



**Lonnie N. Carter**  
Senior Vice President  
Corporate Planning & Bulk Power

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One Riverwood Drive  
Moncks Corner, SC 29461-2901  
(843) 761-4192  
Fax: (843) 761-7037  
P.O. Box 2946101  
Moncks Corner, SC 29461-6101

Mr. Mitchell Perkins  
Director  
State Energy Office  
1201 Main Street  
Suite 820  
Columbia, South Carolina 29201

Dear Mr. Perkins:

Enclosed is the annual update (dated January 2003) to Santee Cooper's Integrated Resource Planning Analysis (IRP). This update provides a status of DSM Programs and the Generation Resource Plan as required by the South Carolina Code, Section 58-37-40.

I apologize for providing this report late. I hope it did not cause any inconvenience in compiling your annual information.

If you have any questions about the update, please call me.

Sincerely,

A handwritten signature in cursive script that reads 'Lonnie N. Carter'.

Lonnie N. Carter

LNC:lct

cc: K. Billings

Enclosures

**2001 INTEGRATED RESOURCE PLAN  
UPDATE**

**South Carolina Public Service Authority**

**JANUARY 2003**

## TABLE OF CONTENTS

	<u>PAGE</u>
1. 2001 Integrated Resource Plan Update .....	1
2. DSM Existing Programs.....	2
3. Conclusion .....	3

## I. 2001 Integrated Resource Plan Update

This report provides a status of the recommendations for Demand Side Management (DSM) activities as required by the South Carolina Energy Conservation and Efficiency Act of 1992, Section 58-37-40. The act requires that all plans must be submitted every three years beginning June 30, 1993 and must be updated on an annual basis. This report includes the status of existing DSM Programs.

Santee Cooper prepared a generation resource study, which began in 2000 and was completed in March 2001 ("the 2001 Generation Resource Plan" or "the Plan").

The 2001 Generation Resource Plan assessed the need for additional generating resources to meet future customer demands and developed a least-cost plan to provide the resources for Santee Cooper to meet these demands. Current and future DSM programs were not evaluated in the Plan, but will be separately evaluated on an individual, case-by-case basis.

The 2001 Generation Resource Plan evaluated potential purchased power options against Santee Cooper's self-build generation options. The self-build options evaluated consisted of gas-fired simple cycle combustion turbine units, gas-fired combined-cycle units, and coal-fired thermal units.

For the planning period of 2001 through 2008, the Plan recommended the following:

- Firm power purchases ranging from 50 MWs to 550 MWs.
- Completion of the construction of the Rainey Station units as planned, including one (1) 500 MW-class combined cycle unit and two (2) 168 MW-class simple cycle combustion turbine units.
- Installation of an additional 300 MWs of simple cycle turbines by January 2004.
- Construction of a new 500 MW coal-fueled unit at the Cross Generating Station.

As recommended by the Plan, a 500 MW combined-cycle unit began operation in January 2002. One 150 MW simple cycle unit began commercial operation in March 2002 and the second 150 MW simple cycle unit began commercial operation in May 2002.

Due to additional SEPA capacity and a revised load forecast since the time the Plan was compiled, 240 MWs (as opposed to 300 MWs) of simple-cycle combustion turbine generation are planned for commercial operation in January 2004. In addition, the construction of Cross Unit 3 was approved and is planned for commercial operation January 1, 2007.

Load Forecast 0201 was approved in October 2002, which provides an update to the 2001 load forecast.

## **II. DSM Existing Program**

### **1. Good Cents New and Improved Home Program**

The Good Cents Program is 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. Participants are eligible for an incentive rate.

Program participation in 2001 resulted in a demand savings of 1,814 kW and energy savings of 2,155,015 kWh. Total expenditures for the Good Cents Program incurred through the South Carolina Public Service Authority in 2001 were \$3,515,650.96. (Demand savings are based on summer peak demand reduction of 1.05 kW).

### **2. H<sub>2</sub>O Advantage Water Heating Program**

H<sub>2</sub>O 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.



Program participation in 2001 was closed to new participants. Total expenditures for the H<sub>2</sub>O Advantage Program incurred through the South Carolina Public Service Authority in 2001 for existing participants were \$3,884,432.

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 2001 resulted in a demand savings of 23.8 kW and energy savings of 38,048 kWh. Total expenditures for the Commercial Good Cents Program incurred through the South Carolina Public Service Authority in 2001 were \$5,722.

4. Thermal Storage Cooling Program

This 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 are currently no participants in the program.

### **III. Conclusion**

Santee Cooper has made good progress toward offering DSM Programs. Santee Cooper continues to offer these DSM Programs where cost effective, and has completed generation resource planning necessary to ensure a reliable generation plan to meet customer demands through 2012. Additionally, Santee Cooper has developed rates that have encouraged over 400 MWs of peak load control by industrial customers.