waste Authority	3.3 MWs	September 2001
Allied Waste Management's Lee County Landfill	5.4 MWs	February 2005
Waste Management's Richland County Landfill	5.5 MWs	February 2006
Coastal Carolina University Green Power Solar Pavilions	16 KWs	July 2006

<sup>1</sup>Data as of Dec. 31, 2006.

<sup>2</sup>Green Power Partners are committed environmental stewards who have partnered with Santee Cooper in an effort to promote Green Power. To become a partner, these businesses agree to purchase a percentage of their electricity as Green Power.

---

---

**Customers offering Green Power:**

Aiken Electric Cooperative  
Berkeley Electric Cooperative  
Blue Ridge Electric Cooperative  
Broad River Electric Cooperative  
Coastal Electric Cooperative  
Edisto Electric Cooperative  
Fairfield Electric Cooperative  
Horry Electric Cooperative  
Laurens Electric Cooperative  
Little River Electric Cooperative  
Lynches River Electric Cooperative  
Marlboro Electric Cooperative  
Mid-Carolina Electric Cooperative  
Palmetto Electric Cooperative  
Pee Dee Electric Cooperative  
Santee Electric Cooperative  
Tri-County Electric Cooperative  
York Electric Cooperative  
City of Georgetown

## Additional Environmental Programs

Santee Cooper, a public power utility that recognizes its environmental responsibility and supports programs and techniques that protect the environment, is dedicated to provide leadership, resources and management direction to protect South Carolina's environment.

---

The Wadboo conservation easement, 2,600 acres of Santee Cooper's Wadboo Creek property is set aside in a permanent nondevelopment conservation easement. This protects a bottomland forest, unique limestone bluffs, eight miles of a freshwater creek and a Revolutionary War battle site.

---

Santee Cooper has completed construction of Unit 3 and continues construction of Unit 4 at its Cross Generating Station. This massive undertaking represents a \$1.4 billion investment in the future energy needs of South Carolina. There will be no net increase in regulated emissions from these new units, and they will provide an additional 1,160 MWs to the Santee Cooper system.

---

State-of-the-art environmental control technology at Santee Cooper is second to none with other public power utilities around the country. The expansive portfolio includes scrubbers to remove sulfur dioxide, SCRs to reduce nitrogen oxides and precipitators to remove particulate matter.

---

Santee Cooper continues to work closely with federal and state agencies by supporting environmental efforts and objectives. Examples include the ongoing support of the U.S. Fish & Wildlife Refuge located on Lake Marion and coordination with the S.C. Dept. of Natural Resources on fish passage efforts at Jefferies Hydro Station and the U.S. Army Corps of Engineers' St. Stephen Hydro Station. That collaborative fish passage endeavor has established the

---

largest combined fish passage of American shad and blueback herring on the East Coast of the United States and one of the largest and most robust commercial shad fisheries on the entire coast.

---

In early 2005, Santee Cooper announced a major economic development project with American Gypsum in Georgetown, which will bring \$125 million in investment and several hundred jobs. Santee Cooper helped create a new industry that will use gypsum – a byproduct of the utility’s environmental control technology – in its wall-board process. Using the gypsum in this manner means it will not be going to a landfill. In fact, 100 percent of Santee Cooper’s gypsum is being recycled.

---

The utility’s mosquito-control program is known as one of the leading mosquito-control operations in the Carolinas. In the five counties surrounding lakes Marion and Moultrie (Berkeley, Calhoun, Clarendon, Orangeburg and Sumter counties), Santee Cooper provides mosquito control services to these areas, making them safer and healthier to live, work and play.

---

Santee Cooper has 48 water-monitoring stations located throughout the 160,000 acres of lakes Marion and Moultrie, and all major tributaries. These monitoring points are sampled regularly for a wide variety of water quality parameters, with the data being used to assess the overall quality of the lakes and to identify potential problems.

---

Santee Cooper partners with POWER (Protect Our Wildlife at Every Right of Way) for Wildlife, a statewide program aimed at reducing the number of right-of-way acres requiring maintenance while at the same time encouraging wildlife habitat enhancement. More than 1,800 acres along the 4,400 miles of the utility’s transmission corridors are now part of the POWER for Wildlife program. Santee Cooper’s goal is to effectively manage these rights of way as well as ensure reliable power to the utility’s customers.

