



Public Service Commission

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RECORDS AND REPORTING

DATE: MARCH 16, 2000

TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYO)

FROM: DIVISION OF ELECTRIC AND GAS (GOAD)^{RS}
DIVISION OF LEGAL SERVICES (CROSSMAN)^{of RJE PLT}

RE: DOCKET NO. 991790-EG - APPROVAL OF DEMAND-SIDE MANAGEMENT PLAN OF GULF POWER COMPANY.

AGENDA: 03/28/00 - REGULAR AGENDA - PROPOSED AGENCY ACTION - INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: NONE

FILE NAME AND LOCATION: S:\PSC\EAG\WP\991790.RCM

CASE BACKGROUND

The Florida Energy Efficiency and Conservation Act (FEECA), Chapter 366.82, Florida Statutes, requires the Commission to adopt goals to reduce and control the growth rates of electric consumption, and to reduce and control the growth rates of weather sensitive peak demand. In Docket No. 971006-EG, Gulf filed for approval of its conservation goals for the period 2000-2009. The Legal Environmental Assistance Foundation (LEAF) was granted intervenor status in the Docket. After a series of workshops and identification of the issues, LEAF stipulated with Gulf that in exchange for withdrawing from the proceeding Gulf would commit to investigate and, if feasible, develop various energy-efficiency measures such as an enhanced low income audit program, green pricing, and project-specific energy efficiency measures for commercial/industrial customers. The Commission approved the stipulation in Order No. PSC-99-1381-FOF-EG issued on July 19, 1999. The Commission ultimately established Gulf's conservation goals in Order No. PSC-99-1942-FOF-EG on October 1, 1999.

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FPSC-RECORDS/REPORTING

In accordance with Rule 25-17.0021(4), Florida Administrative Code, Gulf filed its Demand Side Management Plan to meet its established conservation goals for 2000-2009.

DISCUSSION OF ISSUES

ISSUE 1: Should the Commission approve Gulf Power Company's (Gulf) proposed Demand Side Management plan for 2000-2009, including approval for cost recovery?

RECOMMENDATION: Yes. Gulf's proposed programs are cost-effective and as projected will allow Gulf to meet its required conservation goals for 2000-2009.

STAFF ANALYSIS: Gulf's proposed plan consists of six residential programs and seven commercial/industrial (C/I) programs. In addition, Gulf intends to provide environmental initiatives and low-income programs, and pursue research and development on energy efficiencies.

Staff reviewed Gulf's filing using the criteria approved by the Commission in Order No. 22176. The criteria are as follows:

1. Does each component program advance the policy objectives set forth in Rule 25-17.001, F.A.C., and Sections 366.80-.85, Florida Statutes, also known as the Florida Energy Efficiency and Conservation Act (FEECA)?
2. Is each component program directly monitorable and yield measurable results?
3. Is each program cost-effective?

Each of Gulf's proposed programs will advance the policy objectives established in Rule 25-17.001, F.A.C., and FEECA. The programs will contribute towards either reducing peak weather sensitive demand, increasing the efficiency of end-use consumption, or furthering research and development of alternative energy sources and new technologies.

Gulf determined the amount of demand and energy reduction that could be achieved by each program using two different computer simulation models. For residential analysis, Gulf used the Residential Building Energy Program (RBEP). The program considers thermal characteristics and energy use in residential buildings along with building data, hourly weather data and customized energy rates. For commercial analysis, Gulf used the AXCESS Building Energy Analysis Program developed by the Electric Power Research Institute (EPRI). AXCESS considers building materials, building orientation, weather, operating schedules, occupancy, and HVAC performance specifications. In addition to these modeling tools, Gulf power has first hand experience with most of its proposed programs. Gulf uses these tools and its experience in combination to derive reasonable estimates of demand and energy reduction.

To determine cost-effectiveness of the individual programs, Gulf used the Commission approved cost-effectiveness manual. All measures with a 1.0 or higher Rate Impact Measure result and Participants Test result were considered as passing or, in other words, cost-effective.

Gulf is continuing most of the programs it offered in its 1995 Commission approved plan with the addition of several new programs. The GoodCents Mail-In Energy Survey is a new residential program in Gulf's 2000 plan. In addition, Gulf is proposing three new C/I programs, the Commercial Energy Analysis Program (Mail-In), Interruptible Service, and the Technical Assistance Audit Program. Gulf also plans to offer several environmental, low-income, and research and development programs as part of its DSM plan. Gulf will notify the Commission of research and development projects that will exceed \$25,000 and limit annual spending to \$250,000. The environmental, low-income and research programs will not contribute to Gulf's conservation goals attainment.

Of note, Gulf's Real Time Pricing (RTP) program was introduced as a pilot program in Gulf's 1995 plan. The program was subsequently approved by the Commission in Order No. PSC-99-1768-FOF-EI, September 1999. The Commission approved Gulf's RTP program with the understanding that Gulf must petition the Commission for any cost recovery. The inclusion of the RTP program in this filing does not constitute a petition for cost recovery.

