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-M-E-M-O-R-A-N-D-U-M-

DATE: January 12, 2011

TO: Office of Commission Clerk (Cole)

FROM: Division of Regulatory Analysis (Graves, Brown, Crawford, Garl, Lewis, Ma)
Office of the General Counsel (Harris)

RE: Docket No. 100154-EG – Petition for approval of demand-side management plan of Gulf Power Company.

AGENDA: 01/25/11 – Regular Agenda – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\RAD\WP\100154.RCM.01-25-11.DOC

Case Background

The Commission, as required by the Florida Energy Efficiency and Conservation Act (FEECA), Sections 366.80 through 366.85 and 403.519, Florida Statutes (F.S.), adopts annual goals for seasonal peak demand and annual energy consumption for the FEECA Utilities every five years. These include Florida Power & Light Company (FPL), Progress Energy Florida, Inc. (PEF), Tampa Electric Company (TECO), Gulf Power Company (Gulf or Company), Florida Public Utilities Company (FPUC), JEA, and Orlando Utilities Commission (OUC).

Pursuant to Rule 25-17.008, Florida Administrative Code (F.A.C.), in any conservation goal setting proceeding, the Commission requires each FEECA utility to submit cost-effectiveness information based on, at a minimum, three tests: (1) the Participants test, (2) the

Rate Impact Measure (RIM) test, and (3) the Total Resource Cost (TRC) test. The Participants test measures program cost-effectiveness to the participating customer. The RIM test measures program cost-effectiveness to the utility's overall rate payers, taking into consideration the cost of incentives paid to participating customers and lost revenues due to reduced energy sales that may result in the need for a future rate case. The TRC test measures total net savings on a utility system-wide basis. In past goal setting proceedings, the Commission established conservation goals based on measures that pass both the Participants test and the RIM test.

The 2008 Legislative Session resulted in several changes to the FEECA Statute, and the Commission's goal-setting proceeding was the first implementation of these modifications. By Order No. PSC-09-0855-FOF-EG,[1] the Commission established annual numeric goals for summer peak demand, winter peak demand, and annual energy conservation for the period 2010 through 2019, based upon an unconstrained Enhanced-Total Resource test (E-TRC) for the investor-owned utilities (IOUs). The E-TRC test differs from the conventional TRC test by taking into consideration the estimated additional costs imposed by the potential regulation of greenhouse gas emissions. In addition, the numeric impact of certain measures with a payback period of two years or less, were also included in the goals. Further, the IOUs subject to FEECA were authorized to spend up to 10 percent of their historic expenditures through the Energy Conservation Cost Recovery (ECCR) clause as an annual cap for pilot programs to promote solar water heating (Thermal) and solar photovoltaic (PV) installations.

On January 14, 2010, Gulf filed a Motion for Reconsideration of Order No. PSC-09-0855-FOF-EG. Order No. PSC-10-0198-FOF-EG[2] denied Gulf's motion for reconsideration. On March 30, 2010, Gulf filed a petition requesting approval of its Demand-Side Management (DSM) Plan pursuant to Rule 25-17.0021, F.A.C.

The Southern Alliance for Clean Energy (SACE) was granted leave to intervene on August 9, 2010.[3] The Florida Solar Energy Industry Association (FlaSEIA) was granted leave to intervene on August 11, 2010.[4] Wal-Mart Stores East, LP, and Sam's East, Inc. (Walmart) was granted leave to intervene on August 18, 2010.[5]

On July 14, 2010, the SACE filed comments on the FEECA Utilities' DSM Plans. These comments were amended on August 3, 2010, to include comments regarding FPUC. No other intervenors filed comments. On July 28, and August 12, 2010, PEF and Gulf, respectively, filed responses to SACE's comments. On December 22, 2010, the SACE filed additional comments on the FEECA Utilities' DSM Plans.

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[1] See Order No. PSC-09-0855-FOF-EG, issued December 30, 2009, in Docket No. 080410-EG, In re: Commission review of numeric conservation goals (Gulf Power Company).

[2] See Order No. PSC-10-0198-FOF-EG, issued March 31, 2010, in Docket No. 080410-EG, In re: Commission review of numeric conservation goals (Gulf Power Company).

[3] See Order No. PSC-10-0493-PCO-EG, issued August 9, 2010, in Docket No. 100154-EG, In re: Petition of approval of demand-side management plan of Gulf Power Company. (SACE)

[4] See Order No. PSC-10-0505-PCO-EG, issued August 11, 2010, in Docket No. 100154-EG, In re: Petition of approval of demand-side management plan of Gulf Power Company. (FlaSEIA)

[5] See Order No. PSC-10-0524-PCO-EG, issued August 18, 2010, in Docket No. 100154-EG, In re: Petition of approval of demand-side management plan of Gulf Power Company. (Walmart)

On September 1, 2010, staff filed a recommendation, noting that Gulf's original DSM Plan did not meet the annual goals set by the Commission. Pursuant to Order No. PSC-10-0608-PAA-EG, the Commission required the Gulf to file a revised DSM Plan that meets the annual goals set forth by the Commission. On November 3, 2010, the Company filed its revised DSM Plan.