# Customers

## Wholesale Distribution Cooperatives

Aiken Electric Cooperative  
Berkeley Electric Cooperative  
Black River Electric Cooperative  
Blue Ridge Electric Cooperative  
Broad River Electric Cooperative  
Coastal Electric Cooperative  
Edisto Electric Cooperative  
Fairfield Electric Cooperative  
Horry Electric Cooperative  
Laurens Electric Cooperative  
Little River Electric Cooperative  
Lynches River Electric Cooperative  
Marlboro Electric Cooperative  
Mid-Carolina Electric Cooperative  
Newberry Electric Cooperative  
Palmetto Electric Cooperative  
Pee Dee Electric Cooperative  
Santee Electric Cooperative  
Tri-County Electric Cooperative  
York Electric Cooperative

## Municipal Customers

Bamberg

Georgetown

## Retail Customers Served Directly

Santee Cooper owns distribution facilities in two noncontiguous areas covering portions of Berkeley, Georgetown and Horry counties. These service areas include 2,541 miles of distribution lines.

## Large Industrial Customers

Santee Cooper directly serves the Charleston Air Force Base and 32 large industrial customers with 33 premises.

## Glossary of Terms

**Alternating Current (AC)** - Electricity that flows alternately in one direction, then in the other at a specified frequency. That frequency standard in the U.S. is 60 cycles per second.

**Ampere** - The unit of measurement of electrical current flow. It is based upon the quantity of electrons flowing through a conductor past a given point in one second.

**Bond** - An interest-bearing promise to pay a specified sum of money, the principal amount, due on a specific date.

**Btu (British Thermal Unit)** - The standard unit for measuring quantity of heat energy, such as the heat content of fuel. It is the amount of heat energy necessary to raise the temperature of one pound of water one degree Fahrenheit.

**Capacity** - The load for which a generating unit, generating station, or other electrical apparatus is rated.


**Circuit** - A conductor or a system of conductors through which an electric current flows.

**Coal** - America's most abundant fossil fuel resource. Of Santee Cooper's 2006 total power supply, almost 77 percent was provided by coal-fired generation.

**Combustion Turbine** - A jet-type turbine engine which burns gas or oil and propels a generator to produce electricity.

**Co-ops (Electric Membership Cooperatives)** - Originated in the 1930s as "cooperatives," co-ops are member-owned electric systems located originally in rural areas.

**Cost of Service** - Basis upon which rates for all customer classes are classified by Santee Cooper so that each customer group is charged for power according to what it costs to serve that group.



**Degree Day** - A degree day is a tool for comparing heating or cooling energy use to variations in weather. The concept of degree days assumes that at 65 degrees Fahrenheit a home will need neither heating nor cooling. It is also assumed, therefore, that when outside temperature rises above or falls below 65 degrees, energy will be needed to cool or heat the home.

For example, if on a particular day the average temperature is 80 degrees Fahrenheit, that day will have 15 cooling degree days. ( $80-65 = 15$ ). Conversely, if the average temperature that day is 45 degrees Fahrenheit, it will have 20 heating degree days. ( $65-45 = 20$ ). Degree days are also cumulative so that the number of heating and cooling degree days for one year is the sum of the degree days for each day of that year.

Because energy use is reasonably constant for a given number of degree days, degree days can be used to estimate a building's heating and cooling requirements. Therefore, comparing the number of degree days from one month to another may give an indication of the amount of energy a family will have to purchase to heat and cool its home.

The chart on the next page compares degree day information for 2005 and 2006. It gives you a good idea of how hot or cold it's been.


**Demand** - The rate at which electric energy is delivered to or by a system, part of a system or a piece of equipment. It is expressed in kilowatts at a given instant or averaged over any designated period of time. The primary source of "demand" is the power-consuming equipment of the customers.

**Demand Charge** - The specified charge to be billed on the basis of demand, under an applicable rate schedule or contract. Demand charges are designed to recover fixed costs of service.

**DOE** - Department of Energy.

## Degree Day Information Recorded In Santee Cooper Service Area

Month	Heating Degree Days		Cooling Degree Days	
	2006	2005	2006	2005
January	459	567	0	0
February	528	513	0	0
March	397	400	0	0
April	114	175	64	10
May	34	36	132	85
June	0	0	299	332
July	0	0	453	512
August	0	0	466	455
September	1	0	233	382
October	126	113	70	135
November	264	245	1	7
December	367	581	4	0
<b>TOTAL</b>	<b>2,290</b>	<b>2,630</b>	<b>1,722</b>	<b>1,918</b>



**Direct Current (DC)** - Electricity that flows continuously in one direction.

**Distribution** - The process of delivering electric energy from convenient points on the transmission or bulk power system to the consumers.

