

State of Florida



Public Service Commission

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DATE: February 17, 2005

TO: Director, Division of the Commission Clerk & Administrative Services (Bayó) *RT*

FROM: Division of Economic Regulation (Harlow, Colson, Sickel) *JGH TB JS*
Office of the General Counsel (Vining) *AEV*

RE: Docket No. 040032-EG – Petition for approval of numeric conservation goals by Gulf Power Company.

AGENDA: 03/01/05 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\040032B.RCM.DOC

Case Background

The Florida Energy Efficiency and Conservation Act (FEECA), specifically Section 366.82, Florida Statutes, requires the Commission to adopt goals to reduce and control the growth rates of electric consumption and weather sensitive peak demand. In Order No. PSC-04-0764-PAA-EG, issued August 9, 2004, the Commission set numeric conservation goals for Gulf Power Company (Gulf) for the period 2005 through 2014.

Rule 25-17.0021(4), Florida Administrative Code, requires that within 90 days of a final Commission order establishing goals, each utility shall submit a demand-side management (DSM) plan designed to meet the utility's goals. Gulf timely filed its proposed DSM Plan on December 1, 2004. Gulf included program standards for the programs in its proposed DSM Plan. On January 25, 2005, in response to requests by staff, Gulf filed a modification to its DSM Plan. Gulf requests approval of its DSM Plan, as modified on January 25, 2005, including approval for cost recovery.

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This recommendation addresses Gulf's petition for approval of its 2005 DSM Plan. The Commission has jurisdiction over this matter pursuant to Sections 366.81 and 366.82, Florida Statutes.

Discussion of Issues

Issue 1: Should Gulf Power Company's (Gulf) proposed 2005 Demand-Side Management (DSM) Plan be approved, including approval for cost recovery?

Recommendation: Yes. Gulf's DSM Plan: 1) meets the objectives of Rule 25-17.001, Florida Administrative Code, and FEECA; and, 2) contains programs that appear to be cost-effective, directly monitorable, and meet Gulf's numeric conservation goals. Gulf's research and development program expenditures for the Conservation Demonstration and Development Program should be capped at the existing level of \$250,000 annually. (Harlow, Colson, Sickel)

Staff Analysis: Gulf's proposed DSM Plan contains 13 programs, including six residential programs, five commercial/industrial (C/I) programs, one research and development program and a renewable energy program. Gulf proposes to continue all existing programs, with modifications to five programs. Gulf also proposes one new program, the Commercial Geothermal Heat Pump Program. A summary of each of these programs is included in Attachment A.

In Order No. 22176, issued November 14, 1989, in Docket No. 890737-PU, In re: Implementation of Sections 366.80 through 366.85, Florida Statutes, Conservation Activities of Electric and Natural Gas Utilities, the Commission stated that conservation programs will be evaluated using the following criteria:

- Whether the program advances the policy objectives of Rule 25-17.001, Florida Administrative Code, and Sections 366.80 through 366.85, Florida Statutes, also known as the "Florida Energy Efficiency and Conservation Act" (FEECA);
- Whether the program is directly monitorable and yields measurable results; and,
- Whether the program is cost-effective.

Gulf has proposed modifications to three of its existing residential programs. Gulf plans to increase the efficiency requirements under the GoodCents Home Program in 2006 to correspond with an update in the Florida Model Energy Code. In addition, Gulf has combined several energy audit programs into the Residential Energy Survey Program, in order to increase administrative efficiency, and added an on-line energy audit option. Finally, Gulf has proposed a change in the incentive structure of the Residential Geothermal Heat Pump Program. The program currently offers a \$250 rebate for systems installed in multi-family dwellings, and a guaranteed level of heating and cooling costs for single family homes. Gulf proposes to simplify the incentive structure by providing a \$150 per ton incentive for the installation of qualifying geothermal HVAC systems to single- or multi-family dwellings. Single-family systems above 10 tons and multi-family systems above 50 tons will be subject to incentives based on a cost-effectiveness analysis.

Gulf has proposed modifications to two of its existing C/I programs. Gulf will increase the efficiency requirements under the GoodCents Commercial Buildings Program in 2006 to reflect an update in the Florida Model Energy Code. As in its residential energy audit program,

Gulf has combined several C/I energy audit programs into the C/I Energy Analysis Program and added an on-line audit option.

Gulf has proposed one new program in its DSM Plan. The Commercial Geothermal Heat Pump Program will promote the installation of specified geothermal HVAC systems in commercial buildings. Gulf will provide participating customers with information on the potential energy savings associated with geothermal HVAC systems. The program will also include a \$150 per ton incentive for commercial full closed loop geothermal HVAC projects, or \$75 per ton for hybrid closed loop projects.