The Commission has jurisdiction over this matter pursuant to Sections 366.80 through 366.85, F.S.

Discussion of Issues

Issue 1: Does Gulf's revised Demand-Side Management Plan satisfy the Company's numeric conservation goals set by the Commission in Order No. PSC-09-0855-FOF-EG?

Recommendation: Yes. Gulf's revised DSM Plan meets or exceeds the numeric conservation goals set by the Commission, is cost-effective, and the rate impact associated with the revised DSM Plan is low relative to a typical customer's total bill.

The Commission should approve the programs contained in Gulf's revised Demand-Side Management Plan to allow Gulf to file for cost recovery. However, Gulf must still demonstrate, during the annual Energy Conservation Cost Recovery (ECCR) clause proceedings, that expenditures in executing its DSM Plan are reasonable and prudent. Gulf should be required to file program standards for administrative approval within 30 days of the Consummating Order in this docket. (Graves, Ma)

Staff Analysis: By Order No. PSC-09-0855-FOF-EG, the Commission established annual goals for the FEECA Utilities for the period 2010 through 2019. Gulf's approved goals are divided into residential and commercial/industrial sectors, with each of these further subdivided into three categories: summer peak demand, winter peak demand, and annual energy. Gulf's initial filing submitted March 30, 2010, was insufficient to meet several of the Commission's annual goals in multiple categories and multiple years. Gulf was directed by the Commission, in Order No. PSC-10-0608-PAA-EG, to file specific program modifications or additions needed in order for the Company's DSM Plan to be in compliance with Order No. PSC-09-0855-FOF-EG. The revised DSM Plan submitted by Gulf on November 12, 2010, modified certain programs in order to fulfill these requirements, as discussed below.

Based on Gulf's current estimates and projections, the Company's revised DSM Plan will meet or exceed the Commission-approved annual demand and energy goals for the residential sector and the commercial/industrial sector. The revised DSM Plan, filed November 12, 2010, represents an increase of approximately 2.5 megawatts (MW) of summer peak demand, 8.3 MW of winter peak demand, and 17.3 gigawatt-hours (GWh) of annual energy, over the original DSM plan filed on March 30, 2010. The projected demand and energy savings stated in the revised DSM Plan, along with the goals approved by the Commission in Order No. PSC-09-0855-FOF-EG, are summarized in Tables 1 and 2 below.

Table 1 - Comparison of Residential Goals to Revised DSM Plan

	Summer (MW)		*Winter (MW)*		*Annual Energy (GWh)*	
Year	**Commission Goals**	**Gulf Revised Filing**	**Commission Goals**	**Gulf Revised Filing**	**Commission Goals**	**Gulf Revised Filing**
2010[6]	7.5	8.2	5.9	9.3	35.0	35.8
2011	8.3	10.6	6.5	11.5	37.6	40.1
2012	9.4	13.6	7.4	14.5	40.6	54.5
2013	10.5	17.0	8.5	17.2	43.8	57.3
2014	11.7	19.4	9.5	19.0	46.8	65.1
2015	12.8	18.9	10.9	18.6	50.2	63.2
2016	14.0	17.0	12.1	17.0	53.6	59.5
2017	14.7	17.5	12.7	17.9	55.4	61.8
2018	14.9	16.7	13.3	17.5	56.2	59.2
2019	15.1	16.0	13.7	17.1	56.7	56.8
Total	**118.9**	**140.8**	**100.5**	**145.4**	**475.9**	**493.5**

Table 2 - Comparison of Commercial/Industrial Goals to Revised DSM Plan

	Summer (MW)		*Winter (MW)*		*Annual Energy (GWh)*	
Year	**Commission Goals**	**Gulf Revised Filing**	**Commission Goals**	**Gulf Revised Filing**	**Commission Goals**	**Gulf Revised Filing**
2010[6]	1.2	6.4	0.5	3.4	3.2	3.3
2011	1.6	2.1	0.6	1.1	5.6	5.6
2012	2.1	2.9	0.8	1.4	7.7	7.8
2013	2.4	3.6	0.9	1.8	9.5	9.6
2014	2.7	4.1	1.0	2.0	10.8	11.0
2015	2.9	4.6	1.0	2.0	11.7	12.1
2016	3.0	4.9	1.2	2.1	12.3	12.8
2017	3.2	4.8	1.1	2.1	12.7	12.8
2018	3.1	4.9	1.1	2.0	12.5	12.9
2019	3.1	4.5	1.1	1.9	11.9	12.0
Total	**25.3**	**42.6**	**9.3**	**19.9**	**97.9**	**99.7**

