#### FLORIDA PUBLIC SERVICE COMMISSION

Capital Circle Office Center ● 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

### MEMORANDUM

November 8, 1995

DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYO) TO:

FROM: DIVISION OF ELECTRIC & GAS (FUTRELL, HAFF, TAYLOR) DIVISION OF LEGAL SERVICES (CULPEPPER, ERSTLING, WAGNER)

950442-EG, 950443-EG, 950444-EG, RE: DOCKET NOS. 950447-EG, 950449-EG, 950450-EG, 950451-EG, 950452-EG, 950453-EG, 950454-EG, 950455-EG - APPROVAL OF DEMAND-SIDE MANAGEMENT PLANS OF GAINESVILLE REGIONAL UTILITIES-CITY OF GAINESVILLE, JACKSONVILLE ELECTRIC AUTHORITY, KISSIMMEE UTILITY AUTHORITY, CITY OF OCALA, ORLANDO UTILITIES COMMISSION, CLAY ELECTRIC COOPERATIVE, INC., LEE COUNTY ELECTRIC COOPERATIVE, INC., SUMTER ELECTRIC COOPERATIVE, INC., SUMTER ELECTRIC COOPERATIVE, INC., TALQUIN ELECTRIC INC., WITHLACOOCHEE RIVER COOPERATIVE, ELECTRIC COOPERATIVE, INC., FLORIDA KEYS ELECTRIC COOPERATIVE ASSOCIATION, INC., AND CITY OF VERO BEACH.

AGENDA: 11/21/95 - REGULAR AGENDA - PROPOSED AGENCY ACTION - INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES:NONE

SPECIAL INSTRUCTIONS: I:\PSC\EAG\WP\950442.RCM

#### CASE BACKGROUND

The Florida Energy Efficiency and Conservation Act (FEECA), Chapter 366.82, Florida Statutes, requires the Commission to adopt goals to reduce and control the growth rates of electric consumption, and to reduce and control the growth rates of weather sensitive peak By Order No. PSC-95-0461-FOF-EG, issued April 10, 1995, the Commission set numeric demand-side management (DSM) goals for Florida Public Utilities Company (FPUC), and the eight municipal and six electric cooperative utilities subject to FEECA. Rule 25-17.0021(4), Florida Administrative Code, states that within 90 days of a final order establishing goals, each utility shall submit a DSM plan designed to meet the utility's goals.

On August 25, 1995, each utility filed its DSM Plan with the exception of FPUC and the City of Tallahassee. FPUC was granted an extension by Order No. PSC-95-0934-PCO-EG, issued August 1, 1995. The City of Tallahassee was granted an extension by Order No. PSC-0841-PCO-EG, issued July 14, 1995.

In Order No. 22176, issued November 14, 1989 in Docket No. 890737-PU, the Commission stated that conservation programs will be judged by the following criteria:

- 1. Does each component program advance the policy objectives set forth in Rule 25-17.001 and the FEECA statute?
- 2.Is each component program directly monitorable and yield measurable results?
- 3. Is each component program cost-effective?

Criterion three does not apply to municipal and cooperative electric utilities because the Commission does not have rate setting authority. Hence these utilities are free to implement non-cost-effective programs as was stated in Order 22176. This has been taken into consideration in staff's analysis of the DSM plans.

### **DISCUSSION OF ISSUES**

**ISSUE 1:** Should The Gainesville Regional Utilities-City of Gainesville's Demand-Side Management plan be approved?

RECOMMENDATION: Yes. The Gainesville Regional Utilities-City of Gainesville's (GRU) DSM plan projects that GRU will exceed the goals established in Order Number PSC-95-0461-FOF-EG. [Haff]

STAFF ANALYSIS: GRU's DSM plan contains 21 residential programs, and 14 commercial and industrial (C/I) programs. Staff has reviewed GRU's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. GRU's DSM plan projects that GRU will exceed its residential goals in 2005 by: 3,939 kw summer; 10,955 kW winter; and 68,370 mWh. GRU's DSM plan projects that GRU will exceed its C/I goals in 2005 by: 35,283 kW summer; 18,125 kW winter; and 125,389 mWh. A summary of GRU's programs is provided in Attachment 1.

