

The Potential of Price Response, Demand-side Management and Energy Efficiency

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PURC Energy Policy Roundtable



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Demand-Side Management

- Florida Statute 366.82 Definition of Utility
- Florida Administrative Code Chapter 25-17
- Role of the Rate Impact Measure Test
- Utility DSM Programs
- State & Federal Incentives
- DSM Potential – who is responsible for realizing it?
- Demand Response/Price Response



FS 366.82 Definition of Utility

- “excluding any municipality or instrumentality ... whose annual sales as of July 1, 1993, to end-use customers is less than 2,000 gigawatt hours.”
- Currently regulated are the four large Investor-Owned Utilities (FPL, PEF, TECO and Gulf Power) and the largest Municipal Utilities (JEA, OUC, etc.)



Florida Administrative Code Chapter 25-17

- Sets goals for utilities based upon Rate Impact Measure Test cost-effectiveness
- Requires periodic submission of a Demand-Side Management Plan designed to achieve those goals
- Requires submission of DSM Plan status
- Allows for Energy Conservation Cost Recovery for Investor-Owned Utilities



Role of the Rate Impact Measure Test

- Determines the cost effectiveness of DSM programs to all rate payers of the utility
- Provides a basis for determining cost recovery
- Exceptions to RIM cost effectiveness allowed for particular programs (e.g., research, development, low-income households, etc.)
- Other tests performed (e.g., Participant's Test, Total Resource Cost Test, etc.)



Utility DSM Programs

- Most have been in operation since 1980
- Most are based upon the RIM test
- Impacts reported annually in the Ten-Year Site Plan process
- Most have focused on peak power demand and on-peak energy use
- Long history of demand-response programs



State & Federal Incentives

- National Energy Policy Act of 2005
 - Tax credits
- FL Energy Efficiency and Conservation Act
 - Sales tax exemptions
 - Rebates
- Florida Renewable Energy Policy



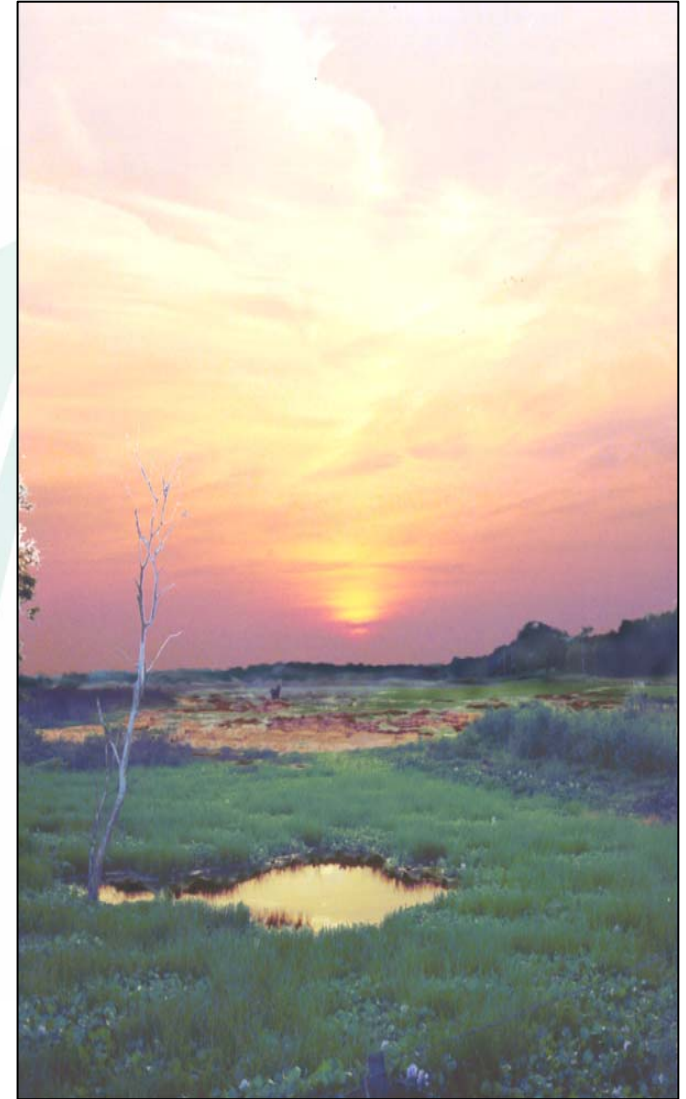
DSM Potential – who is responsible for realizing it?