Staff is aware that the values presented in this docket are projections based upon participation rates which may or may not occur. Staff will continue to monitor and report the actual amount of DSM savings each year, on an annual and cumulative basis, as part of the Commissions annual report addressing progress toward goal achievement (FEECA Report). In the event that a FEECA utility fails to achieve its DSM goals in one or more categories, the utility can submit justification for its failure to meet the annual or cumulative goals. Staff will bring this to the attention of the Commission as part of the annual FEECA Report and the Commission can then consider what actions are appropriate.

Description of the Revised DSM Plan

Gulf's original DSM Plan consisted of 21 energy and demand saving programs as well as 4 solar pilot programs. The four solar pilot programs were approved by the Commission

[6] The values listed for 2010 are based upon the Company's filings. As the revised DSM Plan is not scheduled to be implemented during 2010, these values do not reflect actual savings for the period.

pursuant to Order No. PSC-10-0608-PAA-EG. As part of the Company's revised DSM Plan 3 of the 21 energy and demand saving programs were modified to increase participation levels. Table 3 below lists the programs which were revised in Gulf's revised DSM Plan. A complete list of the programs contained in Gulf's revised filing can be found in Attachment A.

Table 3 - List of Modified Programs in Gulf's revised DSM Plan

Residential Programs	Commercial/Industrial
1. Home Energy Reporting Program	1. HVAC Retro-Commissioning
2. Self-Install Efficiency Program	

For the Home Energy Reporting Program, Gulf increased the number of years of deployment. For the Self-Install Efficiency Program, Gulf increased compact fluorescent light bulb (CFL) promotion in 2010. Similarly, Gulf increased emphasis on creating awareness and marketing its HVAC Retro-Commissioning program in order to increase participation. No changes were made to energy savings per participant, or any other aspect of the DSM Plan.

The modifications proposed by Gulf sufficiently increase projected demand and energy savings to allow the Company's revised plan to meet or exceed the annual goals set forth by the Commission in Order No. PSC-09-0855-FOF-EG. Staff would note that these values represent projections only, and that actual participation may vary from the Company's estimates. As a result, Gulf should continuously monitor its DSM Programs. In the event that actual participation is insufficient, it is the Company's responsibility to take appropriate action to meet its conservation goals.

Program Cost-Effectiveness

In reviewing Gulf's DSM Plan, staff analyzed the assumptions made for a variety of aspects of the programs, including, but not limited to: rebate and incentive levels, participation rates, program savings, program costs, and avoided costs. Staff issued multiple data requests, and used previously submitted data from the utility's DSM programs, and information from the goal-setting docket to examine each category. Overall, staff believes the assumptions in Gulf's DSM Plan are reasonable for use in evaluating Gulf's DSM Plan.

Gulf's incentive levels were developed with assistance from the consulting firm ITRON and are based on the maximum level that the company believes is reasonable for overall program viability. ITRON provided consulting services to all FEECA utilities during the goal setting proceeding. Programs targeting low income customers and renters offer equipment such as CFLs and low-flow shower heads at no expense to the customer. None of Gulf's proposed incentives are in excess of the cost to the customer. Given that a majority of Gulf's proposed programs are new, appropriate incentive levels are uncertain at this time.

Third party providers assisted Gulf with projections of customer participation in several of its new programs. When available, Gulf reviewed historical participation in similar programs offered by other Florida IOUs. Gulf's projections for existing programs took into account historical participation, technology limitations, and changes to incentive levels.

Gulf's energy and demand savings estimates for new programs were developed using data from the ITRON study, computer-based engineering modeling software, and actual program performance data gathered by Gulf or its energy efficiency program contractors. Gulf utilized actual performance data from its own experience or from the experience of its contractors whenever this data was available. Gulf's Energy Select program is an example of a program that utilized actual performance data.

Gulf's administrative costs, which include program marketing, are based on costs projected by ITRON to achieve the E-TRC. For purposes of evaluating cost-effectiveness, Gulf allocated the total portfolio administrative costs across programs based on the amount of energy savings each program contributes to the total DSM Plan target. Gulf utilized this approach due to the lack of historical information of actual program operation costs.

Gulf's programs and measures were evaluated against a natural gas-fired combined cycle power plant with an in-service date of 2014. Additionally, Gulf included the potential cost of greenhouse gas emissions in its cost of energy, which it calculated as $20/ton, starting in 2014, and escalating in the future. Gulf's avoided cost inputs, including fuel costs, are consistent with those used during the goal-setting process.

