Florida Public Service Commission

Annual Report on

Activities Pursuant to the Florida Energy Efficiency and Conservation Act

As Required
by Sections 366.82(10) and
377.703(2)(f), Florida Statutes

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List of Acronyms

DSM	Demand-Side Management
ECCR	Energy Conservation Cost Recovery
E-RIM	Enhanced Rate Impact Measure
E-TRC	Enhanced Total Resource Cost
F.A.C.	Florida Administrative Code
FEECA	Florida Energy Efficiency and Conservation Act
F.S.	Florida Statutes
GWh	Gigawatt-Hour
HERS	Home Energy Rating System
HVAC	Heating Ventilating and Air Conditioning
kWh	Kilowatt-hour
LDC	Local Distribution Company
MW	Megawatt
PSC	Public Service Commission
RIM	Rate Impact Measure
TRC	Total Resource Cost

Executive Summary

Reducing Florida's energy demand and consumption remains as important and relevant today as it was in 1980, when the Florida Energy Efficiency and Conservation Act (FEECA) was enacted. Located in Sections 366.80 through 366.85 and Section 403.519, Florida Statutes (F.S.), FEECA emphasizes reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, and reducing the consumption of scarce resources such as petroleum fuels. Section 366.82(2), F.S., requires the Public Service Commission (Commission or PSC) to set appropriate goals for each of the seven electric utilities[1] subject to the Act. The goals are expressed as annual electric peak demand and energy savings over a ten-year period. These utilities must submit for Commission approval cost-effective demand-side management (DSM) plans and programs designed to meet the goals.

The Commission is required by Section 366.82(10), F.S., to provide an annual report to the Legislature and the Governor summarizing the adopted goals and progress achieved toward those goals. Section 1 of this report provides a history of FEECA and highlights conservation achievements of the FEECA utilities. For context, Section 2 provides a current overview of Florida's electricity market. Finally, Section 3 provides an update on the current goal-setting process.

Conservation Achievements

While utility compliance with FEECA is important, consumer choice also plays an essential role in reducing the growth rates of electrical demand and energy in Florida. Smaller, more efficient homes; energy-efficient appliances; energy-efficiency improvements to existing homes and increased use of the most efficient and cost-effective demand-side renewable systems are areas in which customers may actively be involved with electric energy conservation. As power plant sites and transmission corridors grow scarce in Florida, utility efforts to defer future generating units and transmission lines become increasingly important. Building codes and appliance efficiency standards impact utilities' conservation programs by creating a baseline for the cost-effectiveness of any new program. As consumers become more educated on the cost of electricity and the benefits of conservation, DSM and renewable energy will continue to play important roles in conserving fossil fuels and reducing customer bills.

[1] The seven utilities subject to FEECA include Florida Power & Light Company, Progress Energy Florida, Inc., Tampa Electric Company, Gulf Power Company, Florida Public Utilities Company, Orlando Utilities Commission, and JEA.

Consumer education is essential to energy conservation. The Commission's consumer education program (see Appendix 1) employs a variety of tools to educate consumers on daily conservation and energy efficiency activities. From January through December 2010, more than 126,000 people accessed the more than 560 consumer-oriented pages on the PSC Web site. The Commission also distributes conservation-related materials through partnerships with governmental entities, consumer groups, and many other organizations during community events and has placed increased emphasis on educating the youth about the benefits of energy conservation.

Since 1981, Florida's investor-owned electric utilities have recovered over $5 billion of conservation program expenditures through the Energy Conservation Cost Recovery (ECCR) clause. In 2009, Florida's investor-owned electric utilities recovered over $310 million in conservation program expenditures from ratepayers. Over the last decade, investor-owned utilities have recovered over $2.5 billion dollars in conservation program expenditures. To date, Florida's investor-owned utilities have performed over 300,000 residential energy audits and offer over 100 conservation programs for residential and commercial customers (these programs are summarized in Appendix 2). Since FEECA's enactment, DSM programs are projected to reduce winter peak demand by an estimated 6,500 MW and annual energy by an estimated 7,500 GWh by 2010. The demand savings from these programs has deferred the need for over 40 typical 150 MW combustion turbine units.