In its petition to reset goals, Gulf did not include an analysis of the potential demand and energy savings associated with its energy audit programs. Therefore, Gulf's revised goals, as approved in Order No. PSC-04-0764-PAA-EG, issued August 9, 2004, were set at a level which did not include savings from energy audit programs. However, Gulf's DSM Plan counted the estimated demand and energy savings from Gulf's energy audit programs toward meeting Gulf's goals. Staff believes it is inappropriate to count savings from audit programs towards goals unless the goals are set at a level which includes the potential savings from audit programs. In response to this concern, on January 25, 2005, Gulf filed a revised DSM Plan in which Gulf does not apply savings from its energy audit programs towards meeting its goals.

When Gulf excluded the savings from its energy audit programs, Gulf's DSM Plan did not appear to provide sufficient summer energy and demand savings to meet Gulf's goals. Accordingly, Gulf filed revised participation estimates for three existing programs on January 25, 2005. Gulf increased its expected participation in the Residential GoodCents Home/Energy Star and Residential Geothermal Programs due to increased home construction resulting from the impacts of Hurricane Ivan. Gulf also increased the expected participation in the C/I Real Time Pricing Program after discussions with field representatives with specific knowledge of customers who plan to participate. Staff believes Gulf's revised DSM Plan is based on reasonable assumptions and it appears to meet Gulf's goals.

In conclusion, staff has reviewed Gulf's proposed DSM Plan, as revised on January 25, 2005, and believes it meets the Commission's three-pronged test, as described in Order No. 22176. The resulting demand and energy savings also appear to meet Gulf's newly set goals, as approved in Order No. PSC-04-0763-PAA-EG, issued August 9, 2004, in the instant docket. The DSM programs which Gulf counts toward its goals appear to be directly monitorable. Gulf's research and development program expenditures for the Conservation Demonstration and Development Program should be capped at the existing level of \$250,000 annually, as proposed in Gulf's DSM Plan.

Issue 2: Should Gulf be required to submit detailed program participation standards?

Recommendation: Yes. If Issue 1 is approved, Gulf should file program participation standards within 30 days of the issuance of the order. Staff should be permitted to administratively approve the program participation standards if they conform to the description of the programs contained in Gulf's DSM Plan.

Staff Analysis: Gulf included program standards in its December 31, 2005 DSM Plan filing; however, staff believes these standards do not contain sufficient detail. Gulf has agreed to work with staff to provide revised participation standards. If Issue 1 is approved, Gulf should file revised program participation standards within 30 days of the issuance of the order. Gulf's program standards should clearly state the requirements for participation in the programs, customer eligibility requirements, details on how rebates or incentives will be processed, technical specifications on equipment eligibility, and necessary reporting requirements. Staff recommends that these standards be administratively approved by staff if they conform to the description of the programs outlined in Gulf's approved DSM Plan. (Harlow, Colson, Sickel)

Issue 3: Should this docket be closed?

Recommendation: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order. (Vining)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order.

RESIDENTIAL PROGRAMS:

1. *GoodCents Select Program*: Real-time pricing program which includes an interactive energy management system. This system allows customers to program their HVAC system, electric water heater and pool pump to automatically respond to varying prices of electricity depending on the time of day, day of week and season. Each participating customer pays a fee of \$4.95 per month. Gulf has proposed no changes to this program.
2. *GoodCents Home/Energy Star Program*: Encourages the design and construction of energy efficient homes by providing information to builders on energy efficiency and offering a rating system. If a builder constructs a home to a specified level of efficiency, which is beyond the requirements of the Florida Model Energy Code, Gulf will certify the home as a GoodCents Home. In addition, Gulf signed an agreement with the Environmental Protection Agency in 2004 to participate in its Energy Star Program as an Energy Efficiency Program Sponsor, providing Gulf with the ability to offer ratings under the Energy Star Program. Gulf plans to increase the efficiency requirements under the GoodCents Home Program in 2006 to correspond with an update in the Florida Model Energy Code requirements. Gulf will not recover any expenses related to this program through the ECCR clause.
3. *Residential Geothermal Heat Pump Program*: This program offers customers an incentive to install geothermal HVAC systems. Gulf has proposed a change in the incentive structure of the program. The program currently offers a \$250 rebate for systems installed in multi-family dwellings, and a guaranteed level of heating and cooling costs for single-family homes. Gulf proposes to simplify the incentive structure by providing a \$150 per ton incentive for the installation of qualifying geothermal HVAC systems to single- or multi-family dwellings. Single-family systems above 10 tons and multi-family systems above 50 tons are subject to incentives based on a cost-effectiveness analysis.
4. *Residential Energy Survey Program*: Energy audit program for new and existing homes which offers an on-site energy survey of the home, as well as a mail-in audit option. Gulf has combined several residential energy survey programs into this umbrella program, and added an on-line energy survey option to the program.
5. *Low-Income Energy Education Program*: Program designed to assist low-income customers in managing energy costs by providing basic energy education, information on available utility-sponsored conservation programs, and information on low- or no-cost energy conservation measures. Gulf has proposed no changes to this program.
6. *Affordable Housing Builders and Providers Program*: In this program, Gulf encourages affordable housing builders to attend education seminars on energy-efficient construction, retrofit programs, and financing programs, and to participate in the GoodCents Home Program. Gulf has proposed no substantive changes to this program.

