

**Preliminary Report on Energy Efficiency Programs**

---

GRU | OCTOBER 2006 UPDATE

Since approval of the FY 07 conservation plan and budget on July 25, staff has been busy developing the foundation and infrastructure for achieving maximum DSM. This includes a variety of tasks required to implement the first year of our energy efficiency programs and begin the planning process for future years. During this first year, staff has worked with both internal and external stakeholders to ensure the success of the programs. Many of these efforts will be discussed in this preliminary report. In the future, quarterly reports will focus on MWh and kW savings achieved as a result of these programs.

**Financial Incentives**

**ACHIEVEMENT**

**STATUS**

**BENEFIT**

**Florida’s Energy Efficiency Week (Tax Holiday)**

Complete

- Customers will see a significant tax savings if they purchase qualified ENERGY STAR® products during this week

- Press release sent to media, posted on gru.com, e-line and sent via electronic email (Newsflash)

**Compact Fluorescent Lamp (CFL) Lincoln Homes Retrofit Pilot**

In Progress – finalizing agreement

- GRU/Community involvement
- CFL direct installation
- Energy savings
- Increased awareness of GRU energy efficiency programs
- Cost savings

- Establishing contractual agreement with the Cultural Arts Coalition (Environmental Ambassadors) to install 5,000 compact fluorescent lamps in Lincoln Estates neighborhood homes
- Working with Eastside High School students to analyze total energy savings in neighborhood

**Compact Fluorescent Lamp (CFL) Tanglewood Retrofit Pilot**

In Progress – finalizing agreement; replaced lamps in nine units

- GRU/Community involvement
- CFL direct installation
- Energy savings
- Increased awareness of GRU energy efficiency programs
- Cost savings

- Establishing a contractual agreement with the University of Florida Housing Department to implement a light bulb change out program. The UF Housing Department will install approximately 3,000 CFLs in Tanglewood Apartments (married housing)
- The International Carbon Bank Exchange (ICBE) will be measuring the results of the project over a 5-year period to try to establish the energy, financial and environmental savings associated with more efficient lighting

# Preliminary Report on Energy Efficiency Programs

CONTINUED

## HVAC

### Contractor Partnership

- Held workshop with contractors to gauge interest in becoming a certified contractor
- Developing guidelines and requirements for HVAC contractors to be listed as a GRU Certified Contractor - must meet performance and customer satisfaction criteria
- In exchange for marketing GRU programs, GRU will offer marketing benefits to the contractor

In Progress – held workshop; requested feedback; Spoke with other utilities about their contractor partnerships;

Target – Jan 2007

- GRU/Contractor involvement
- Energy savings
- Increased awareness of GRU energy efficiency programs
- Leverages an already strong marketing force to maximize customer take rates of rebate programs
- Cost savings
- Allows consistent application of residential rebates
- Ensures quality installation with high levels of performance
- Provides a marketing value to local contractors

### Energy Star Certification/ Affordable Housing

- Met with the City of Gainesville Housing Department and the Neighborhood Housing Development Corporation (NHDC) to bring them up to date on GRU's E-Star Housing and other GRU Programs that may be of assistance.
- Ten "affordable" homes in the North Point neighborhood have qualified for \$300 rebates for Energy Star certification (plans are for 46 additional)

In Progress – processing Energy Star Certification rebates

- GRU/community involvement
- Energy savings
- Increased awareness of GRU energy efficiency programs
- Cost savings
- Planning to cross-market with CFL program

### High Efficiency Central A/C

- Increased rebate value from \$125 to \$200 for 15 SEER or greater
- Increased rebate value from \$325 to \$550 for 15 SEER or higher 2-stage units
- Rewrote Administrative Guideline
- Updated web site, written materials

Complete

- Higher rebate amount to customer
- Second Tier allows newer technologies (2 Stage) to be used

### High Efficiency Room A/C

- Lowered EER requirement from 11 to 10.7
- Lowered minimum Btu requirement from 12,000 to 10,000
- Rewrote Administrative Guideline
- Updated web site, written materials

