

Energy Efficiency – A Community’s Perspective

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FPSC Staff Workshop

YOUR HANDS

0 IN FREE IMPROVEMENTS

GRU LEEP® a program designed to help homeowners make energy efficiency improvements that can lower your energy bills. GRU LEEP participants will work with GRU energy auditors to identify energy efficiency opportunities that best suit their home. Up to 40 participants, who meet the program's criteria, will receive a free energy audit and a \$1000 in free energy efficiency improvements.



Who is GRU

- Gainesville Regional Utilities (GRU) is a multi-service utility owned by the City of Gainesville and is the 5th largest municipal electric utility in Florida.
- Approximately 89,000 electric retail customers in Gainesville and surrounding unincorporated areas.
- Most recent summer peak 481 MW
- Total installed capacity 611 MW

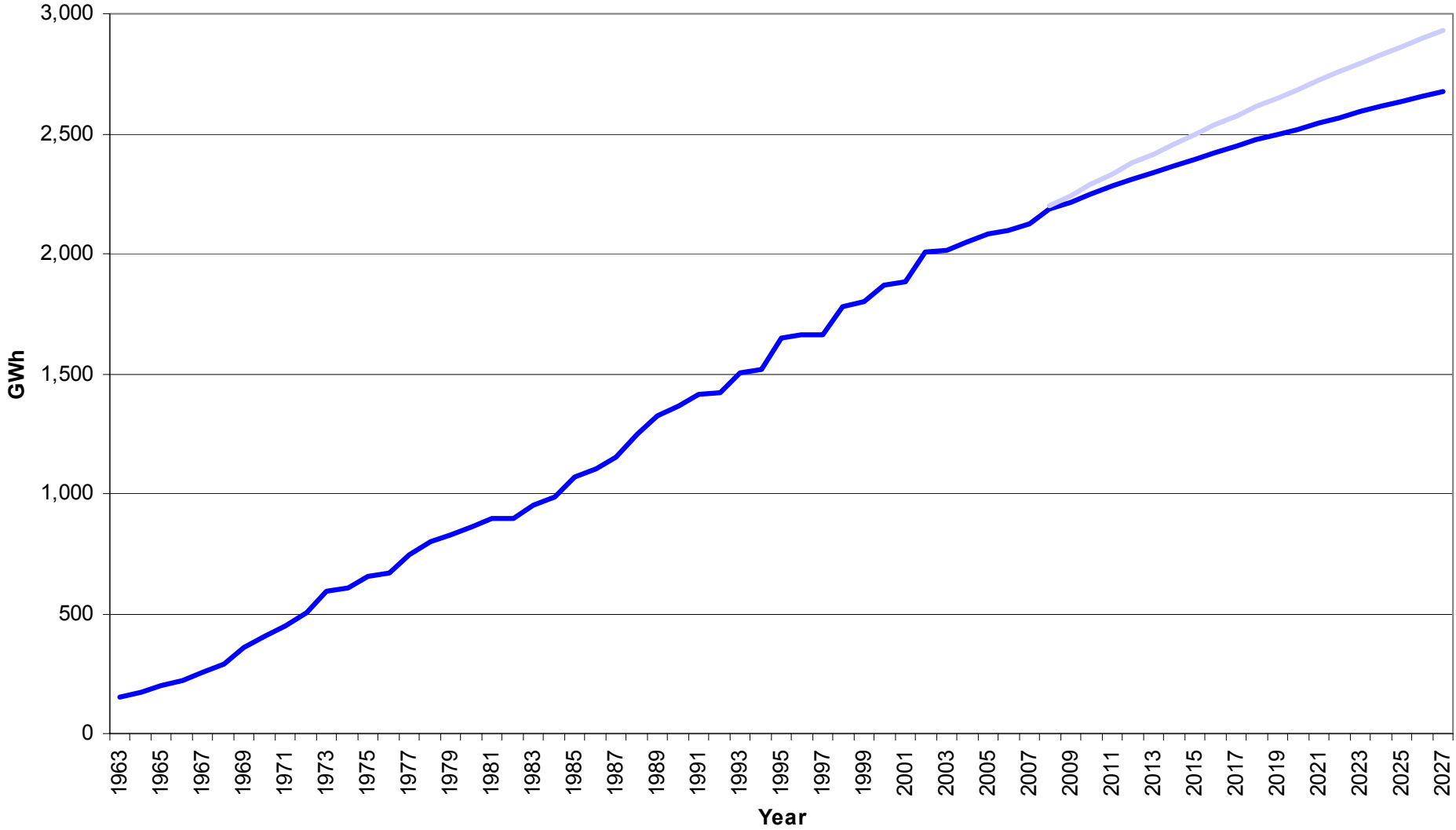


Long Term DSM Commitments

- DSM included in GRU's 2008 Ten Year Site Plan
- Goals
 - Incremental Demand - 48 MW by 2017
 - Incremental Energy – 128,000 MWh by 2017
- Long term impacts
 - Decrease demand growth by ~ 60% a year
 - Projected growth 7.9 MW / year
 - Projected DSM 4.8 MW / year
 - Decrease energy growth by ~ 22% a year
 - Projected growth 58,000 MWh / year
 - Projected energy reduction 12,800 MWh / year

Historical Net Energy for Load & 2008 Forecast of Net Energy for Load

Forecast Net Energy for Load w/ DSM Forecast Net Energy for Load w/o DSM



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...”*

The Process

- Public discussion process 2002 – 2006
 - Over 50 public meetings
 - Over 20 meetings with City Commission
- Integrated Resource Plan (IRP) 2002 – 2005
 - Identified need for new economical base load capacity
 - Plan utilized Rate Impact Measure (RIM) test
- Independent review process 2005 – 2006
 - Conducted two independent reviews of IRP
 - April 2006 City Commission took action
- Learning from energy efficiency leaders 2006
 - Staff visits with: Austin Energy, Burlington Electric, Long Island Power Authority, Sacramento Municipal Utility District, Pacific Gas and Electric