**ISSUE 2:** Should Jacksonville Electric Authority's Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. Jacksonville Electric Authority's (JEA) DSM plan projects that JEA will exceed the goals established in Order Number PSC-95-0461-FOF-EG. [Taylor]

STAFF ANALYSIS: JEA's DSM Plan contains three residential educational programs, and one C/I program even though they had no goals set for the C/I Class. Staff has reviewed JEA's plan and conservation programs meet believes the the Commission's three-pronged test. All programs which were submitted in this plan have been analyzed for cost effectiveness using the Commission's approved tests as required in Rule 25-17.008, Florida Administrative Code. Demand and energy savings, and program participation were derived from a combination of FPL filings and JEA estimates. JEA's DSM plan projects that JEA will exceed its residential goals in 2005 by: 0.4 mW winter; 0.15 mW summer; and 1.35 mWh. A summary of these programs is provided in Attachment 1.

**ISSUE 3:** Should Kissimmee Utilities Authority's Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. Given that its DSM goals were set at zero, any savings projected in Kissimmee Utility Authority's (KUA) DSM plan will exceed the goals established in Order No. PSC-95-0461-FOF-EG. [Haff]

STAFF ANALYSIS: Although both its residential and C/I DSM goals were set at zero, KUA plans to continue to offer its existing DSM programs. KUA's DSM plan consists of six residential programs, two C/I programs, and two combined residential and C/I programs. Staff has reviewed KUA's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. A summary of the programs is provided in Attachment 1.

**ISSUE 4:** Should the City of Ocala's Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. Given that its DSM goals were set at zero, any savings projected in the City of Ocala's (Ocala) DSM plan will exceed the goals established in Order No. PSC-95-0461-FOF-EG. [Haff]

STAFF ANALYSIS: Although both its residential and C/I DSM goals were set at zero, Ocala plans to continue to offer its existing DSM programs. Ocala's DSM plan contains three residential programs, three C/I programs, and two combined programs. Staff has reviewed Ocala's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. A summary of Ocala's programs is provided in Attachment 1. In addition to these programs, Ocala also plans to provide information on solar technology and on energy-efficient new construction. Ocala also has a commercial load management test program which controls air conditioning and heating equipment on several city-owned facilities. In addition, Ocala has a new C/I program which allows the utility to make customer-specific recommendations for reducing energy usage and peak demand.

**ISSUE 5**: Should the Orlando Utilities Commission's Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. The Orlando Utilities Commission's (OUC) DSM plan projects that OUC will exceed its commercial/industrial energy goals, and meet the additional goals established in Order Number PSC-95-0461-FOF-EG. [Haff]

STAFF ANALYSIS: OUC's DSM plan consists of four residential programs, three C/I programs, and one public education program. Staff has reviewed OUC's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. OUC's DSM plans projects that OUC will exceed its C/I energy goal by 3,947 mWh, and meet its residential goals and its C/I demand goals. A summary of OUC's programs is provided in Attachment 1.

<u>ISSUE 6</u>: Should Clay Electric Cooperative, Inc.'s Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. Clay Electric Cooperative, Inc.'s (Clay) DSM plan projects that Clay will exceed the goals established in Order Number PSC-95-0461-FOF-EG. [Futrell]

STAFF ANALYSIS: Clay's proposed DSM plan contains three residential programs. No C/I programs are included because C/I goals were set at zero. Staff has reviewed Clay's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. Clay's DSM plan projects that Clay exceed its residential goals in 2005 by: 134 kW summer; 284 kW winter; and 61 mWh. A summary of the programs is provided in Attachment 1.

**ISSUE 7:** Should Lee County Electric Cooperative, Inc.'s Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. Lee County Electric Cooperative, Inc.'s (Lee County) DSM plan projects that Lee County will exceed the goals established in Order Number PSC-95-0461-FOF-EG. [Futrell]

STAFF ANALYSIS: Lee County's proposed DSM plan contains three residential programs. No C/I programs are included because C/I goals were set at zero. Staff has reviewed Lee County's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. Lee County's DSM plan projects that Lee County will exceed its 2005 residential goals by: 5,841.74 kW summer; 1,299.1 kW winter; and 65.58 mWh. A summary of the programs is provided in Attachment 1.