RESIDENTIAL DEMAND-SIDE MANAGEMENT PROGRAMS

DSM PROGRAM	Summer Peak Demand		Winter Peak Demand		Annual Energy Consumption		Benefit / Cost Ratio (RIM)
	Savings (MW)	% of Goal	Savings (MW)	% of Goal	Savings (GWh)	% of Goal	
GoodCents Select	51.90	91.2%	66.00	95.1%	22.86	82.2%	1.02
GoodCents Home/Energy Star	3.63	6.4%	10.64	15.3%	14.96	53.8%	N/A
Residential Geothermal Heat Pump	2.60	4.5%	1.93	2.8%	2.77	10.0%	1.03
Energy Survey	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Low-Income Energy Education	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Affordable Housing Builders	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL SAVINGS	58.1	102.2%	78.6	113.2%	40.6	146.0%	
GOAL	56.9		69.4		27.8		

COMMERCIAL/INDUSTRIAL PROGRAMS:

1. *GoodCents Commercial Buildings Program:* This existing program promotes the construction of commercial buildings and retrofit of existing commercial buildings with energy efficiency levels above the Florida Model Energy Code standards. The program provides GoodCents certifications to buildings which meet specified standards for HVAC efficiency and thermal envelope requirements which are above code. Gulf plans to increase the efficiency requirements of the program in 2006 to reflect an update in the Florida Model Energy Code requirements.
2. *Commercial Geothermal Heat Pump Program:* This is a new program which promotes the installation of specified geothermal HVAC systems in commercial buildings. Gulf will provide participating customers with information on potential energy savings, and a \$150 per ton incentive for commercial full closed loop geothermal HVAC projects, or \$75 per ton for hybrid closed loop projects.
3. *Commercial/Industrial Energy Analysis Program:* This is a C/I energy audit program designed to identify potential energy saving measures for C/I customers. Customer options include a basic Energy Analysis Audit performed with an on-site survey or mail-in survey, or a more detailed Technical Assistance Audit. Gulf has combined several C/I energy survey programs into this umbrella program to increase administrative efficiency, and deleted the Tier 2 Commercial Energy Analysis. Gulf also plans to add an on-line option.
4. *Real Time Pricing Program:* This program provides large C/I customers with hourly energy prices. The program is limited to customers with an annual peak demand of not less than 2,000 kW. Participating customers must sign a one-year contract. Gulf has proposed no changes to this program.
5. *Energy Services Program:* This is a catch-all program for cost-effective C/I efficiency measures which are not included in other Gulf programs. Efficiency measures are identified under Gulf's Energy Analysis Program, and customized energy services are offered on a project-specific basis. Projects must have a payback period of greater than two years. Participation is limited to customers with a minimum peak demand of 20 kW. Gulf has proposed no changes to this program.

COMMERCIAL/INDUSTRIAL DEMAND-SIDE MANAGEMENT PROGRAMS

DSM PROGRAM	Summer Peak Demand		Winter Peak Demand		Annual Energy Consumption		Benefit / Cost Ratio (RIM)
	Savings (MW)	% of Goal	Savings (MW)	% of Goal	Savings (GWh)	% of Goal	
GoodCents Commercial Buildings	7.81	27.7%	2.23	17.7%	22.32	96.2%	1.13
Commercial Geothermal Heat Pump	1.12	4.0%	1.45	11.5%	2.41	10.4%	1.44
C/I Energy Analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Time Pricing	20.00	70.9%	10.00	79.4%	0	0%	1.39
Energy Services	2.75	9.8%	5.10	40.5%	11.79	50.8%	N/A
TOTAL SAVINGS	31.7	112.3%	18.8	149.0%	36.5	157.4%	
GOAL	28.2		12.6		23.2		

RESEARCH AND DEVELOPMENT:

Conservation Demonstration and Development: Under this existing program, Gulf plans to “pursue research, development, and demonstration projects designed to promote energy efficiency and conservation.” Gulf will notify the Commission of projects with expenditures in excess of \$25,000, and has proposed to maintain the existing limit on annual spending of \$250,000. Gulf has proposed no changes to this program.

RENEWABLE ENERGY INITIATIVES:

Renewable Energy Program: Gulf’s Renewable Energy Program contains several existing voluntary renewable options for customers, including the Photovoltaic Optional Rate Rider and the Solar for Schools Program. Gulf also plans to study the feasibility of additional renewable initiatives under the program.

- Solar for Schools: This existing program seeks to increase awareness of renewable and other energy issues by providing solar education and demonstration projects at local educational facilities. Program materials are funded by voluntary contributions. Administrative costs are recovered through the ECCR clause.

- Photovoltaic Optional Rate Rider: Gulf offers an option for its customers to fund 100-watt blocks of photovoltaic energy. Participating customers pay an additional \$6.00 per block of renewable energy per month. Prior to building photovoltaic facilities or purchasing solar energy, the program requires that sufficient customer commitments be obtained from all of Southern Company's participating sister utilities. Gulf has not received sufficient customer commitments at this time, and therefore has not begun charging committed customers.