Complete

- Gives customers more accessibility to Gainesville retailer's existing stock

# Preliminary Report on Energy Efficiency Programs

---

CONTINUED

<b>Heat Pipe Enhanced A/C</b> <ul style="list-style-type: none"><li>• Increased rebate value from \$95 to \$225</li><li>• Rewrote Administrative Guideline</li><li>• Updated web site, written materials</li></ul>	Complete	<ul style="list-style-type: none"><li>• GRU/Contractor involvement</li><li>• Energy savings</li><li>• Increased awareness of GRU energy efficiency programs</li><li>• Higher rebate amount to customer</li><li>• Cost savings</li></ul>
<b>Solar Water Heater</b> <ul style="list-style-type: none"><li>• Changed calculation of active system rebate amount from whole system levels to \$0.0083 per btu/day</li></ul>	Complete	<ul style="list-style-type: none"><li>• Allows flexibility for the active systems being installed in our service territory</li></ul>
<b>Heat Recovery Water Heater</b> <ul style="list-style-type: none"><li>• Provides rebates to contractors when equipment is installed in our service area and fully processed by GRU</li><li>• Rewrote Administrative Guideline</li><li>• Updated web site, written materials</li></ul>	In Progress – informed contractors of monetary incentive	<ul style="list-style-type: none"><li>• GRU/Contractor involvement</li><li>• Energy savings</li><li>• Increased awareness of GRU energy efficiency programs</li><li>• Cost savings</li></ul>
<b>Reflective Roof Coating</b> <ul style="list-style-type: none"><li>• Provides \$75 rebate for application of reflective coating on mobile homes</li><li>• Rewrote Administrative Guideline</li><li>• UF College of Journalism and Communications graduate public relations students researching and developing plans to promote this rebate</li></ul>	In progress	<ul style="list-style-type: none"><li>• Energy savings</li><li>• Increased awareness of GRU energy efficiency programs</li><li>• Cost savings</li></ul>
<b>Request of Interest for Consulting Services</b> <ul style="list-style-type: none"><li>• Request for Interest seeking consulting services to assist in development of Low Interest Loan Program, Refrigerator Buyback, Recycling Program and Attic Insulation Program was sent out</li></ul>	Complete	<ul style="list-style-type: none"><li>• Helps speed up development of new programs</li></ul>

# Preliminary Report on Energy Efficiency Programs

---

CONTINUED

## **Low Income Whole House Program**

- Will provide up to \$2750 for upgrades to existing low income housing
- Research underway
- Meetings being held with The Action Network for input on development

Target -  
March 2007

- Allows a large rebate for much needed weatherization, insulation, and appliance improvements
- Added comfort and reduced energy bills

## **Low Interest Loan Program**

- Will offer low interest loans to residential customers
- Research underway

Target - Jan  
2007

- Allows customer to take advantage of a low interest loan to purchase energy efficient equipment and services

## **Refrigerator Buy back and Recycle**

- Encourage customers to get rid of older inefficient refrigerators
- Research underway

Target –  
Jan 2007

- Reduced energy consumption for customer
- Completely removes and recycles older inefficient refrigerators

## **Attic Insulation Rebate**

- Encourage customers to increase the level of insulation in their attics
- Research underway

Target –  
Jan 2007

- Added comfort and reduced energy bills for residential customers

## **Photo Voltaic**

- Planned rebate is \$1.50 per watt for residential PV Systems

Target –  
Jan 2007

- Added incentive for customers wanting to add PV Electric systems to their homes (can be used in combination with existing State rebates and Federal tax credits)

## **Customized Business Rebate**

- Encourages existing businesses to implement energy conservation measures that reduce peak demand and energy
- Can be used for lighting, HVAC, motors, controls, energy management systems, etc.
- Rebate amount is up to 50% of the project or \$40,000 whichever is lower
- Developed Administrative Guideline
- Developed web site, written materials

Complete

- Allows the flexibility for most businesses to implement conservation measures specific to their needs
- Reduced peak demand and energy usage.

# Preliminary Report on Energy Efficiency Programs

---

CONTINUED

## **LED Exit Sign Rebate**

- Incentive for businesses to change out their existing incandescent or compact fluorescent exit signs with new high efficiency LED exit signs
- Up to \$75 for each sign replaced
- Developed Administrative Guideline
- Developed web site, written materials

Complete

- Reduced energy usage - saves up to \$25 per year per sign
- Reduced operational costs
- LEDs last about 100,000 hours vs. incandescent 1000 – 2000 hours and compact fluorescent 10,000 – 15,000 hours

## **Smart Vend Program**

- Motion sensor/timer device installed on refrigerated drink vending machines - provided to vending machine owners (\$175 value)
- \$15 incentive for each device installed
- Agreement signed with major vending machine company to install 20 per month

Complete

- Reduced energy consumption and heat discharge at customer's facility About \$250 savings per year per machine
- Great visibility

## **Education and Information Programs**

### ACHIEVEMENT

#### **School Curriculum Kits**

- Produced ten more kits for middle and elementary schools
- The kits cover the importance of renewable resources, environmental protection, where energy comes from and how to save it at home and school. Games and interactive activities are used to present the lessons.