As illustrated in Table 4 below, all of the programs proposed by Gulf are cost-effective under the E-TRC and Participants tests. Although Order No. PSC-09-0855-FOF-EG states E-RIM test results shall be considered in evaluating programs, it does not require programs to pass the E-RIM test.

Table 4 - Cost Effectiveness Test Results by Program[7]

Program Name	E-TRC	E-RIM	Participant
Residential Programs			
1. EnergySelect Lite	2.17	1.28	99.00
2. Refrigerator Recycling	2.46	0.68	99.00
3. Landlord-Renter Custom	1.67	0.59	14.46
4. High Performance Window	2.04	0.70	5.57
5. Variable Speed Pool Pump	2.72	1.00	4.49
6. Reflective Roof	2.51	0.97	4.22
7. EnergySelect	1.64	1.01	4.37
8. Self-Install Energy Efficiency	1.37	0.59	4.95
9. HVAC Efficiency	1.81	0.77	3.80
10. Home Energy Reporting	1.03	0.77	1.50
11. Ceiling Insulation	1.19	0.65	2.21
12. Heat Pump Water Heater	1.04	0.52	2.40
13. Community Energy Saver (Low-Income)	1.70	0.59	14.70
Commercial/Industrial Programs			
1. HVAC Retrocommissioning	4.72	1.08	12.95
2. Food Services	3.86	0.93	8.46
3. High Efficiency Motors	2.73	1.00	4.75
4. HVAC Occupancy Sensor	2.25	0.77	4.32
5. Commercial Building Efficiency	2.74	1.00	3.45
6. C/I Custom Incentive	-	-	-

Several types of programs are not evaluated for cost-effectiveness. These include audits, which are mandated by the Commission to be available for ratepayers, and pilot programs, which

[7] Programs are determined to be cost-effective if the result of the test is a ratio greater than 1.00.

are designed to gather additional information on conservation measures or methods. Gulf does not count any demand or energy savings associated with audits towards meeting its goals.

Program Standards

Most programs have an administrative component that describes the eligibility requirements, billing practices, etc. Historically, this information is provided to staff, for administrative approval, after a program has been approved by the Commission. Therefore, staff recommends that Gulf file its program standards for administrative approval within 30 days of the Commission's Order in this docket. If final incentive levels are changed in the program standards, these will be brought back to the Commission for approval.

Rate Impact

The costs to implement a DSM program consist of administrative, equipment, and incentive payments to the participants, which are recovered by the Company through its ECCR clause. This clause represents a monthly bill impact to customers as part of the non-fuel cost of energy on their bill. As discussed above, if a program passes the E-TRC test it is cost-effective from a system basis. However, utility incentive payments, not included in the E-TRC test, are recovered through the utility's ECCR factor and have an immediate impact on customer rates.

Much like investments in generation, transmission, and distribution, investments in energy efficiency have an immediate rate impact but produce savings over time. Overall, the impact of Gulf's revised DSM Plan is low relative to the customer's total bill. Table 5 below shows the bill impact of the ECCR factor over the ten-year period. The monthly bill impact of Gulf's ECCR factor is projected to increase from $1.30 (currently) to $6.36 in 2014, when the Commission is due to revisit the conservation goals as required by Section 366.82(6), F.S.

Table 5 – ECCR Percentage of 1,200 kWh Bill[8]

Year	ECCR	Residential Bill	Percent of Bill
2009	$1.30	$149.35	0.87%
2010	$3.32	$151.37	2.19%
2011	$5.19	$153.24	3.39%
2012	$5.43	$153.48	3.54%
2013	$5.74	$153.79	3.73%
2014	$6.36	$154.41	4.12%
2015	$7.03	$155.08	4.53%
2016	$6.70	$154.75	4.33%
2017	$6.14	$154.19	3.98%
2018	$5.83	$153.88	3.79%
2019	$5.47	$153.52	3.56%

While not immediately applied to customer's bills, energy saving DSM programs can also have an impact on a utility's base rates. When revenues reduce because fewer kWh were

[8] Based on Gulf's revised DSM Plan. Estimated Residential Bill for the period 2011 through 2019 assumes all bill components remain static, excluding the Energy Conservation Cost Recovery clause.

consumed, the utility may have to make up the difference by requesting an increase in rates in order to maintain its authorized Return on Equity (ROE). Other factors interact with a company's earnings, and may either delay or accelerate a base rate proceeding.

