

Amy

William R. Sutton, P.E.
Vice President



P.O. Box 2946101, Moncks Corner, South Carolina 29461-2901 • 803/761-4098 • Fax 803/761-4010

June 27, 1995

Via FedEx Delivery



Mr. Jay A. Flanagan, P.E.
Director
State Energy Office
1201 Main Street, Suite 820
Columbia, South Carolina 29201

Re: Santee Cooper's 1994 Integrated Resource Plan and 1995 Annual Integrated Resource Plan Update

Dear Mr. Flanagan:

Pursuant to Section 58-37-10 et seq. of the South Carolina Code and as amended by the South Carolina Energy Conservation and Efficiency Act of 1992, enclosed herewith are four copies of Santee Cooper's 1994 Integrated Resource Planning Analysis (IRP), dated January 1995. This IRP was prepared under contract by Metzler & Associates.

Also enclosed is the annual update (dated June 1995) to Santee Cooper's 1994 IRP. This update provides a status of the recommendations made for the "Metzler" IRP, filed by Santee Cooper on this date, and is being furnished as required by the South Carolina Code, Section 58-37-40.

If you need additional copies or would like to discuss any aspect of the IRP and/or annual update, please call me at (803) 761-4098.

Sincerely,

A handwritten signature in blue ink, appearing to read 'William R. Sutton'.

William R. Sutton, P.E.
Vice President
Planning and Power Supply

WRS/bcc (WRS4:94IRP-31.WIN)

Enclosures

**1994 INTEGRATED RESOURCE PLAN
UPDATE**

South Carolina Public Service Authority

JUNE 1995

TABLE OF CONTENTS

I. 1994 Integrated Resource Plan Update	1
II. Status of Recommendations of Action From 1994 IRP	1
III. DSM Existing Programs	2
IV. Conclusion	5

I. 1994 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. The report includes the status of recommendations in the 1994 Integrated Resource Planning Analysis (IRP) and a summary of existing DSM programs.

II. Status of Recommendations of Action from 1994 IRP

Santee Cooper contracted with Metzler and Associates to complete a comprehensive Integrated Resource Planning Analysis. This plan focused on several of the items identified in the 1993 IRP and recommendations made by the State Energy Office. The evaluation of DSM programs provided a screening of programs considered but will require a more detailed analysis before the programs can be recommended for implementation. The following action items have started since the completion of the Integrated Resource Planning Analysis by Metzler and Associates.

1. Timing and type of new generation unit

Preparations are being made to put in place a new bidding process in the event that ALUMAX decides in 1997 to remain on the system. This process will include the costs for a utility built unit.

2. Compliance with the Clean Air Act Amendments of 1990 (CAAA)

Santee Cooper is completing a detailed analysis of the allowance options recommended in the 1994 IRP to determine which method will be used to insure compliance with the CAAA.

3. Implement the four new DSM programs listed in the 1994 IRP on a pilot program basis. Continue the existing Residential and Commercial Good Cents Programs.

Santee Cooper is currently evaluating the impact of structural changes in our industry upon our organization. We plan to delay development of any new programs until the ramifications of industry changes are more clearly known.

The Residential and Commercial Good Cents Program has continued to increase in participation as expected. Residential Good Cents incentive levels changed as a result of a program evaluation to make the program more cost effective.

No new programs.

II. DSM Existing Programs

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.

What was in reported change in evaluation methods? More detail on DSM programs. What is methodology for measuring actual results of DSM programs.

93 6261 kW
3,221,531 kWh
\$3322,000
exceeded exp.

Program participation in 1994 resulted in a demand savings of 2,595 kW and energy savings of 6,357,000 kWh. Total expenditures for the Good Cents program incurred through the South Carolina Public Service Authority in 1994 were \$4,150,557. (Demand savings are based on summer peak demand reduction of 1.05 kw.)

#1599.4

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.

demand 3539 kW
\$5418,000
has exceeded

Program participation in 1994 resulted in a demand savings of 2,828,000 kW. Total expenditures for the H₂O Advantage program incurred through the South Carolina Public Service Authority in 1994 were \$5,239,000.

\$1.85

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 1994 resulted in a demand savings of 279 kW and energy savings of 310,918 kWh. Total expenditures for the Commercial Good Cents program incurred through the South Carolina Public Service Authority in 1994 were \$118,200.

\$423.6

91.5 kW
95744 kWh
\$211,279
lower

4. Water Conservation Program

This program is targeted at existing residential homes in which older high-flow showerheads would be replaced with low-flow showerheads. The savings would be derived from the reduced energy requirement for heating water.

Program approval occurred the 3rd quarter of 1993 with implementation the 4th quarter of 1993. One direct mailing was completed and estimated energy savings was 713,500 kWh for 1994.

Total expenditures was \$18,141 in 1994.

5. 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. A time-of-use meter will be installed for this program. There are currently no participants in the program.

V. Conclusion

Santee Cooper believes that it has made good progress towards the implementation of the recommendations in the 1993 IRP. The results of the 1994 Integrated Resource Planning Analysis have provided Santee Cooper with the basis to complete the planning analysis necessary to insure that the resource planning options and related Clean Air Act compliance issues will be addressed to help Santee Cooper make these important decisions for the next twenty years.