### STATUS

Ten kits completed; setting up school delivery

### BENEFIT

- Educational fun curriculum that teaches energy and water efficiency habits which can lead to lifestyle changes
- GRU/Community involvement
- Energy savings

#### **Energy Efficient Lighting Display**

- Researched options
- Two metered lamps used to compare incandescent and CFL lamps

In Progress – finalizing purchase

- Educational display demonstrates the difference in energy use for CFL and incandescent bulbs

# Preliminary Report on Energy Efficiency Programs

---

CONTINUED

<b>ENERGY STAR® "Change a Light Pledge"</b> <ul style="list-style-type: none"><li>• Program details posted to gru.com and promoted in Customer Bulletin</li></ul>	Complete and ongoing	<ul style="list-style-type: none"><li>• Encourages customers to change at least one bulb to one that is ENERGY STAR® certified</li><li>• Based on research, pledging is the first step to modifying behavior</li></ul>
<b>GRU "Change a Light" Model Home</b> <ul style="list-style-type: none"><li>• Energy efficient lighting upgrades to be installed and showcased in a 2006 Fall Parade of Homes home</li></ul>	Ongoing	<ul style="list-style-type: none"><li>• GRU/Home Builder partnership</li><li>• 29 CFLs expected to be installed</li><li>• Informational pieces available in the home for all visitors as well as outdoor signage</li></ul>
<b>"Win Energy Savings" Contest</b> <ul style="list-style-type: none"><li>• Contest posted to gru.com and promoted in Customer Bulletin</li></ul>	Complete	<ul style="list-style-type: none"><li>• 120 CFLs will be distributed among 20 winners</li><li>• Registration forms gather data on how many CFLs, if any, are currently installed at customer locations</li></ul>
<b>Online Energy Tools</b> <ul style="list-style-type: none"><li>• Implemented a web-based software solution to help customers manage their energy use</li><li>• Assists customer service representatives with customer questions</li></ul>	Complete	<ul style="list-style-type: none"><li>• Shows customers about ways to manage their energy usage</li><li>• Energy calculators compare energy efficiency savings for appliances</li></ul>
<b>Energy and Water Efficiency Kits</b> <ul style="list-style-type: none"><li>• Kits are provided to those completing online energy profile (described above) or the mail out survey</li><li>• Kits include<ul style="list-style-type: none"><li>- Package of two leak detecting dye tablets</li><li>- Low flow swivel nozzle for kitchen faucet</li><li>- 8 outlet and 4 switch gaskets</li><li>- 13-watt compact fluorescent light bulb</li><li>- 15-watt compact fluorescent light bulb</li><li>- Hot water temperature gauge card</li></ul></li></ul>	Target – Nov 2006	<ul style="list-style-type: none"><li>• Helps customers take the first steps toward energy efficiency</li><li>• Energy reduction and savings for customer</li></ul>

# Preliminary Report on Energy Efficiency Programs

---

CONTINUED

- Low flow showerhead

## **GRU Website Changes**

• Updated energy efficiency information on [www.gru.com](http://www.gru.com) with more prominently displayed, up-to-date rebate information, and information segmented by type of energy user (renter, owner, small business)

Complete

- Website is easier to use
- Customers can quickly find information on GRU rebates and reducing energy usage in their homes.

## **Speaker's Bureau**

- Expand communication efforts in an attempt to secure more speaking engagements on energy efficiency.
- Updated website and will utilize letters, emails and phone calls
- Updated and expanded the mailing list to include more relevant organizations and associations

Ongoing

- Builds relationships with community organizations.
- Provides an open forum for two-way communication
- Helps get out word about programs and customer role in energy efficiency

## **Rates and Regulatory Reform**

### ACHIEVEMENT

### STATUS

### BENEFIT

#### **Electric Baseline Rate**

- Implemented baseline rate
- Electric rate below 250 kWh was decreased and offset with an increase of the rate above 750 kWh.