**ISSUE 8:** Should Sumter Electric Cooperative Inc.'s Demand-Side Management plan be approved?

<u>RECOMMENDATION</u>: Yes. Sumter Electric Cooperative, Inc.'s (Sumter) DSM plan projects that Sumter will exceed the goals established in Order Number PSC-95-0461-FOF-EG. [Futrell]

STAFF ANALYSIS: Sumter's proposed DSM plan contains two residential programs. No C/I programs are included because C/I goals were set at zero. Staff has reviewed Sumter's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. Sumter's DSM plan projects that Sumter will exceed its 2005 residential goals by: 72.62 kW summer; 714.92 kW winter; and 1,487.19 mWh. A summary of the programs is provided in Attachment 1.

**ISSUE 9:** Should Talquin Electric Cooperative, Inc.'s Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. Talquin Electric Cooperative, Inc.'s (Talquin) DSM plan projects that Talquin will exceed the goals established in Order Number PSC-95-0461-FOF-EG. [Futrell]

STAFF ANALYSIS: Talquin's proposed DSM plan contains three residential programs. No C/I programs are included because C/I goals were set at zero. Staff has reviewed Talquin's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. Talquin's DSM plan projects that Talquin will exceed its residential 2005 goals by: 189.8 kW summer; 208.9 kW winter; and 1,286.4 mWh. A summary of the programs is provided in Attachment 1.

Talquin's Load Management program does not provide a credit on member's bills for participating in the program. Staff questions whether projected savings will actually occur with no credit which could be used to stimulate participation. Staff will closely monitor this program's participation in Talquin's annual DSM report, and Talquin is still expected to meet its DSM goals.

**ISSUE 10:** Should Withlacoochee River Electric Cooperative, Inc.'s Demand-Side Management plan be approved?

RECOMMENDATION: Yes. Withlacoochee River Electric Cooperative, Inc.'s (Withlacoochee) DSM plan projects that Withlacoochee will exceed the goals established in Order Number PSC-95-0461-FOF-EG. [Futrell]

STAFF ANALYSIS: Withlacoochee's proposed DSM plan contains two residential programs. No C/I programs are included because C/I goals were set at zero. Staff has reviewed Withlacoochee's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. Withlacoochee's DSM plan projects that Withlacoochee will exceed its residential goals in 2005 by: 127.2 kW summer; 2,554.89 kW winter; and 3,266.39 mWh. A summary of the programs is provided in Attachment 1.

**ISSUE 11:** Should Florida Keys Electric Cooperative Association, Inc.'s Demand-Side Management plan be approved?

RECOMMENDATION: Yes. Florida Keys Electric Cooperative Association, Inc.'s (FKEC) DSM plan projects that Florida Keys will meet the goals established in Order Number PSC-95-0461-FOF-EG. [Taylor]

STAFF ANALYSIS: FKEC's proposed DSM plan contains three residential programs and two C/I programs. Staff has reviewed FKEC's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. A summary of these programs is provided in Attachment 1.

**ISSUE 12:** Should the City of Vero Beach's Demand-Side Management plan be approved?

**RECOMMENDATION:** Yes. Given that its DSM goals were set at zero, any savings projected in the City of Vero Beach's (Vero Beach) DSM plan will exceed the goals established in Order No. PSC-95-0461-FOF-EG. [Haff]

STAFF ANALYSIS: Although both its residential and C/I DSM goals were set at zero, Vero Beach plans to continue to offer its existing DSM programs. Vero Beach's DSM plan contains four residential programs, one C/I program, and one combined program. Staff has reviewed Vero Beach's plan and believes the conservation programs meet the Commission's three-pronged test. Staff has determined that the demand and energy savings assumptions for each program are reasonable, and comparable to the investor-owned utilities' assumptions for similar programs. A summary of programs is provided in Attachment 1.

**ISSUE 13:** Should the Commission's Proposed Agency Action Order in these dockets sever the decisions on approval of the DSM Plans for each utility and its respective docket?

**RECOMMENDATION:** Yes. A protest to any of the actions proposed in the Order should be specific to the utility and to the action being protested. If no protest is filed to any proposed action in a specific docket, then all actions in that docket should become final.