Staff has reviewed Gulf's plan and believes that all of the proposed conservation programs meet the Commission's three-prong test. As such, staff recommends that the Commission approve Gulf's 2000 Demand Side Management Plan. Attachment A contains a description of each program and the costs to be recovered through

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the Energy Conservation Cost Recovery (ECCR) clause. It also lists ten-year totals (2000-2009) of Gulf's established goals and projected achievement.

ISSUE 2: Should Gulf Power Company be required to submit detailed program participation standards?

RECOMMENDATION: Yes. Gulf should file program participation standards within 30 days of the issuance of the order in this docket. Staff should be allowed 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'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 it be allowed to administratively approve these program participation standards if they conform to the description of the programs contained in Gulf's DSM Plan.

ISSUE 3: Should this docket be closed?

RECOMMENDATION: Yes, this docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's proposed agency action in Issue 1 files a protest within 21 days of the issuance of the order.

STAFF ANALYSIS: If no person whose substantial interests are affected by the Commission's proposed agency action in Issue 1 files a protest within 21 days of the issuance of the order, this docket should be closed upon issuance of a Consummating Order.

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Gulf Power Company's DSM Programs for Goal Attainment

Residential

GoodCents Select - Formerly known as the Advanced Energy Management (AEM) Program. The program will provide customers variable rate signals based on system load. The customer is able to directly control specific appliances along with his general electric usage to reduce load during peak periods when prices are high. Labor and administrative costs, along with a portion of equipment costs will be recovered through the ECCR.

Residential Geothermal Heat Pump Program - The program is designed to encourage emerging geothermal systems. The installation of these systems will benefit Gulf by reducing approximately 1.5 kW per customer. Gulf will guarantee that single family homes' heating and cooling costs to not exceed predetermined amounts and provide a \$250 rebate to multifamily projects. Gulf will discontinue the guarantee and \$250 rebate beginning in 2002. Incentives and labor and administrative costs will be recovered through the ECCR. After 2001, incentives will not be offered, and therefore, will not be recovered through the ECCR.

GoodCents Energy Survey - Personalized in home walk-through audit to educate customers about how to upgrade their home's thermal envelope and equipment efficiencies in a cost-effective manner. Labor and administrative costs will be recovered through the ECCR clause.

(New) GoodCents Mail-In Energy Survey - Gulf will mail an introductory letter and survey explaining the program and the potential benefits. Customers may send a completed questionnaire back. Gulf will analyze the customer's responses and send a complete analysis with recommendations for energy efficiency back to the customer. Gulf intends to recover administrative costs of the program through the ECCR clause.

Duck Leakage Repair - Gulf will identify potential participants through its Mail-In Survey program as well as through educational and promotional activities. A blower door test will be offered to these identified customers for \$25. The results of the test will be provided to the customer along with a potential for energy savings estimate. If the customer follows through with the repairs, Gulf will reimburse him \$25. New homes will be eligible for a duct pressurization test for \$25. Incentives, promotional, and administrative costs will be recovered through the ECCR clause.

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GoodCents Home/Energy Star - Gulf will provide information to residential builders on energy efficiency. If the builder constructs a home to a preset level of efficiency, which is above and beyond the Florida Model Energy Code, Gulf will certify the home as a GoodCents Home. In addition, with the approval of the Department of Energy, Gulf will also declare the home an Energy Star home. No costs will be recovered in association with this program.

Gulf's Residential DSM Programs (2009)

DSM Program	Summer Peak Demand		Winter Peak Demand		Total Energy Reduction		RIM Value
	Savings (MW)	% of Goal	Savings (MW)	% of Goal	Savings (GWH)	% of Goal	
GoodCents Select	141.8	87.0	165.3	87.5	92.8	76.1	1.16
Geothermal Heat Pump	16.0	9.8	20.9	11.1	17.1	14.0	1.13
GoodCents Home/Energy Star	11.9	7.3	21.4	11.3	17.0	13.9	N/A
GoodCents Energy Survey	2.1	1.3	1.2	0.6	3.4	2.8	N/A
GoodCents Mail-In Survey	2.1	1.3	1.2	0.6	3.2	2.6	N/A
Duct Leakage Repair	0.0	0.0	0.0	0.0	0.0	0.0	1.09
TOTAL SAVINGS	173.9	106.7	44.7	111.2	40.7	109.5	
GOAL	163.0		188.9		121.9		

Commercial/Industrial Programs

GoodCents Commercial Buildings - Gulf has established requirements for thermal efficiency and HVAC equipment efficiency. These requirements exceed the Florida Model Energy code standards. Gulf will certify buildings that adhere to its prescriptive standards as GoodCents buildings. Labor and administrative costs will be recovered through the ECCR clause.

(New) Commercial Energy Analysis Program: Tier 1 (Mail-In) - Similar to the residential mail-in survey, Gulf provides a letter and questionnaire to qualifying businesses (customers with billing demands of 150 kW or less). Upon receipt of a completed questionnaire, Gulf will provide somewhat standardized recommendations to encourage the customer to move beyond the efficiency level of average buildings. Gulf intends to recover administrative costs through the ECCR clause.