Completed

- The rate below 250 kWh is subsidized encouraging conservation
- It also represents a minimum level of electrical usage for a residential customer

#### **Enhancement of Energy Efficiency for Rental Property**

- Investigating ways to encourage landlords to provide units that are energy efficient, with appliances that meet Energy Star specifications.
- Possible mechanisms include the Minimum Housing Code or legislative changes to the State Building Code

Preliminary research, presentation to Community Development Committee

- Encourages energy efficiency in rental properties

#### **Legislative Issues**

- Florida Municipal Efficiency

Ongoing - Proposals will

- Currently FMEC is investigating the issue of water heaters with a demand

# **Preliminary Report on Energy Efficiency Programs**

---

CONTINUED

Committee (FMEC) is compiling a list of regulatory issues that they will propose jointly for resolution by the legislature

be made to  
Legislature  
early in 2007

of over 4500 Watts



# Preliminary Report on Energy Efficiency Programs

CONTINUED

## Planning & Research

### ACHIEVEMENT

### STATUS

### BENEFIT

#### **Performance Tracking System**

- Implemented a performance management system to track energy efficiency programs
- Sample Energy Efficiency Scorecard to be provided

Draft  
Complete

- Program managers can better manage and report the performance of their programs

#### **Demonstration of Energy Efficient Design (DEED) Project**

- Project launched last fall partnering with UF to investigate energy usage in low income households to determine reasons for high energy intensity and possible programs to address their individual needs
- Funding of \$25,000 from DEED to help with cost

In Progress - surveys complete; analysis 95% complete; draft of final report from UF expected at the end of October 2006

- Allows the creation or modification of energy efficiency programs to address needs of low income customers

#### **Residential Appliance Saturation Survey**

- Updated the 1991 survey of appliance stock for GRU customers for Demand Side Management modeling
- Achieved a 42% response rate

Complete

- Increase quality of DSM modeling

#### **Florida Public Service Commission Renewable Energy Questionnaire**

- Participated in a survey of Florida utilities on renewable energy efforts within the last five years

Complete

- As a participant, will receive a comprehensive report on renewable energy efforts in Florida.

#### **Florida Municipal Efficiency Committee (FMEC)**

- Formed committee comprised of JEA, OUC, Lakeland, Tallahassee and Florida Municipal Power Agency

Ongoing

- Economy of scale for joint research on energy conservation measures
- Facilitates coordination on legislative initiatives, marketing and program development

# Preliminary Report on Energy Efficiency Programs

---

CONTINUED

<b>Research Collaboration</b> <ul style="list-style-type: none"><li>• Established load research contacts through the Florida Solar Energy Center (FSEC)</li></ul>	Ongoing	<ul style="list-style-type: none"><li>• Seek expertise from UCF and FSEC on load research compiled for Progress Energy</li></ul>
<b>Energy Orb</b> <ul style="list-style-type: none"><li>• Purchased an Energy Orb with light and pulse indicators that show the real time level of energy usage for customers</li></ul>	Preliminary Testing	<ul style="list-style-type: none"><li>• Currently evaluating as an energy use alert tool for residential customers</li></ul>
<b>Automated Meter Reading</b> <ul style="list-style-type: none"><li>• Presentations from Silver Spring Networks, Energy Axis, TWAC, AMI</li></ul>	Preliminary	<ul style="list-style-type: none"><li>• Pilot program to evaluate the benefits of automated meter reading on customer awareness, customer data and utility operations</li></ul>
<b>Load Research</b> <ul style="list-style-type: none"><li>• Conducting Pilot with Enetics SPEED recorders</li></ul>	Ongoing	<ul style="list-style-type: none"><li>• Update energy savings, demand savings and customer costs for energy conservation measures</li><li>• Increase quality of DSM modeling</li></ul>
<b>City Facility Energy Efficiency Plan</b> <ul style="list-style-type: none"><li>• Developed a charter for a self directed work team to look at energy and water efficiency practices in City/GRU facilities and create a plan to improve efficiencies within existing and new facilities</li><li>• Team members from GRU's conservation, plants, and facilities departments along with General Government's codes and facilities departments</li><li>• Team will also look at existing Green Building ordinance for possible modifications</li></ul>	Preliminary	<ul style="list-style-type: none"><li>• Energy and Demand reductions for City and GRU facilities</li><li>• Demonstration of City commitment to conservation</li></ul>