

GENERAL MANAGER REGULAR ITEM #080630

First 2 Years of Maximum Energy Efficiency

December 4th, 2008



We've surpassed our Targets

- Cumulative FY07 & FY08
 - Target
 - 30,657 MWh
 - 5,873 kW
 - Actual Achieved
 - 35,548 MWh
 - 6,060 kW
 - Equates to customers saving \$4.9M annually
 - 3118 homes
 - 31,566.6 Tonnes of CO²



Total Energy Reduction Since Implementation



Cost of energy

Levelized Cost per MWh Energy Reduction Since Implementation



Peak reduction cost

- First year cost
 - -\$920.14 / kW
- Current cost
 - \$1,192 / kW
- Compared to
 - \$800 \$1,400 peaking capacity
 - \$3,000 \$6,500 baseload capacity

Cost of demand

Cost per kW Demand Reduction Since Implementation



FY '08 Highlights

- 1st Annual Green Building Symposium
 - 200 attended
- Implemented Home Performance w/ E-Star
 - 146 completed
 - Partnering contractors are running w/ it
- Implemented Irrigation Maintenance
 program
 - 61 completed
- Implemented High Efficiency Pool Pump program
 - 88 completed

Continuing Education

- Watt Watchers Program w/ Elementary Schools
- Library of energy & water efficiency DVDs w/ lesson plans
- Eco-Grants
- Solar Car kits
- Cloth shopping bag project w/ Ward's Supermarket
- Recruited volunteers from UF to mentor Lincoln Middle School students

Gainesville vs. Tallahassee

•	Ρ٧	253.78 kW	• PV	107.2 kW
•	CFLs	94,343	• CFLs	116,904
•	Insulation	405	 Insulation 	1393
•	Solar w/h	31	 Solar w/h 	12

Lessons Learned

- Energy Efficiency is getting more expensive like everything else
- Number of Custom Business projects have increased, but are much smaller in scope
- Time to scale back on CFLs

Measurement & Verification of Energy Efficiency Programs



Measurement & Verification of Energy Efficiency Programs

- KEMA Independent Verification of Projected Energy Savings
- Prioritize Analysis of Programs by:
 - Investment by GRU
 - Projected MWh and kW Savings
 - Number of Participants
 - Implementation Reliability

DSM Program Analysis

Program	Number of Participants	MWh Savings	kW Savings	GRU Financial Investment	Order of Analysis
Customized	Medium	High	High	High	1
Natural Gas	Medidini	riigii	riigii	riigii	
Appliances	Medium	High	Medium	High	2
Central AC Maintenance	High	High	Medium	Medium	3
Super Efficient AC Systems	Medium	High	Medium	High	4
Refrigerator Recycling & Buyback	Medium	High	Medium	Medium	5
Duct Leak Repair / Attic Insulation	Medium	High	Medium	Medium	6

Program Schedule

Weeks from Project Start											
1	2	3	4	5	6	7	8	9	10	11	12
Kickoff Meeting											
	Customer Created	Surveys				Customer Surveys Returned					
			Survey & Utility Usage Analysis						lysis		
										Re	eport

Expected Deliverables

Detailed Analysis and Recommendations to Include:

- Baseline assessment (energy usage prior to program implementation)
- Analysis of net-to-gross (free riders)
- Expected vs. actual energy savings
- Analysis of GRU administration and tracking
- Recommendations for expansion, contraction, modification, or elimination of programs

Projected Schedule of M&V of DSM Projects

Program	Schedule		
	2008	2009	2010
Natural Gas Appliances		X	X
Customized Business Rebate		X	X
Central AC Maintenance		X	
Super Efficient AC Systems			X
Refrigerator Recycling & Buyback		x	
Duct Leak Repair / Attic Insulation			X



What's to come?

- Targeting another 18,832 MWh and 3,302 kW for FY'09
- Other Water Efficiency programs
- Continue with LED Traffic signal project
- Upgrades to GRU Administration Building
- Feed In Tariff
- Completion of Gainesville Greens
- 100 Homes Pilot Project

100 Homes Project

- Pilot with UF's Program for Resource Efficient Communities, Accelerated Data Works, and the International Carbon Bank Exchange, Inc.
- Identify high performing homes
- Survey them for behavioral differences
- Reward their performance by purchasing carbon offsets
- Package model for other utilities

We've exceeded our Targets!

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Thank you!