Resulting Programs

Added Insulation
Central Air Conditioner Maintenance
Duct Leak Repair
Energy Star for Affordable Housing
Heat Pipe Enhanced Air Conditioner
Heat Recovery Unit
High Efficiency Central Air
Conditioner
Super SEER Air Conditioner
High Efficiency Room Air
Conditioner
**LEEP (Low-income Energy
Efficiency Program)**

Low Interest Loan Program
CFL Program
Reflective Roof Coating for Mobile
Homes
**Refrigerator Buyback and
Recycling**
On-line Residential Survey
Energy Efficiency Kit
**Solar Electric (PV) System Rebate
Program**
Solar Water Heating Rebate Program
On-line Business Survey
Customized Rebate
Exit Sign Replacement
Smart Vendor

Community Commitment

- October 2006 – December 2007
 - 2.9 MW
 - 17,541 MWh
 - \$3M total GRU expenditures
 - **Over \$7.5M total customer investment**
 - Over 6,000 participants (not including CFLs)
 - Over 63,000 CFLs distributed



Stand Out Program

- Custom Business Rebate
 - \$708,101
 - 120 of Customers
 - 1.2 MW and 6,678 MWh
- Low-Income Energy Efficiency Program
 - Assists low-income customers with comprehensive whole house improvements
 - \$2,600 for each home
 - 100 homes completed to date



Stand Out Program

- Solar Photovoltaic
 - January 2007 – February 2008
 - 193 kW installed
 - State program July 2006 – February 2008
 - 1,129 kW installed
- Second refrigerator buyback and recycling
 - 663 refrigerators recycled

Continuous Review

- Not every program will succeed
- No program will succeed without some changes
- Metrics and goals measured frequently
- Make others aware of these metrics and goals
- Quarterly program review between key players
- Measurement and Verification (M&V)

Measurement and Verification Challenges

- “Fox guarding the henhouse,” keeping track of the data, understand the value of M&V, when do you reevaluate
- Our approach
 - Early peer review – Roger Duncan – Austin Energy
 - 3rd party M & V – KEMA
 - Adjust programs where necessary

Conclusion

- TRC was the right choice for Gainesville
- Goal can only be achieved with a community effort
- Continuous review is necessary
- Measurement and Verification plays a vital role