Commercial Energy Analysis Program: Tier 2 - Formerly the Commercial Energy Audit, the program is available to all commercial customers. Gulf will perform an on-site review by an energy consultant. Based upon which, a summary of areas for kW and kWh reduction will be provided along with an energy usage summary and energy management options. Labor and administrative costs will be recovered through the ECCR clause.

(New) Technical Assistance Audit (TAA) Program - Spin-off of the Commercial Energy Audit, the program is customized to meet the needs of large customers (20kW and more). A summary of areas for kW and kWh reduction will be provided along with an energy usage summary and energy management options. Evaluation will also include an AXCESS simulation in order to determine the payback period for the suggested improvements. Labor and administrative costs will be recovered through the ECCR clause.

Real Time Pricing - Gulf will provide very large participating customers (2 MW and over) hourly energy prices. The customer responds by modifying energy usage from high price peak periods to low price off peak periods. Gulf provided the program originally as a pilot. In September '99, the Commission approved the program as a permanent rate. At the time of its approval Gulf stated that the RTP kW savings would be considered toward its goals achievement, but Gulf did not intend to recover any expenses through the ECCR clause. Gulf is only estimating that 8 customers will participate.

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(New) Interruptible Service - Provides Gulf with a callable resource during peak demands. Customers will be notified in advance for the need to curtail consumption. Customers will contract on an individual basis through Gulf's Commercial/Industrial Service Rider (CISR) how much load will be interruptible. No costs will be recovered in association with this program.

Energy Services - This program is designed to offer advanced energy services, including comprehensive audits and design, construction and financing of energy conservation projects. Projects may include retrofits such as lighting and HVAC, programs with a payback of less than two years will not be eligible. Projects with a payback period of greater than two years will be reviewed using a RIM test. The program is limited to customers with a peak demand of at least 20 kW. Gulf will recover expenses associated with evaluating energy efficiency opportunities. Gulf will petition for recovery of accepted projects on a case-by-case basis.

Gulf's Commercial/Industrial DSM Programs (2009)

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DSM Program	Summer Peak Demand		Winter Peak Demand		Total Energy Reduction		RIM Value
	Savings (MW)	% of Goal	Savings (MW)	% of Goal	Savings (GWH)	% of Goal	
Interruptible Service	24.0	41.4	24.0	51.7	0.0	0.0	N/A
Real Time Pricing	20.7	35.7	11.0	23.7	0.0	0.0	N/A
GoodCents Commercial Buildings	12.8	22.1	1.0	2.2	18.4	88.5	1.02
Commercial Energy Analysis (Tier 1)	8.5	14.7	8.5	18.3	24.0	115.4	N/A
Commercial Energy Analysis (Tier 2)	2.6	4.5	2.6	5.6	7.4	35.6	N/A
Technical Audit Assistance Program	Case by Case						N/A
Energy Services	0.2	0.3	0.2	0.4	10.4	50.0	N/A
TOTAL SAVINGS	68.8	118.6	47.3	101.9	60.2	289.4	
GOAL	58.0		46.4		20.8		

Additional Programs With No Contribution to Goals

Environmental Initiatives

Solar for Schools - Uses voluntary contributions to fund materials for energy education, permanent demonstration displays, rewards for science contests, and teacher education. Administrative costs of the program will be recovered through the ECCR clause.

(New) Photovoltaic (PV) Optional Rate Rider - Gulf offers an option for its customers to purchase 100-watt blocks of PV energy. Customers will be able to purchase 100-watt blocks for \$6.00 a month with a five year agreement. Gulf intends to recover research, promotional, and administrative costs through the ECCR clause.

Other Green Pricing Initiatives - Investigation of additional Green pricing offerings for design and implementation of new offerings. Gulf will notify the Commission in writing of all projects equal to or greater than \$5,000. Gulf intends to recover ongoing administrative costs through the ECCR clause.

In Concert with the Environment - Educational program for 8th and 9th graders on energy use. The program includes a video, introductory presentation, lesson plans, an energy survey, and handbooks. No costs will be recovered in association with this program.

GoodCents Environmental Home - The program promotes energy-efficiency and environmentally sensitive construction design and practice. No costs will be recovered in association with this program.

Low-Income

(New) GoodCents Energy Survey: Tailored Low-Income Pilot Program - To increase low-income participation, Gulf will partner with Weatherization Assistance Programs (WAPs) and Affordable Housing Providers (AHPs) within Gulf's service territory. Gulf will provide training to WAPs and AHPs so they may conduct walk-through audits for low-income customers. Gulf intends to recover labor and administrative costs through the ECCR clause.

Project Share - Gulf administers the collection of voluntary contributions to assist low-income and elderly customers. Gulf

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forwards the contributions to the Salvation Army for distribution. Gulf absorbs all costs associated with this program.

Research and Development

Conservation Demonstration and Development - Program for the identification, development and evaluation of new or emerging end-use technologies. The focus will be on large scale projects that focus on specific end uses. Gulf will notify the Commission of projects that will exceed \$25,000 and limit annual spending to \$250,000.