STAFF ANALYSIS: The issues presented in this recommendation in respect to approval of the DSM plans for the individual utilities are separable. A protest of one proposed action respective to one utility should not delay proposed actions relative to the other utilities from becoming final.

**ISSUE 14:** Should these dockets be closed?

RECOMMENDATION: Yes. These dockets should be automatically closed if no timely protests are filed to the specific agency actions proposed.

STAFF ANALYSIS: These dockets should be closed if no person whose substantial interests are affected by the action proposed files a petition within 21 days of the issuance of the order for a formal hearing. In the event a protest is filed specific to a particular docket, then only that docket should remain open.

# Attachment 1 - DSM Program Descriptions

## Gainesville Regional Utilities-City of Gainesville

#### Residential Programs

Site-Specific Customer Assistance: These programs provide information to residential customers on energy conservation opportunities by evaluating dwellings, and reviewing energy consumption trends. Customers with late payment tendencies are given information on energy conservation opportunities, dwelling inspections, and information on financial assistance for energy efficiency improvements. Programs targeting apartment owners and home-builders are designed to increase the awareness of energy efficiency opportunities.

- a. Energy Audits (Walk-Through and Detailed)
- b. Energy Action Checks
- c. Payment-Troubled Customer Consultation
- d. Apartment Energy Efficiency Rating
- e. New Home Energy Efficiency Rating

Low-Income Customer Assistance: GRU works with the Central Florida Community Action Agency (CFCAA) to identify energy conservation opportunities for low-income customers. Energy audits and financial assistance is provided for low-income home owners. Extension of natural gas into low-income areas will assist in reducing the utility costs of low-income customers. GRU will assist the CFCAA in evaluating the site potential of solar energy systems for low-income customers.

- a. Low-Income Weatherization Assistance
- b. Natural Gas Extension to Low-Income Areas
  - c. Solar Water Heater Assistance for Low-Income homes

Technology Demonstration Program: This program will allow GRU to determine the costs and benefits of duct leakage repair. GRU will perform blower door tests on a sample of GRU customers' homes. These tests will determine the leakage from central air conditioning duct systems.

#### a. Duct Leakage Repair Pilot

<u>Natural Gas Incentives</u>: These programs will provide rebates to participating customers for the purchase and installation of gas equipment. Eligible customers must have electric central heating and cooling, and water heating equipment at the end of its useful life. GRU also encourages the installation of gas equipment in new construction by providing a credit to contractors to offset the cost of piping and venting.

- a. Natural Gas Water Heating Rebates
- b. Natural Gas Space Heating Rebates
- c. Natural Gas Builder Rebates
- d. Natural Gas Cooling Rebates

<u>Cooling Incentives</u>: These programs will provide rebates to participating customers for the purchase and installation of efficient electric equipment. Eligible customers must have electric central heating and cooling, and water heating equipment at the end of its useful life.

- a. High-Efficiency Central AC Rebates
- b. High-Efficiency Room AC Rebates
  - c. Heat Recovery Unit Rebates
- d. Duct Leakage Repair Rebates
- e. Central AC Maintenance Rebates
- f. Heat Pipe Enhanced AC Rebates
- g. Mobile Home Reflective Roof Coating Rebates

<u>Information Program</u>: This program provides information on energy conservation to residential customers, contractors, builders, and code officials through seminars on a variety of topics.

#### a. Trade Alliance

### Commercial & Industrial Programs

<u>Site-Specific Customer Assistance</u>: These programs provide information to commercial customers on energy conservation opportunities by evaluating buildings, and reviewing energy consumption trends.

- a. Detailed Energy Audits
- b. Walk-Through Energy Audits
- c. Commercial Lighting Audits
  - d. Building Efficiency Evaluation

Technology Demonstration Program: This demonstration project utilizes Green Pricing to fund a renewable resource project. This PV application takes advantage of existing infrastructure associated with an uninterruptible power supply servicing computer equipment in GRU's electric system control center.

### a. Photovoltaic project

<u>Natural Gas Incentives</u>: These programs will provide rebates to participating customers for the purchase and installation of gas equipment. Eligible customers must have gas available and electric equipment at the end of its useful life.