Gulf's DSM Plan includes a variety of programs that would allow participation by a wide spectrum of customer groups, including low-income, renters and landlords, residential, and commercial customers. By participating in a DSM program, customers should be able to reduce or eliminate the potential rate impact of Gulf's DSM Plan. For example, based on projected monthly energy savings, customers that participate in Gulf's low-income and landlord-renter programs could reduce their monthly bill by approximately $6.90.

Because the Commission-approved goals were based on the E-TRC test, which does not consider costs associated with utility incentives, those who do not or cannot participate in an incentive program will not see their monthly utility bill decline unless they directly decrease their consumption of electricity. If that is not possible, non-participants could actually see an increase in the monthly utility bill.

Rate Impact Mitigation Plan

While not formally requested as part of its petition, Gulf included a "rate impact mitigation plan" in its revised DSM Plan filing. The proposed rate impact mitigation plan is based on an assessment of each measure's net benefits as calculated by the E-RIM test. Gulf also gave consideration to those measures that could be deferred without negatively affecting the continuity of the respective program or overall mix of program offerings. For example, although the HVAC Maintenance measure has a significant rate impact, this measure is considered the foundation for customer engagement in any of the high efficiency HVAC measures; therefore, Gulf suggests that it should remain in its DSM portfolio. Additionally, some program measures identified for potential deferral in the rate impact mitigation plan include measures that have a higher probability of free-ridership; therefore, there remains a reasonable likelihood that these measures will still be implemented by customers. Ultimately, Gulf identified eight residential measures that could be deferred to reduce the long term rate impact of the Company's proposed Plan. Table 6 below lists the measures and associated programs Gulf has proposed for deferral.

Table 6: Rate Mitigation Measures

Measure	Associated Program
HVAC Early Retirement Tier 1	HVAC Efficiency
HVAC Early Retirement Tier 2	
HVAC Early Retirement Tier 3	
Compact Fluorescent Lamp	Self-Install Energy Efficiency
Energy Star Clothes Washer	
Energy Star Refrigerator	
Energy Star Freezer	
Window Replacement	High Performance Window

The deferral of the eight measures would reduce the projected bill impact by more than $1.50 by 2014. Although the rate impact mitigation plan would reduce the bill impact of the proposed plan it would also reduce residential annual energy savings by 210.5 GWh. Similarly, residential summer and winter peak demand savings would be reduced by 43.6 MW and 50.3 MW respectively. The reductions in annual energy and peak demand savings would cause Gulf's plan to fall out of compliance with Order No. PSC-09-0855-FOF-EG. Table 7 below summarizes the impact of Gulf's proposed rate mitigation plan as compared to the Commission's approved goals and the Company's original filing.

Table 7: Comparison of Residential Goals to Rate Mitigation Plan[9]

	Summer (MW)			*Winter (MW)*			*Annual Energy (GWh)*		
Year	**Commission Goals**	**Original Filing**	**Rate Mitigation**	**Commission Goals**	**Original Filing**	**Rate Mitigation**	**Commission Goals**	**Original Filing**	**Rate Mitigation**
2010	7.5	5.0	6.7	5.9	5.9	7.4	35.0	15.4	17.7
2011	8.3	10.6	8.7	6.5	11.5	9.4	37.6	40.1	25.1
2012	9.4	13.6	10.6	7.4	14.5	11.2	40.6	54.5	32.6
2013	10.5	17.0	13.3	8.5	17.2	13.5	43.8	57.3	41.9
2014	11.7	19.4	13.7	9.5	19.0	13.4	46.8	65.1	42.0
2015	12.8	18.9	13.1	10.9	18.6	12.8	50.2	63.2	39.6
2016	14.0	17.0	11.1	12.1	17.0	11.0	53.6	58.5	34.2
2017	14.7	16.0	11.8	12.7	16.4	11.9	55.4	55.2	37.7
2018	14.9	15.2	11.3	13.3	15.9	11.6	56.2	52.7	36.2
2019	15.1	14.4	10.9	13.7	15.5	11.3	56.7	50.3	34.9
Total	**118.9**	**138.8**	**97.2**	**100.5**	**143.2**	**99.3**	**475.9**	**478.0**	**283.1**

Staff believes that Gulf's approach in developing its rate impact mitigation is appropriate. However, the Commission rejected Gulf's original filing due to non-compliance with Order No. PSC-09-0855-FOF-EG. As illustrated in the table above, the projected demand and energy savings associated with the rate mitigation plan fall below those contained in the Company's original filing. As previously discussed the rate impact associated with the revised DSM Plan is relatively small compared to other components of the Company's bill and customers should be able to reduce or eliminate the potential rate impact by participating in the programs contained in the plan. Therefore, staff does not advocate approving the rate mitigation plan over the Company's revised DSM Plan.