Section 1 of this report compares demand and energy savings to goals that were established in 2004. When residential and commercial results are combined, FPL, PEF, TECO, JEA, and OUC met their annual and 2005 through 2009 cumulative demand and energy goals. FPUC only achieved 97 percent of its Summer demand goal, primarily due to a lack of participation in the commercial sector. FPUC may wish to re-evaluate its marketing techniques in order to increase participation in the commercial sector. Gulf achieved 62 percent of its Summer demand goal and only 48 percent of its Winter demand goal. Gulf states that its goals were not met because the GoodCents residential program endured technical obstacles such as a shortage of equipment from the manufacturer and the reduction of new home construction in its service territory. Therefore, the reasons for Gulf not meeting its goals appear to be beyond the control of the company.

As discussed below, the Commission has set aggressive goals for the FEECA utilities for the period 2010 through 2019. Recent amendments to Section 366.82(8), F.S., provides the potential for rewards or penalties using these new goals as a baseline. The Commission will continue to monitor the utilities' performance regarding meeting these aggressive goals and take appropriate action, if necessary.

Goal Setting Activities

The FEECA statutes have remained relatively constant since their original adoption in 1980. During the 2008 Legislative session, the following changes were enacted: (1) establishing goals for demand-side renewable energy resources; (2) consideration of efficiency investments in generation, transmission, and distribution efficiency improvements; (3) clarification of the costs and benefits to be considered in the determination of cost-effectiveness; and (4) authorization to provide rewards and penalties for conservation achievements. During 2007, in preparation for the new goal-setting process, the Commission conducted five workshops regarding energy efficiency initiatives. On June 26, 2008, the Commission opened Dockets 080407-EG through 080413-EG to review numeric conservation goals for the utilities subject to FEECA. On November 13, 2008, the Commission staff contracted with GDS Associates, Inc. (GDS) to provide independent technical consulting and expert witness services during the conservation goal-setting proceeding. GDS was retained to review and critique the overall goals proposed by each utility and provide expert testimony and recommendations on alternative goals.

An evidentiary hearing in Dockets 080407-EG through 080413-EG was held on August 10-13, 2009. On October 15, 2009, staff filed its recommendation regarding the review of the FEECA utilities numeric goals. At the November 10, 2009 Commission Conference, the Commission directed staff to develop more robust goals for each utility.

At the December 1, 2009 Commission Conference, the Commission approved aggressive new numeric DSM goals for Florida Power & Light (FPL), Progress Energy Florida (PEF), Tampa Electric Company (TECO), Gulf Power Company (Gulf), and Florida Public Utilities Company (FPUC). The new goals were based on the Enhanced Total Resource Cost (E-TRC) test which includes estimated costs imposed by the potential regulation of greenhouse gas emissions, along with numeric adders associated with residential measures that have a two-year or less payback. In addition, the investor-owned utilities were authorized to spend up to 10 percent (approximately $24 million) of their historic energy conservation cost recovery expenditures as an annual cap for solar water heating and solar photovoltaic pilot programs. The table below illustrates the proposed goals by the utilities in comparison to the Commission approved goals. Additional detail of the goal-setting process is discussed in Section 3.

2010-2019 Incremental Demand-Side Management Goals								
	Summer Demand Goals (MW)			Winter Demand Goals (MW)			Annual Energy Goals (GWH)	
Utility	Utility Proposal	Commission Approved Goals		Utility Proposal	Commission Approved Goals		Utility Proposal	Commission Approved Goals
FPL	607	1,498		338	605		878	3,082
PEF	521	1,183		560	1,072		614	3,488
TECO	82	138		41	109		202	360
Gulf	69	144		46	110		159	574
FPUC	0	4		0	2		0	13
OUC	0	12		0	9		0	36
JEA	0	44		0	30		0	290
Total	1,279	3,023		985	1,937		1,853	7,843

In 2010, the Commission approved DSM plans for Orlando Utilities Commission (OUC), JEA, FPUC, and TECO. However, FPL, PEF, and Gulf's DSM plans have yet to be approved. The Commission is expected to vote on the proposed DSM plans in the beginning of 2011. A utility whose plans have not been approved may still be obligated to meet their annual goals, and an investor-owned utility could be subject to penalties as authorized by Section 366.82(8), F.S., should it fail to meet its annual goals.

Conclusion

Consumer education, building codes, and appliance efficiency standards impact utilities' conservation programs by creating a baseline for the cost-effectiveness of any new program and decreasing the amount of incremental energy savings. Utility programs offer rebates and incentives for appliances that exceed minimum efficiency standards, thereby avoiding duplicate savings estimates. Staying current on building codes and appliance efficiency standards is highly important to the FEECA utilities' DSM efforts. As consumers become more educated on the cost of electricity and the benefits of conservation, DSM and renewable energy will continue to play important roles in conserving fossil fuels and reducing customer bills.