- a. Natural Gas Water Heating Rebates
- b. Natural Gas-Fired Cooling Rebates

<u>Shared Savings</u>: GRU provides a commercial lighting audit, and install energy-saving lamps or remove lamps determined to be excessive. GRU charges for the service, as defined by contract, on the customer's monthly bill. The charge is a shared savings arrangement for one-third of the projected energy savings over the life of the contract.

### a. Commercial Lighting Service

<u>Cooling Incentives</u>: These programs will provide rebates to participating customers for the purchase and installation of efficient electric equipment and measures designed to reduce peak electric cooling load. Eligible customers must have electric central heating and cooling, and water heating equipment at the end of its useful life.

- a. Thermal Energy Storage System Rebate
  - b. Heat Recovery Unit Rebate
- c. Window Shading Rebate
- d. Targeted Performance Rebate

<u>Information Programs</u>: These programs provide commercial customers with information on energy conservation measures, and information on usage and techniques to reduce consumption.

- a. Business Partners
- b. Key Accounts

### Jacksonville Electric Authority

### Residential Programs

Contractor and Building Inspector Continuing Education: This program provides education and training to building contractors and building inspectors to encourage energy conservation and reduce duct leakage. In addition to the classes, JEA will develop a list of trained contractors willing to undertake duct repairs at a set price which will be derived from the average price submitted by qualified contractors.

According to JEA residential duct leakage occurs in the range of 11 to 17 percent of homes while the resulting energy losses are 20 to 40 percent. In light of these numbers, JEA believes that these education courses will encourage energy efficient building practices and the correct installations of duct systems as well as

increase the supply of informed contractors available to repair existing duct leaks.

Appliance Efficiency Education: This program provides a means of educating customers about replacing their pool pumps with a higher efficient pool pump by contacting with vendors to promote these pumps. The vendors will give the customer a \$10.00 discount when purchasing a new pool pump. The second part of this program involves an education program to show customers how much it costs to have a second refrigerator and freezer.

Approximately 9 percent of JEA's customers have pool pumps while approximately 8.8 percent of their customers have a second refrigerator of freezer. As approximately 10 percent of those customers who have a pool pump replace that pool pump each year, there should be significant savings if those customers were to buy a high efficient pool pump as a replacement. JEA estimates that with the \$10 rebate the \$50 premium will show a payback within four years.

Energy Audits for Low Income Customers: Even though all JEA customers are eligible for energy audits, they are not free. However, in conjunction with DCA's low income weatherization program, JEA will provide the energy audit and waive the approximately \$50.00 fee. In addition this audit, which includes a blower door test, a carbon monoxide test and an air pollution source survey, is more extensive than JEA's standard energy audit.

### Commercial/Industrial program

Commercial Lighting: This program provides financial assistance in the form of low interest (5%) loans which must be paid for over a three year period. The JEA will provide \$30.00 for a retrofit of lighting fixtures that promotes energy savings and power quality improvements. All commercial/industrial customers that have 10 or more fixtures and who follow certain guidelines spelled out in the program participation standards are eligible for these loans that JEA estimates will cover 85% of the cost of replacing the fixtures.

#### Kissimmee Utility Authority

#### Residential Programs

Elimination of Electric Resistance Space Heating: Program designed to encourage the elimination of electric resistance space heating in the residential sector. Customers meeting specific efficiency guidelines receive a cash incentive.

<u>Energy Audits</u>: Program offered as a free service to residential customers. Audit includes in-depth analysis of energy consumption,

demand, hours of operation, rates, equipment, and lighting. KUA auditor provides customer with summary of audit findings and recommendations for increasing energy efficiency and lowering electric bills.

Five-Star Program: Five-star evaluation is performed with each residential energy audit. Consists of measure points which are added for energy inefficiencies and subtracted for use of State-recognized conservation measures.

Fix-Up Program/Blower Door Tests: Program provides minor weatherization and conservation services for residential customers. Services include installation of water flow restrictors, sealing leaking duct work, adjusting water heater thermostats and pool pump timers, and insulating exposed hot water pipes. Air infiltration into duct system is diagnosed through performance of a blower door test.

