

RUC ITEM #100008

Energy Efficiency Update

RUC September 8, 2010



Agenda

- Overall Strategy
- Current Status
- Cost Effectiveness
- Are Windows a good fit
- Program Evaluation
- State and Federal Programs
- PACE Update

City Commission Action

On April 12, 2006 The Gainesville City Commission directed staff to:

*“1. Include the **Total Resource Cost test** as a consideration to **pursue all cost effective and feasible demand side measures** including demand response, energy efficiency, load management and innovative rate design options. Ensure that the needs of low income customers are addressed in demand side management programs.*

*2. Have GRU staff conduct a thorough examination of all DSM options and **present a plan to the commission** to develop and implement all cost effective DSM and demand response measures...”*



ICF Report

- Commissioned by City Commission
- Evaluate Integrated Resource Plan
- Demand Side Management Feasibility Study
- Final Report March of 2006

ICF Report

- Looked at 125 potential programs
- Filtered down to 19 programs
- Identified potential for
 - 86 MW by 2025
 - 249,000 MWh by 2025
- Set Goal
 - Decrease demand growth 50% per year
 - Decrease energy growth by 30% per year

Four Legged Stool Strategy



Four Legged Stool

- Incentives (ICF Report)
 - Residential
 - Business
 - Low Income
 - LEEP
 - CWC
 - Renewables

Four Legged Stool

- Education
 - Energy Efficiency Road Show
 - Energy Surveys
 - Community Events
 - Web Site
 - Home Energy Report
 - School programs

Four Legged Stool

- Rates
 - Tiered rate structure
 - Electric and Water
 - The more you use, the more you pay
- Regulation
 - Only with uniform state building code
 - New construction
 - Nothing in place for existing housing
 - Community Development Committee attempted through Minimum Housing Code (R19)

Current Status

- Through 3rd Qtr
 - 60,306 MWh
 - Equivalent to 6,091 houses
 - 11,138 kW
- 4 Year Goal
 - 76,323 MWh
 - 13,866 kW

Cost Effectiveness

- Evaluated based on
 - Marketing Expenses
 - Labor Expenses
 - O&M
 - Training
 - Certifications
 - Vehicles, etc.
 - Rebate Expenses
 - Our calculated energy and demand savings

Cost Effectiveness

- “All in” levelized cost
- \$18.11 per MWh
- ICF was assuming \$23 per MWh
- Programs are evaluated every year
 - Additions, Changes or Deletions made as necessary
 - Participation
 - Heat Recovery Unit
 - Cost
 - Reflective Roof Coating
 - Absorbing A/C Maintenance into Home Performance w/ Energy Star
 - Evaluating Low Interest Loan Program
 - Regulatory Changes
 - 13 SEER Central A/C
 - Piloting a Heat Pump Water Heater program this year

Windows

Are Windows a Good Fit?

- Preliminary analysis shows promise
- Full analysis and final recommendation requires more research
- Will provide final recommendation at December's RUC meeting

Program Evaluation

Program Evaluation

- Do we really save what we estimate?
 - 3rd Party Measurement and Verification (M&V)
- Completed first round in FY2009
 - Refrigerator Buyback, Super SEER, Attic, and Duct Leak
- Ongoing M&V Process
 - Home Performance w/ Energy Star in FY2010
- Built in M & V for Home Energy Reports

Federal and State Programs



HOMESTAR Energy Efficiency Retrofit Program

- Also known as Cash for Caulkers
- Consumer Rebate
- 14 different measures
- \$6 Billion allocated

Expectations

- Improve 3 million homes
- 168,000 Jobs
- \$9.2 Billion savings over next 10 years
- Reduce dependency on foreign oil

Measures Covered

- \$1500 – Air sealing, wall insulation & air source A/C Heat Pump
- \$1000 – Attic insulation, duct replacement & Sealing, window replacement, heating system replacement, geothermal heat pump, water heater replacement
- \$500 – Window film
- \$250 – crawl space/basement insulation
- \$125 – door (2) or skylight (2) replacement

Silver Star Level

- Combination of upgrades
- Lower of 50% of the cost or \$3000
- Products made in USA
- Installed by a certified contractor

Gold Star Level

- Must reduce usage by 20%
- \$3000 rebate to hit target
- \$1000 for each additional 5% reduction
- Lower of 50% of cost or \$8000
- Installed by certified contractor

Contractor Requirements

- Building Performance Institute (BPI) or equivalent certification
- Independent QA to do post inspections
- QA State Oversight

Status

- Passed the house May 2010 now in the Senate
- Senate has multiple “retrofit” bills on the table
- Need to be incorporated into original House Bill prior to approval

Florida Energy Star Residential HVAC Rebate Program

- Open Aug 30th through Dec 31st
- HVAC Systems
 - Central A/C, Air Source Heat Pumps, Geothermal Heat Pumps
- Must have a Manual J
- Ducts evaluated and repaired to 15% or less leakage
- \$1500

PACE Update

- Sean McClendon

Thank you!