Florida's utilities traditionally have been successful in meeting the objectives of FEECA. Customer participation in utility-offered DSM and energy conservation programs, along with individual efforts to use electrical energy wisely, remain to be fundamental elements for reducing the demand for energy. The FEECA utilities, with the exception of Gulf, have substantially met their 2005 through 2009 Commission approved goals. However, the reasons for Gulf not meeting its goals appear to be beyond the control of the company. The Commission has set

aggressive goals for the FEECA utilities for the period 2010 through 2019. Recent amendments to Section 366.82(8), F.S., provides the potential for rewards or penalties using these new goals as a baseline. The Commission will continue to monitor the utilities' performance regarding meeting these aggressive goals and take appropriate action, if necessary.

In 2010, the Commission approved DSM plans for Orlando Utilities Commission, JEA, FPUC, and TECO. However, FPL, PEF, and Gulf's DSM plans have yet to be approved. The Commission is expected to vote on the proposed DSM plans in the beginning of 2011. A utility whose plans have not been approved may still be obligated to meet their annual goals, and an investor-owned utility could be subject to penalties as authorized by Section 366.82(8), F.S., should it fail to meet its annual goals.

Section 1. The Florida Energy Efficiency and Conservation Act

1.1 History of FEECA

Enacted in 1980, the FEECA has placed a continued emphasis towards reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, and reducing the consumption of scarce resources such as petroleum fuels. To accomplish these objectives, FEECA requires the Commission to establish goals and the electric utilities to implement DSM programs to meet those goals.

Initially, all of Florida's electric utilities were subject to FEECA. The legislative sunset review of the FEECA statute in 1989 resulted in two major changes. The first change required an inclusion of a size limitation so that only electric utilities with more than 500 gigawatt-hours (GWh) of annual retail sales would be subject to FEECA. The second change required the addition of language to encourage cogeneration. At the time, the 12 utilities which exceeded the sales threshold comprised approximately 94 percent of all retail electricity sales in Florida.

In 1996, the Legislature further revised the FEECA statutes. The revision increased the minimum retail sales threshold for municipal and cooperative utilities subject to FEECA to 2,000 GWh. Pursuant to the statute, retail sales for each municipal and cooperative utility were measured as of July 1, 1993, to determine whether the company was subject to FEECA. All five Florida investor-owned utilities are subject to FEECA, regardless of sales. Because they meet the minimum retail sales threshold, OUC and JEA, both municipal utilities, are also subject to FEECA. No rural electric cooperatives are subject to FEECA.

Table 1 displays the 2009 energy sales by each FEECA utility and non-FEECA utilities. Also included in the table is a percentage allocation of energy sales per FEECA utility along with a total percentage allocation for the non-FEECA utilities.

Table 1. Energy Sales by Florida's FEECA Utilities in 2009

Florida's FEECA Utilities	Energy Sales GWh	% of Total FEECA Energy Sales
FPL	102,755	48.9
PEF	37,824	18.0
TECO	18,774	8.9
Gulf	10,903	5.2
FPUC	698	0.3
JEA	12,270	5.8
OUC	6,031	2.9
FEECA Total	**189,255**	**90.0**
Non-FEECA Utilities Total	21,089	10.0
Statewide Total	**210,344**	**100.0**

1.2 Conservation Achievements

While utility compliance with FEECA is important, consumer choice also plays an essential role in reducing the growth rates of electrical demand and energy in Florida. Smaller, more efficient homes; energy-efficient appliances; energy-efficiency improvements to existing homes and increased use of the most efficient and cost-effective demand-side renewable systems are areas in which customers may actively be involved with electric energy conservation. As power plant sites and transmission corridors grow scarce in Florida, utility efforts to defer future generating units and transmission lines become increasingly important. Customer education and participation in utility-offered DSM and energy conservation programs are vital to such efforts.

This report addresses the achievement of goals that were set by the Commission for the 2005 through 2009 period. Collectively, Florida's utilities have been successful in meeting FEECA's overall objectives on a cumulative basis. Pursuant to 366.82(11), F.S., all FEECA utilities are required to offer energy audits to residential customers. Energy audits serve as the basis for all DSM and conservation programs by allowing utilities the opportunity to evaluate conservation opportunities for their customers. To date, Florida's investor-owned utilities have performed more than 300,000 residential energy audits and offer more than 100 conservation programs for residential, commercial, and industrial customers.