Residential Load Management: Voluntary direct load control program that allows KUA to reduce peak demand. At its option, during peak periods, KUA can interrupt electric service to water heaters, central electric heating systems, and central electric cooling systems. As a condition of electric service with KUA, all residential construction after December 31, 1991 shall be equipped with load management equipment. However, as of October 1, 1995, actual participation in the program will be at the option of the customer. The following table shows the control period and credit structure of KUA's load management program:

<u>Appliance</u>	Control Period	Monthly <u>Credit</u>
Water Heater	all year	\$2.50
Central A/C (15 minutes per 1/2 hour)	April - October	\$4.50
Central Heating (15 minutes per 1/2 hour)	November - March	\$4.50

<u>Water Heater Conversion</u>: Program encourages customers to convert from electric resistance water heating to alternative technologies such as waste heat recovery, dedicated heat pump, natural gas, and solar.

### Commercial/Industrial programs

Energy Audits: Program offered as a free service to commercial customers. Audit includes in-depth analysis of energy consumption, demand, hours of operation, rates, equipment, and lighting. KUA auditor provides C/I customer with summary of audit findings and

recommendations for increasing energy efficiency and lowering electric bills.

Incentive Rates: KUA offers three incentive rate structures for commercial customers: time-of-use, curtailable, and interruptible. The time-of-use and curtailable rate structures provide incentives to customers who lower their electric usage during peak periods upon a 15-minute notice from KUA. Interruptible customers are given a 15-minute notice before their service is interrupted. As of the time that KUA's DSM plan was filed, there were no interruptible or curtailable customers, but there were 36 customers taking part in the time-of-use rate structure.

#### Combined Programs

Outdoor Lighting: Program replaces existing mercury vapor private area lighting with higher-efficiency high-pressure sodium lighting.

<u>Public Awareness</u>: KUA regularly includes information on available <u>DSM programs and conservation measures in customer bills. KUA also provides conservation information packets to customers when they initiate electric service.</u>

# The City of Ocala

#### Residential Programs

Residential Energy Audit: Program offered as a free service to residential customers. Audit includes analysis of energy consumption and household characteristics. Auditor provides customer with summary of audit findings and recommendations to increase energy efficiency and lower electric bills.

Residential Load Management: Voluntary direct load control program that allows Ocala to reduce peak demand by interrupting electric service to water heaters, central electric heating systems, and central electric cooling systems.

<u>Five-Star Efficiency Rating</u>: Five-star evaluation consists of measure points which are added for energy inefficiencies and subtracted for use of State-recognized conservation measures.

### Commercial/Industrial Programs

Commercial/Industrial Energy Audit: Program offered as a free service to C/I customers. Audit includes in-depth analysis of energy consumption, demand, hours of operation, rates, equipment, and lighting. Auditor provides C/I customer with summary of audit

findings and recommendations for increasing energy efficiency and lowering electric bills.

<u>High-Pressure Sodium Lighting Conversion</u>: Program replaces existing mercury vapor lighting with higher-efficiency high-pressure sodium lighting.

<u>Time-of-Use Rates</u>: Program provides Ocala's C/I electric customers to curtail energy usage during peak demand periods. There is only one participant on this program, which was first offered in January, 1991.

### Combined Programs

<u>Energy Audit/Weatherization</u>: Program provides minor weatherization services for residential customers as well as those customers living in public housing.

<u>Public Awareness</u>: Program provides speakers to schools, churches, and civic groups. Bill stuffers are used to notify residential and C/I customers of the availability of Ocala's DSM programs.

### Orlando Utilities Commission

### Residential Programs

Residential Direct Load Control: OUC plans to start a pilot load control program in 1996; the full program is expected to start in January, 1997. The program will control central air conditioners, electric furnaces, heat pump auxiliary heat operations, electric water heaters, and pool pumps. Incentive levels and appliance control schedules are not yet set, but OUC plans to offer both fixed and variable credits. Variable credits will be based on the number of control days.

Residential Energy Survey: Walk-through audit designed to provide homeowners with recommended energy efficiency measures and practices. Program includes complete inspections of attic and air ducts, and is used as a means to encourage OUC customers to participate in other conservation programs.

