



Lonnie N. Carter
Senior Vice President
Customer Services

One Riverwood Drive
Post Office Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-4192
FAX: (843) 761-4110

June 30, 1999



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 June 1999) 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.

Santee Cooper is in the process of completing a new Generation Resource Plan. The 1998 Generation Resource Plan is included with this report.

If you need additional copies or would like to discuss any aspect of the report, please call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lonnie N. Carter'.

Lonnie N. Carter

LNC:sbg

Enclosures

**1998 INTEGRATED RESOURCE PLAN
UPDATE**

South Carolina Public Service Authority

JUNE 1999

TABLE OF CONTENTS

	<u>PAGE</u>
I. 1998 Integrated Resource Plan Update	1
II. DSM Existing Programs	2
III. Conclusion	4

I. 1998 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 contracted Stone & Webster Management Consultant to complete a comprehensive resource plan for the years 1998 through 2010. A copy of this plan entitled Santee Cooper Generation Resource Plan, September 25, 1998 (the "1998 Generation Resource Plan") is included with this report.

The 1998 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 1998 Generation Resource Plan evaluated potential purchased power options, received in response to a request for proposals issued by Santee Cooper, 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 immediate planning period of 1999 through 2004, the 1998 Generation Resource Plan recommended the following:

- Santee Cooper purchase varying amounts of firm power ranging from 100 MW to 200 MW for the period of 1999 through 2003.
- Santee Cooper develop a plan to install a 250 MW-class combined-cycle unit in 2002.
- Santee Cooper develop a plan to install two 168 MW-class simple-cycle combustion turbine units in 2004.

Upon further analysis and refinement of project costs, Santee Cooper modified the above plan to include the addition of a 500 MW-class combined-cycle unit in 2002 in place of the 250 MW-class combined-cycle unit.

Load Forecast 9801 was completed and published in December 1998, which provides an update to the 1997 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 1998 resulted in a demand savings of 3,513 kW and energy savings of 4,166,000 kWh. Total expenditures for the Good Cents Program incurred through the South Carolina Public Service Authority in 1998 were \$4,537,500. (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.

Program participation in 1998 resulted in a demand savings of 1,713 kW. Total expenditures for the H₂O Advantage Program incurred through the South Carolina Public Service Authority in 1998 were \$5,823,000.

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 1998 resulted in a demand savings of 123 kW and energy savings of 119,000 kWh. Total expenditures for the Commercial Good Cents Program incurred through the South Carolina Public Service Authority in 1998 were \$56,000.

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 2010.