Conclusion

The revised DSM Plan submitted by Gulf shows estimated conservation achievements for both peak demand and energy reduction which exceed those approved by the Commission in Order No. PSC-09-0855-FOF-EG. Gulf's residential and commercial/industrial portfolios are cost-effective under the E-TRC and Participants tests. The rate impact associated with the revised DSM Plan is relatively small compared to other components of the Company's bill and customers should be able to reduce or eliminate the potential rate impact by participating in the programs contained in the plan. If the Commission believes the projected rate impact of Gulf's revised plan needs to be reduced, staff believes approving Gulf's proposed rate impact mitigation plan would be appropriate.

[9] Highlighted cells note years in which the Company's projected savings are not in compliance with Commission Order No. PSC-09-0855-FOF-EG.

Staff recommends the Commission approve the programs contained in Gulf's revised DSM Plan which will allow Gulf to file for cost recovery. However, Gulf must still demonstrate, during the ECCR clause proceeding, that expenditures in executing its DSM Plan were reasonable and prudent. Gulf should be required to file program standards for administrative approval within 30 days of the Consummating Order in this docket.

Issue 2: Should this docket be closed?

Recommendation: Yes. If no person whose substantial interests are affected by the proposed agency action issue files a protest within 21 days of the issuance of the Order, a Consummating Order will be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the Order, the programs should not be implemented until after the resolution of the protest. However, the docket should remain open for staff's verification that the program standards have been filed by the Utility and approved by staff. When the PAA issues are final and the program standards have been approved, this docket may be closed administratively. (Harris)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action issue files a protest within 21 days of the issuance of the Order, a Consummating Order will be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the Order, the programs should not be implemented until after the resolution of the protest. However, the docket should remain open for staff's verification that the program standards have been filed by the Utility and approved by staff. When the PAA issues are final and the program standards have been approved, this docket may be closed administratively.

RESIDENTIAL DEMAND-SIDE MANAGEMENT PROGRAMS:

1. Residential Energy Audit and Education

The Residential Energy Audit and Education Program is the primary educational program to help customers improve the energy efficiency of their new or existing home through energy conservation advice and information that encourages the implementation of efficiency measures and behaviors resulting in energy and utility bill savings. This program is also designed to increase the awareness of energy savings opportunities among Gulf's customers.

2. Community Energy Saver Program

The Community Energy Saver Program is designed to assist low-income families. The Community Energy Saver Program will implement a comprehensive package of electric conservation measures at no cost to the customer. In addition to direct installation of the conservation measures, the program will educate families on energy efficiency techniques and behavioral changes to help customers control their energy use and reduce their utility operating costs.

- The incentive cost per household is expected to average $57.50

3. Landlord / Renter Custom Incentive Program

The Landlord/Renter Custom Incentive Program is a program designed to increase energy efficiency in the residential rental property sector. This program will promote the installation of various energy efficiency measures available through other programs including HVAC, insulation, windows, water heating, lighting, appliances, etc. Depending on the individual circumstances of the rental property, additional incentives may be necessary to overcome the split-incentive barrier. This program will also promote the installation of low cost measures associated with the Community Energy Saver Program by the landlord of multi-family properties. The maximum total incentive offered will be limited to an amount which would produce a customer payback of no less than one year.

4. HVAC Efficiency Improvement Program

The Heating, Ventilation and Air Conditioning (HVAC) Efficiency Improvement program is designed to increase energy efficiency and improve HVAC cooling system performance for both new and existing single-family, multi-family and permanently anchored manufactured homes. Since as much as half of the energy used in a home goes to cooling and heating, customers can save energy and money by installing an efficient system. A total of nine measures fall under the HVAC Efficiency Program. The maximum incentives for each measure are identified below.

- HVAC Maintenance - $160
- HVAC Retirement Tier 1 - $1,025
- HVAC Retirement Tier 2 - $1,400

- HVAC Retirement Tier 3 - $1,500
- HVAC Upgrade Tier 1 - $300
- HVAC Upgrade Tier 2 - $1,050
- HVAC Upgrade Tier 3 - $1,500
- Duct Repair - $300
- ECM Fan - $200

5. Heat Pump Water Heater Program

The Heat Pump Water Heater (HPWH) Program will to provide residential customers with an incentive to encourage the installation of high-efficiency Heat Pump Water Heating equipment for domestic hot water production. The objective of this program is to encourage customers to replace existing older or malfunctioning water heaters with the most efficient water heating equipment available in order to reduce energy use associated with domestic water heating. In addition, it is the intent of this program to influence the initial water heating purchase decisions of customers who are building or considering the construction of a new home. The maximum incentive per participant is $1,000.