Residential Heat Pump Program: Program encourages installation of heat pumps by homeowners with existing strip heating and older, inefficient central air conditioners and heat pumps.

Residential Weatherization: Promotes installation of ceiling insulation (to R-19 or higher), caulking, and weatherstripping.

### Commercial/Industrial Programs

Efficient Lighting: Program that targets existing commercial customers and the retrofit market. Customers are encouraged to replace old lamps and ballasts with new, energy-efficient fixtures. Rebates are equal to \$100 for every kilowatt of lighting load that permanently removed from OUC's system.

Efficient Motors: New program that is presently under development and is expected to be fully operational in 1996. This program will promote the installation of high-efficiency motors to existing commercial customers. Incentive amounts are not yet set, but the incentive schedule will likely be based on motor efficiency and size (in horsepower).

<u>Multi-Family Weatherization</u>: New program that is presently under development and is expected to be fully operational in 1996. This program will target those persons living in multi-unit apartment complexes by offering top floor attic insulation, electric water heater insulation, low-flow shower heads, and weatherstripping around exterior doors.

### Public Education Program

Educational Outreach: Classroom presentation program that educates students on energy and water conservation.

### The City of Vero Beach

#### Residential Programs

Residential Energy Survey: Provides residential customers with analysis of current energy use and recommendations on how to save on energy bills. Recommendations cover low-cost or no-cost savings practices and measures, as well as changes to the building envelope and equipment replacement.

Two types of audits comprise the Energy Survey Program, both of which are offered at no cost: Walk-Through Audit and Energy Analysis. The walk-through audit is a basic inspection of building envelope and major electrical appliances. The energy analysis audit includes cost and payback estimates for ceiling insulation upgrades and high efficiency equipment.

Home Fix-Up: Umbrella program designed to improve the energy efficiency of existing homes. In this program, the City of Vero Beach will install, or arrange for the installation of, electric outlet gaskets, water heater insulation jackets, low flow shower heads, window treatments, weatherstripping, hot water pipe insulation, and repairs of HVAC ducts.

To participate in the home fix-up program, customer must have previously had an energy audit. New construction homes do not qualify for this program.

Low-Income Weatherization: Program assists the local Economic Opportunity Council to improve the energy efficiency of existing homes. Services include weatherization improvements and customer education. The City of Vero Beach will provide supplemental funding of \$100 per installation, not to exceed a total of \$3000 per year.

New Home Construction: Informational program that promotes energy-efficient new home construction. By granting awards and public recognition, Vero Beach encourages builders to incorporate new home construction standards that exceed the current building and energy codes.

### Commercial/Industrial Program

Commercial/Industrial Energy Survey: Provides C/I customers with analysis of current energy use and recommendations on how to save on energy bills. Recommendations cover low-cost or no-cost savings practices and measures, as well as changes to the building envelope and equipment replacement.

Two types of audits comprise the Energy Survey Program: Free Walk-Through Audit and Energy Analysis by Qualified Consulting Firm. The walk-through audit is a basic inspection of building envelope and major electrical appliances. The energy analysis audit involves a qualified consulting firm chosen by the customer to inspect equipment that Vero Beach's staff is not qualified to analyze. The customer pays for the cost of the consulting firm, but there is no charge for the support services provided by the City of Vero Beach's staff.

### Combined Program

<u>Public Information</u>: Informational program that educates students, city employees, and the general public on energy conservation practices and measures.

#### Clay Electric Cooperative, Inc.

### Residential programs

Energy Surveys: This program provides residential members with an analysis of recent energy use, and information on available energy conservation measures. This program is free to all residential members.

<u>Conservation Loans</u>: Residential members may borrow up to \$3,600 for a 36 month repayment period for cost-effective energy conservation measures such as: high efficiency space conditioning system upgrades, duct system repairs, insulation additions, heat pump water heaters, heat recovery water heaters, solar water heaters, and window upgrades.

<u>Load Management</u>: This program provides a credit to those members who use at least 500 kWh per month for utility control of water heating, and heating and air conditioning equipment during peak periods.

# Florida Keys Electric Cooperative, Inc.

## Residential programs

Energy Audit Program: The energy audit program provides the customer with information on how to implement energy conservation measures in a cost effective manner utilizing two venues.

