William R. Sutton, P.E. Vice President



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

July 7, 1997

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 1997) to Santee Cooper's 1994 Integrated Resource Planning Analysis (IRP). This update provides a status of the recommendations made in the 1994 IRP, 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 report, please call me at (803) 761-4098.

Sincerely,

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

WRS/JDS/bcc (WRS7:SCSE0-1.WPD)

Enclosure



1996 INTEGRATED RESOURCE PLAN UPDATE

j7

· ъ

South Carolina Public Service Authority

JUNE 1997

TABLE OF CONTENTS

1⁹⁹

I.	1996 Integrated Resource Plan Update	1
П.	Status of Recommendations of Action From 1994 IRP	1
III.	DSM Existing Programs	3
IV.	Conclusion	5

I. 1996 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

The uncertainty facing Santee Cooper resulting from the restructuring of the electric utility industry has a major impact on the way resource planning requirements are viewed. Santee Cooper is reviewing the best information available and evaluating methods to meet the requirements of a more competitive environment.

To meet the requirements of submitting a complete Integrated Resource Plan every three years, Santee Cooper contracted with Metzler and Associates to complete a comprehensive Integrated Resource Planning Analysis. A copy of this plan was submitted with the 1994 Integrated Resource Plan Update. 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 Load Forecast was revised in 1996. 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

Santee Cooper is weighing the economics of power market purchasing against building and operating new peaking units.

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

Santee Cooper continues to analyze the economics of allowance options to ensure 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 continues to evaluate 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 Programs have 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.

III. 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.

Program participation in 1996 resulted in a demand savings of 5,470 kW and energy savings of 5,142,000 kWh. Total expenditures for the Good Cents Program incurred through the South Carolina Public Service Authority in 1996 were \$3,800,000. (Demand savings are based on summer peak demand reduction of 1.05 kW.)

2. H₂O Advantage Water Heating Program

 H_2O 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 1996 resulted in a demand savings of 1990 kW. Total expenditures for the H_2O Advantage Program incurred through the South Carolina Public Service Authority in 1996 were \$5,415,000.

IV. Conclusion

Santee Cooper believes that it has made good progress towards the implementation of the recommendations in the 1994 IRP. The results of the 1994 Integrated Resource Planning Analysis have provided Santee Cooper with the basis to complete the planning analysis necessary to ensure 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.

JDS

1.....

3. Commercial Good Cents

• ⁽¹

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 1996 resulted in a demand savings of 75 kW and energy savings of 111,000 kWh. Total expenditures for the Commercial Good Cents Program incurred through the South Carolina Public Service Authority in 1996 were \$67,000.

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. Program promotions did not include any direct mail in 1996. There were no new participants in 1996.

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. There are currently no participants in the program.

-4-