6. Ceiling Insulation Program

The Ceiling Insulation Program offers an incentive designed to encourage customers to install high efficiency insulation or increase insulation in existing residential single-family and multifamily homes. The objective of the program is to reduce heat loss and heat gain from both conductive and convective means by increased insulation. The maximum incentive per participant is $300.

7. High Performance Window Program

The High Performance Window Program will provide residential customers with an incentive to install high-efficiency windows or window films in existing or new residential applications. The objective of the program is to reduce solar heat gain into a home which, in turn, leads to reduced HVAC loads and operating costs. Two measures fall under the HVAC Efficiency Program. The maximum incentive per participant is $1.50/sqft for windows or film.

8. Reflective Roof

The Reflective Roof program will provide Gulfs residential customers with an incentive to install ENERGY STAR qualified cool/reflective roofing products when constructing a new home or replacing the roof on an existing residence. The objective of this program is to significantly decrease the amount of heat that is transferred through roof assemblies and into vented attic spaces which, in turn, decreases the transfer of heat into the home's conditioned living area. The maximum incentive per participant is $400.

9. Variable Speed/Flow Pool Pump Program

The Variable Speed/Flow Pool Pump Program will provide an incentive to encourage the installation of high-efficiency variable speed or variable flow pool pumping and control equipment in both new and existing residential applications. The maximum incentive per participant is $900.

10. EnergySelect

The EnergySelect Program is designed to increase the efficiency of energy consumption on Gulf's system. The program is an interactive energy management system that allows residential customers to program their central heating and cooling system, electric water heater and pool pump, if they have one, to automatically respond to varying prices of electricity depending upon the time of day, day of week and season. These prices are in relation to the Company's cost of producing or purchasing energy. EnergySelect consists of three elements; a custom-designed programmable thermostat, a Residential Service Variable Pricing (RSVP) rate featuring four different prices for electricity, and a communications gateway that facilitates two-way communication between the utility and the customer's home.

11. EnergySelect LITE

The EnergySelect LITE program will be a separate and complementary program offering to the EnergySelect program. EnergySelect LITE is designed to provide expanded price responsive load management program participation from residential customers who do not meet the participation standards for EnergySelect. The EnergySelect LITE program does not require land-line telephone service and will be available to multi-family customers. The program is an interactive energy management system which allows residential customers to program their central heating and cooling system to automatically respond to varying prices of electricity depending upon the time of day, day of week and season, in relation to the Company's cost of producing or purchasing energy.

12. Self-Install Energy Efficiency Program

The Self-Install Energy Efficiency Program promotes the purchase and installation of ENERGY STAR rated appliances, lighting, and other self-installed energy saving measures for residential customers. The program focuses on increasing customer awareness of the benefits of energy efficient technologies and products through customer education, retail partnerships, promotional distribution of compact fluorescent light bulbs (CFLs), on-line store, energy audits, and seasonal promotional campaigns. The maximum incentives for each measure are identified below.

- Refrigerator - $50
- Freezer - $25
- Window A/C - $150
- Clothes Washer - $75

- CFL – 100% of Cost

13. Refrigerator Recycling Program

The Residential Refrigerator Recycling program is intended to eliminate inefficient or extraneous refrigerators in an environmentally safe manner and produce cost-effective long-term energy and peak demand savings in the residential sector. The objective of the program is to increase customer awareness of the economic and environmental costs associated with running inefficient, older appliances in a household, and to provide eligible customers with free refrigerator and freezer pick-up services in addition to a cash incentive. The maximum incentive per participant is $35.

COMMERCIAL/INDUSTRIAL CONSERVATION PROGRAMS:

14. Commercial/Industrial Audit

Gulf has developed an audit program, Commercial/Industrial Energy Analysis Program (CEAP). CEAP is an interactive program that provides assistance to C/I customers in identifying energy conservation opportunities. This program allows GULF energy specialists to introduce customers personally to conservation measures. A basic Energy Analysis Audit is provided through either an on-site surveyor an on-line analysis. Additionally, a more comprehensive analysis can be provided by conducting a Technical Assistance Audit.

15. Commercial HVAC Retrocommissioning Program

The Commercial HVAC Retrocommissioning Program offers basic retrocommissioning at a reduced cost for qualifying installations of existing commercial and industrial customers. It is designed to diagnose the performance of the HVAC cooling unit(s) operating in commercial buildings with the support of an independent computerized quality control process. Based on the results, the best course of action to bring the cooling system to its full efficiency will be attempted. The maximum incentive per participant is $200.