Consumer education, building codes, and appliance efficiency standards impact the utilities' conservation programs by creating a baseline for the cost-effectiveness of any new program and decreasing the amount of incremental energy savings as code standards become more rigorous. As a result, appliance efficiency standards can reduce the need for utility DSM goals. Utility programs offer rebates and incentives for appliances that exceed minimum efficiency standards, thereby avoiding duplicate savings estimates. Staying current on building codes is important to DSM efforts, so the FEECA utilities participate in meetings of the Florida Building Commission's Energy Technical Advisory Committee, take part in activities with the Department of Community Affairs, host Continuing Education Classes in regards to building codes, and conduct in-house assessments regarding how to offer more performance based programs such as Energy Star.

Since FEECA's enactment, DSM programs are projected to reduce winter peak demand by an estimated 6,500 MW and annual energy by an estimated 7,500 GWh by 2010. The demand savings from these programs have deferred the need for over 40 typical 150 MW combustion turbine units.

Table 2. Estimated Cumulative DSM Savings Since 1980

	2010
Summer Peak Demand	6,348 MW
Winter Peak Demand	6,485 MW
Energy Consumption (Annual)	7,563 GWh

Table 3 illustrates the annual goal achievements for each utility during 2009. Monitoring annual achievements allows the Commission a better understanding regarding which utility programs may need additional evaluation or revision. For instance, Table 3 conveys that when evaluated on an annual basis, FPUC fails to meet its commercial goals. Once the unsuccessful program/programs have been identified, FPUC could be advised by the Commission to revise or discontinue its unsuccessful programs. When the residential and commercial values are combined, however, FPUC meets its 2009 annual goals. Therefore, from a system planning basis, FPUC is achieving its goals.

Table 3. Comparison of Annual (2009) DSM Achievements

Utility	Winter MW Goals	Reported Winter MW Reduction	Summer MW Goals	Reported Summer MW Reduction	Annual GWh Goals	Reported Annual GWh Reduction
FPL						
Residential	41.00	33.00	58.00	64.00	91.00	90.00
Commercial/Industrial	10.00	45.00	21.00	70.00	9.00	65.00
Total	52.00	78.00	79.00	134.00	100.00	155.00
PEF						
Residential	33.00	59.00	9.00	31.00	15.00	40.00
Commercial/Industrial	3.00	39.00	4.00	43.00	3.00	48.00
Total	36.00	98.00	13.00	74.00	18.00	88.00
TECO						
Residential	3.10	8.40	2.00	6.50	5.20	14.00
Commercial/Industrial	4.10	3.70	4.90	6.10	5.10	26.10
Total	7.20	12.10	6.90	12.60	10.30	40.10
Gulf						
Residential	9.40	.80	7.80	0.67	3.40	.44
Commercial/Industrial	0.40	2.23	1.10	2.66	2.60	10.00
Total	9.80	3.03	8.90	3.33	6.00	10.44
FPUC						
Residential	0.16	0.25	0.09	0.12	0.20	0.31
Commercial/Industrial	0.09	0.11	0.15	0.12	0.43	0.39
Total	0.25	0.36	0.24	0.24	0.63	0.70
JEA						
Residential	0.00	4.40	0.00	4.50	0.00	25.50
Commercial/Industrial	0.00	0.70	0.00	-0.30	0.00	8.60
Total	0.00	5.10	0.00	4.20	0.00	34.10
OUC						
Residential	0.00	.33	0.00	.45	0.00	2.28
Commercial/Industrial	0.00	.64	0.00	.64	0.00	3.84
Total	0.00	.97	0.00	1.09	0.00	6.12

Table 4 shows the cumulative DSM demand and energy achievements of the FEECA utilities for 2005 through 2009. The table compares the achievements to the utilities' DSM goals set by the Commission in 2004.