- Role of regulated utilities defined by FPSC
- Role of unregulated utilities defined by their customers and directors; tend to follow RIM cost-effective approach
- Significantly larger potential exists for energy conservation that is cost-effective for society
- Responsibility of Participating Customers?
- Other sources of funding?



Group Discussion

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Demand Response/Price Response

Mr. Jim Thompson
Team Leader
Pricing and Load Research
Gulf Power



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Separator Slide



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Company History

LAW ENGINEERING AND ENVIRONMENTAL SERVICES (LAW)

1903

1946

1957

1988

- 1873 EC Jordan Company founded
- 1903 LAW founded by Thomas C. Law
- 1946 LAW-Barrow-Agee Laboratories founded
- 1957 Law Engineering Testing Company formed
- 1957 Harding Lawson Associates founded
- 1965 Environmental Science & Engineering (ESE) founded
- 1971 Pacific Environmental Services (PES) founded
- 1975 MACTEC founded as Management Analysis Company
- 1987 Combustion Engineering purchases EC Jordan
- 1988 LAW acquires LeRoy Crandall & Associates
- 1990 ABB Environmental Services purchases Combustion Engineering
- 1998 Harding Lawson purchases ABB Environmental
- 1999 MACTEC acquires ESE
- 2000 MACTEC acquires PES & Harding Lawson; MACTEC merges Harding Lawson & ESE to form Harding ESE
- 2002 MACTEC merges with LAW to form 2 operating units: MACTEC Engineering and Consulting, Inc. & MACTEC Development Corporation

PACIFIC ENVIRONMENTAL SERVICES (PES)

1971

ENVIRONMENTAL SCIENCE AND ENGINEERING (ESE)

1965

1975

1999

2002 - today

2000



MACTEC

HARDING

1957

1998

EC JORDAN --> COMBUSTION ENGINEERING --> ABB ENVIRONMENTAL -->

1873

1987 1990

MACTEC Resources

- More than **100 U.S. Offices** – Comprehensive Geographic Coverage
- More than **4,000 Employees** – Extensive Expertise
- Specialists in **over 50 Engineering, Scientific, and Construction Disciplines** – Full-Service Organization
- **>\$500M** in Revenues

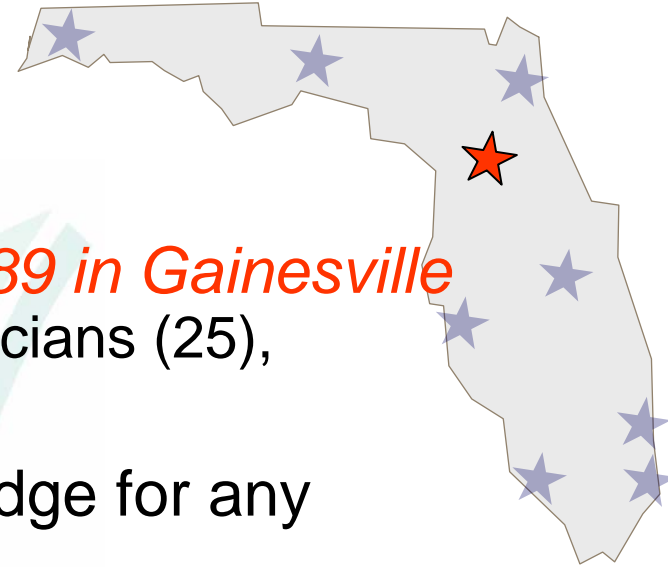


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Gainesville Resources

- Based in Alachua County since 1965
- More than 500 Employees in Florida, **89 in Gainesville**
 - Engineers (22), Scientists (24), Technicians (25), and Support Staff (20)
- Local Expertise, Capacity and Knowledge for any Environmental and Energy Project
- Home of MACTEC's Energy Engineering Group
- State Resources
 - Engineers (163), Scientists (61), Technicians (196), and Support Staff (100)



*We have the technical resources in Gainesville
to successfully execute projects in a cost-effective and timely manner.*



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