16. Commercial Building Efficiency Program

The Commercial Building Efficiency Program is designed as an umbrella efficiency program for existing commercial and industrial customers to encourage the installation of eligible high-efficiency equipment, as a means of reducing energy and demand. The goal of the program is to increase awareness and customer demand for high-efficiency, energy-saving equipment; increase availability and market penetration of energy efficient equipment; and contribute toward long-term energy savings and peak demand reductions. The maximum incentives for each measure are identified below.

- HVAC Upgrade – Air Source A/C or Heat Pump - $225/ton
- HVAC Upgrade – Geothermal - $500/ton
- Heat Pump Water Heater - $7,500/5 ton

- Insulation – ceiling/roof - $0.15/sqft
- Window Film - $2.00/sqft
- Lighting: T-5, T-8 Retrofit; Hard-wired CFL - $150/kw
- Lighting: LED Exit Signs, Display Case - $300/kw
- Lighting: Occupancy Sensor - $25/unit
- Reflective Roof - $0.90/sqft

17. Occupancy Sensor HVAC Control

The Occupancy Sensor HVAC Control Program is intended to help manage energy consumption and reduce energy waste in hotel rooms. The program provides hotel owners served by Gulf an opportunity to automatically control temperature settings in hotel rooms when the rooms are unoccupied. The maximum incentive per participant is $75 per sensor.

18. High Efficiency Motor Program

The High Efficiency Motor Program is designed to encourage commercial and industrial customers to install premium-efficiency motors in new or existing facilities. The objective of the program is to reduce demand and energy associated with electric motors by encouraging customers to replace worn out, inefficient motors with high efficiency motors that qualify under the Program Standards. The maximum incentives for each measure are identified below.

- Energy Efficiency Motor 1-5 HP - $41.50 per HP
- Energy Efficiency Motor 6-50 HP - $13.00 per HP
- Energy Efficiency Motor 51+ HP - $5.00 per HP

19. Food Service Efficiency Program

The Food Service Efficiency Program encourages the installation of ENERGY STAR qualified or equivalent energy efficient commercial and industrial food service equipment. The objective of the program is to reduce energy consumption and demand as well as operating costs for the customer through the use of qualified food service equipment. The maximum incentives for each measure are identified below.

- Convection Oven - $500
- Fryer - $400
- Griddle - $575

- Steamer - $1,100
- Holding Cabinet - $350
- Ice Machine - $100

20. Commercial/Industrial Custom Incentive

The Commercial/Industrial Custom Incentive program is designed to establish the capability and process to offer advanced energy services and energy efficient end-use equipment to Commercial/Industrial customers. These energy services include comprehensive audits, design, and construction of energy conservation projects. Specifically, the types of projects covered under this program would be demand reduction or efficiency improvement retrofits that are beyond the scope of other programs included in this Plan. Examples of custom projects may include, but not be limited to, installation of Variable Frequency Drive Controls, Energy Management Systems, chiller efficiency upgrades, desiccant and mechanical dehumidification systems, and more complex building retrocommissioning. The level of incentives contemplated under this program is limited to any combination of monetary or technical assistance that brings the project payback to no less than two years.

21. Real Time Pricing Program

Real Time Pricing (RTP) is a rate schedule that provides hourly prices of electricity on a day-ahead basis and is available to large Commercial and Industrial customers of Gulf Company. The objective of this program is to encourage customers to reduce demand on Gulf's system during peak times when the marginal cost of generating or purchasing electricity is at its highest. This rate schedule was approved by the FPSC in 1999 and has been utilized in the Company's DSM Plan as a program to achieve peak demand reductions in the Commercial/Industrial customer segments.

RENEWABLE PROGRAMS:

22. Solar for Schools

Gulf's Solar for Schools program will provide capital funding to supplement deployment of PV systems up to 10 kW in qualifying public education facilities served by Gulf.

23. *Solar Thermal Water Heating*

Gulf's Solar Thermal Water Heating Program will provide Gulf residential customers up to a $1,000 incentive to install certified STWH systems. The STWH systems to be installed will offer customers an opportunity to reduce their hot water energy needs otherwise served by natural gas or electric resistance heating. The systems operate in conjunction with a back-up natural gas or electric resistance source of hot water to ensure an uninterrupted supply of hot water to the customer.

24. Solar PV

Gulf's Solar PV Program will provide Gulf residential and commercial customers an incentive to encourage the installation of a solar energy system on their home or business. The incentive value will be up to $2/watt with a maximum incentive per customer of $10,000. Qualifying systems will be designed to offset part or all of a customer's energy needs and will help customers save money on their energy bills.

25. Solar Thermal Water Heating for Low-Income Housing

Under this program, Gulf will facilitate the installation of STWH systems in qualifying low-income housing. Gulf anticipates funding up to fifteen low-income installations per year. Specific eligibility requirements for the program will be provided in the Program Participation Standards.