**Economic Rule Curve** - The elevation above mean sea level at which Santee Cooper seeks to maintain Lake Marion on a year-round basis. From the maximum of about 76 feet in June, the levels are lowered gradually to approximately 72.2 feet in January. This provides a “pocket” to accommodate the heavy inflows from the 15,000 square-mile watershed which occur in the spring. This rule curve has been established as the ideal elevation for the most economical use of lake water.


**Electric Heat Pump** - A year-round air-conditioning and heating system which utilizes the refrigerant cycle to provide heating as well as cooling. During the cooling cycle, it operates as a conventional air-conditioning system to remove heat from the cooled area. During the heating season, it automatically reverses the cycle to extract heat from outdoor air and transfer it to the heated area.

**Energy Management** - The technology involving the analysis of energy use resulting in appropriate techniques and methods to ensure more efficient utilization of energy resources.

**FERC (Federal Energy Regulatory Commission)** - This agency has regulatory authority over the safety of Santee Cooper's dams and dikes.

**Fission** - The nuclear reaction whereby the nucleus of an appropriate type atom, after capturing a neutron, splits into two or more nuclei of lighter elements, with the resulting release of substantial amounts of energy.

**Fossil Fuel** - Fuels used in generation such as coal, oil and natural gases, which are also called conventional fuels.



**Fuel Adjustment** - An adjustment of the amount of the monthly power bill based upon variances in the cost of fuel used in generation from a specified base amount per unit.

**Fusion** - The nuclear reaction which occurs when two lighter nuclei combine to form a heavier nucleus with the resulting release of energy.

**Gigawatt (GW)** - One million kilowatts or 1 billion watts.

**Gigawatt-hour (GWh)** - The unit of electric energy equal to one gigawatt (1 million watts) of power flowing through an electric circuit steadily for one hour.

**Hydroelectric** - A term used to identify a type of generating station in which turbine generators are driven by water power.

**Interchange** - Power delivered to or received by one electric utility system from another through an interconnection or "tie." Santee Cooper has ties with Progress Energy Carolinas, Duke Power Co., Southeastern Power Administration, SCE&G and Southern Company.


**Kilowatt (kW)** - 1,000 watts.

**Kilowatt-hour (kWh)** - The basic unit of electric energy equal to one kilowatt (1,000 watts) of power flowing through an electric circuit steadily for one hour.

**Load** - The amount of electric power delivered or required at any specified point or points on a system.

**Load Factor** - The percentage ratio of the average load in kilowatts supplied during a designated period to the peak or maximum load in kilowatts occurring in that period.

**Load Management Program** - A program in which a utility seeks to control its customers' use of electricity or "loads" during peak periods so as to reduce the system's total demand at a time of maximum usage.



**Lumen** - A unit of light, roughly equivalent to the light of one candle.

**Megawatt (MW)** - One million watts or 1,000 kilowatts.

**NRC (Nuclear Regulatory Commission)** - The federal agency responsible for the licensing and safety of nuclear power plants.

**Nuclear Energy** - Energy produced in the form of heat during the fission process in a nuclear reactor. When released in sufficient and controlled quantity, this heat energy may be used to produce steam to drive a turbine generator to produce electricity.

**O&M** - Operation and Maintenance expenses.

**Ohm** - The unit of measurement of electrical resistance. It is that resistance through which a difference of potential, or electromotive force of one volt, will produce a current of one ampere.

**Online** - Refers to the starting operation time of a new generating facility or to any time units are started up after being shut down; i.e. repairs, annual inspection.

**Peak Demand** - The maximum amount of electricity used by a utility customer at any time during the year. The peak is used to measure the amount of electric generating capacity that is required to meet that maximum demand.

**Pooling** - An arrangement between utilities so that, in meeting their combined loads, the most economic and efficient use can be made of their combined power supplies.