- a. Walk through audits for existing home owner No charge.
- b. Building Energy Rating System (BERS) audits for potential home buyers - \$50.00 charge

Residential Load Control: The residential load control system utilizes controllers that have the central air condition and resistant water heaters connected to them. If a customer has a pool pump, it can also be connected to the controller. The customer must have an average monthly consumption of at least 500 kWh to be eligible for the program. The customer receives a monthly rebate of \$2.00 for A/C and \$1.50 for water heaters. FKEC peaks around the summer holidays, July 4 in particular, and therefore, only operates load management during a few specific periods.

Florida Keys Electric Lifestyle: After the energy or BERS audit the customer will be sent a coupon book which will contain the names of participating HVAC and insulation contractors. The contractors, acting as trade partners will provide the customer with a reduced price to install or perform the end use measures to FKEC's standards. There are three categories of end use applications. They are: a) High Efficiency Heat Pumps and Air Conditioners; b) Duct evaluation and repair; and c) Ceiling insulation upgrade.

### Commercial/Industrial programs

<u>Commercial Energy Audits</u>: These audits are designed to provide the commercial customer an analysis of energy use patterns at their facility. The audit is provided at no cost to the customer.

<u>Right Lights</u>: The commercial right lights program is designed to promote the installation and operation of high efficiency lighting fixtures. Opportunities for lighting applications will be identified after the commercial energy audit.

### Lee County Electric Cooperative, Inc.

## Residential programs

Residential Energy Survey: This program educates members as to energy conservation measures they can carry out to reduce energy consumption and weather sensitive peak demand. Lee County provides an analysis of current energy use and recommendations on energy conservation practices and measures. This program is offered free to Lee County's residential members.

New Home Program: This program intends to educate home builders and contractors on energy efficient technologies. Consumers and realtors will be targeted for education of the benefits of energy efficient home design. The ultimate goal of the program is to improve overall system efficiency resulting from demand and energy savings by program participants.

<u>Load Management</u>: This program provides a credit to those participating members for utility control of water heating equipment, heating and air conditioning equipment, and pool pumps to reduce weather sensitive peak demand.

### Sumter Electric Cooperative, Inc.

#### Residential programs

Residential Energy Audit: This program offers two types of audits to residential members. The Class A audit includes a review of the structural components of the member's home, and an analysis of the energy use of the home. In addition, a computer analysis will be performed in regard to energy conservation. The member is provided written recommendations on how to reduce energy consumption. The Class B audit is similar to the Class A audit except it does not include the computer analysis.

Residential Load Management: This program provides a credit to those members for every month where energy usage is at least 500 kWh for utility control of water heating, and heating and air conditioning equipment during peak periods.

### Talquin Electric Cooperative, Inc.

### Residential programs

Energy Audit program: This program includes a free walk-through audit for existing home owners. An analysis of energy usage at the home

will be provided along with recommendations for energy conservation measures. Talquin will also promote the Building Energy Rating System (BERS) audit offered by the Florida Department of Community Affairs (DCA). This audit is conducted for potential homeowners to make them aware of potential energy efficient equipment for new homes.

<u>Residential Load Management</u>: This program provides for utility control of water heating equipment to control the growth in peak demand on the utility's system.

Residential Energy Advantage program: This program will provide the customer with assistance and information on high efficiency electric heat pumps and air conditioners, duct evaluation and repair, and ceiling insulation upgrade. The information provided by Talquin will include the names of participating HVAC and insulation contractors. Participating contractors will receive training in energy efficiency issues and equipment.

### Withlacoochee River Electric Cooperative, Inc.

### Residential programs

Energy Audit program: This program includes a free walk-through audit for existing home owners. An analysis of energy usage at the home will be provided along with recommendations for energy conservation measures. Talquin will also promote the Building Energy Rating System (BERS) audit offered by the Florida Department of Community Affairs (DCA). This audit is conducted for potential homeowners to make them aware of potential energy efficient equipment for new homes.

Residential Load Management: This program provides for utility control of various equipment to control the growth in peak demand on the utility's system. Incentives will vary as required for marketing purposes.