**Precipitator (Electrostatic Precipitator)** - Device that removes fly ash from flue gases.


**Reinvested Earnings** - Net revenues available for reinvestment in the business.

**Residential Rates** - R6: Residential Standard (RS-96): This rate is Santee Cooper's standard rate for providing electric service to residential customers. R5: Residential Standard Plus (RE-96): This rate is for all-electric customers whose normalized energy usage for the billing months occurring in July, August, and September is less than or equal to 140 percent of their normalized energy usage during the billing months of January, February, and March. Accounts are automatically reviewed in May and November. R2: Standard: This Rate is applicable to customers whose home meets certain qualifications. R1: Standard Plus: This rate is applicable to customers whose home meets certain qualifications AND whose normalized energy usage for the billing months occurring in July, August and September is less than or equal to 140 percent of their normalized energy usage during the billing months of January, February and March. Accounts are automatically reviewed in May and November. R4: Standard: This rate is for customers whose home meets certain qualifications. R3: this rate is applicable to customers whose home meets certain qualifications AND whose occurring in July, August and September is less than or equal to 140 percent of their normalized energy usage during the billing months of January, February, and March. Accounts are automatically reviewed in May and November.

**Resistance Value (R)** - The ability of a material to resist the flow of heat. The higher the "R" value, the better the insulator.

**Revenue Bond** - A bond payable solely from net or gross non-tax revenues derived from the operation and charges paid by users of the system.

**SEPA (Southeastern Power Administration)** - The government marketing agency for numerous federally owned hydroelectric projects in the Southeast, created under the Federal Flood Control Act of 1944.



**Service Area** - Territory in which a utility system is required or has the right to supply electric service to customers.

**O<sub>2</sub> Scrubber** - A pollution-control device which removes sulfur dioxide from the stack gases emitted by coal-fired generating plants. Santee Cooper installed the first SO<sub>2</sub> scrubbers in the Southeast at the Winyah Station in 1977.

**Substation** - An assemblage of equipment for the purpose of switching and/or changing or regulating the voltage of electricity.

**System Peak Load** - The maximum amount of energy required during a one hour period across the Santee Cooper system.

**Time-of-Use Rate** - This rate is offered to customers on a voluntary basis as a pilot program and is limited to the first 300 customers requesting service during the pilot program. Charges for this rate vary according to the time of day, day of the week, and season that energy is used in order to encourage a shift of electrical usage from on-peak to off-peak hours.

**Transformer** - An electromagnetic device that changes the voltage of alternating current electricity.

**Transmission** - The process of transporting electricity in bulk from a source of generation to a distribution system or large power consumers.

**Volt** - The unit of electrical pressure analogous to water pressure in pounds per square inch. It is the electromotive force which, if steadily applied to a circuit having a resistance of one ohm, will produce a current of one ampere.

**Watt** - The electrical unit of power or rate of doing work. It is the rate of energy transfer equivalent to one ampere flowing under a pressure of one volt.

---

**Wheeling** - The transmission of power over lines owned by one utility on behalf of another utility.

# Santee Cooper Locations

## **Santee Cooper Headquarters\***

One Riverwood Drive  
Moncks Corner (29461)  
(843) 761-8000

## **Retail Operations**

305A Gardner Lacy Road  
Myrtle Beach (29579)  
(843) 347-3399

### **Conway\***

100 Elm Street (29526)  
(843) 248-5755

### **Garden City Beach/**

#### **Murrells Inlet\***

900 Inlet Square Drive  
(29576)  
(843) 651-1598

### **Loris\***

3701 Walnut Street (29569)  
(843) 448-2411

### **Myrtle Beach\***

1703 Oak Street (29577)  
(843) 756-5541

### **North Myrtle Beach\***

1000 2nd Ave., North  
(29582)  
(843) 249-3505

### **Pawleys Island\***

126 Tiller Road (29585)  
(843) 237-9222

### **St. Stephen\***

1172 Main Street (29576)  
(843) 567-3346

\*Retail Office

# 2007

## January

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## February

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

## March

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## April

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## May

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## June

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## July

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## August

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## September

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## October

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## November

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

## December

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

○ Holidays

■ Pay Days

*President's Day is a "floating" holiday that can be observed anytime during the calendar year.*



P.O. Box 2946101  
Moncks Corner, SC 29461-6101

One Riverwood Drive  
Moncks Corner, SC 29461-2901  
(843) 761-8000

[www.santeecooper.com](http://www.santeecooper.com)

For additional information,  
call (843) 761-4197.



4/07 : 4,000