Table 4. Comparison of Cumulative (2005-2009) DSM Achievements

Utility	Winter MW Goals	Reported Winter MW Reduction	Summer MW Goals	Reported Summer MW Reduction	Annual GWh Goals	Reported Annual GWh Reduction
FPL						
Residential	168.00	169.20	252.10	302.50	424.10	440.60
Commercial/Industrial	53.50	221.70	113.80	350.30	77.00	468.30
Total	221.50	390.90	365.90	652.80	501.10	908.90
PEF						
Residential	175.00	266.00	47.00	118.00	80.00	157.00
Commercial/Industrial	17.00	126.00	18.00	140.00	15.00	125.00
Total	192.00	392.00	65.00	258.00	95.00	282.00
TECO						
Residential	18.50	26.00	12.70	20.40	33.30	48.80
Commercial/Industrial	16.00	55.90	20.20	64.40	29.30	70.70
Total	34.50	81.90	32.90	84.80	62.60	119.50
Gulf						
Residential	36.10	8.90	29.50	7.26	15.40	6.30
Commercial/Industrial	11.30	13.69	24.00	25.71	11.30	31.49
Total	47.40	22.59	53.50	32.97	26.70	37.79
FPUC						
Residential	0.64	1.27	0.41	0.59	0.87	1.50
Commercial/Industrial	0.45	0.39	0.75	0.54	2.05	1.65
Total	1.09	1.66	1.16	1.13	2.92	3.15
JEA						
Residential	0.00	8.50	0.00	9.30	0.00	47.00
Commercial/Industrial	0.00	1.30	0.00	3.30	0.00	49.20
Total	0.00	9.80	0.00	12.60	0.00	96.20
OUC						
Residential	0.00	1.33	0.00	2.34	0.00	9.68
Commercial/Industrial	0.00	2.85	0.00	2.85	0.00	10.97
Total	0.00	4.18	0.00	5.19	0.00	20.65

Table 4 shows that FPL, PEF, TECO, JEA, and OUC met or surpassed all of the Commission-approved cumulative demand and energy goals in 2009. FPUC achieved 97 percent of its Summer demand goal, primarily due to a lack of participation in the commercial

sector. FPUC may wish to re-evaluate its marketing techniques in order to increase participation in the commercial sector. Gulf achieved 62 percent of its Summer demand goal and only 48 percent of its Winter demand goal. Gulf states that its goals were not met because the GoodCents residential program endured technical obstacles such as a shortage of equipment from the manufacturer and the reduction of new home construction in its service territory. Therefore, the reasons for Gulf not meeting its goals appear to be beyond the control of the company.

The achievements contained in this report are compared to goals established in 2004. In 2009, the Commission established new, aggressive conservation goals for the FEECA utilities for the period 2010 through 2019. However, the implementation of programs designed to meet these new goals remains in transition as the DSM plans for some of the FEECA utilities have yet to be approved by the Commission. A utility whose plans have not been approved may still be obligated to meet their annual goals, and an investor-owned utility could be subject to penalties as authorized by Section 366.82(8), F.S., should it fail to meet its annual goals.

1.3 Conservation Cost Recovery

The investor-owned electric utilities are permitted to recover prudent and reasonable expenses, including incentives paid to participating customers, for Commission-approved DSM programs through the Energy Conservation Cost Recovery clause. Prior to seeking cost recovery through the ECCR clause, utilities must present evidence that DSM programs are cost-effective and, therefore, benefit the general body of ratepayers. Program modifications must also be approved by the Commission prior to a utility seeking cost recovery through the ECCR clause.

Since 1981, Florida's investor-owned electric utilities have recovered over $5 billion of conservation expenditures through the ECCR clause, with approximately $2.5 billion of conservation program expenditures in the last ten years. Table 5 illustrates the annual DSM expenditures recovered from customers by Florida's investor-owned utilities. The table also shows that the investor-owned utilities' annual expenditures have remained fairly stable from 2003 to 2007. This stability is primarily due to DSM programs reaching saturation in participation levels and a decline in the cost-effectiveness of DSM programs resulting from the lower cost of new generating units. In 2008 and 2009, the investor-owned utilities experienced increases in their DSM expenditures that can be attributed to the implementation of new programs during those years. The trend of increased DSM expenditures could continue with the new goals established in 2009.

Table 5. DSM Expenditures Recovered Through the ECCR Clause

	FPL	PEF	TECO	Gulf	FPUC	Total
2000	$158,312,902	$66,052,277	$16,656,250	$3,872,004	$323,102	$245,216,535
2001	$157,660,093	$64,831,597	$17,600,060	$4,984,286	$358,054	$245,434,090
2002	$162,062,655	$63,150,036	$16,970,240	$5,436,083	$418,498	$248,037,512
2003	$150,026,657	$62,156,585	$17,518,874	$7,313,033	$381,563	$237,396,712
2004	$145,679,192	$60,072,362	$16,357,137	$7,619,637	$382,504	$230,110,832
2005	$144,192,696	$59,143,076	$15,583,727	$8,826,754	$473,610	$228,219,863
2006	$146,205,249	$59,543,107	$14,099,638	$9,562,098	$456,162	$229,866,254
2007	$146,204,978	$67,109,815	$13,652,585	$9,107,952	$515,022	$236,589,592
2008	$180,016,994	$77,593,960	$16,989,411	$9,257,740	$534,350	$284,392,455
2009	$186,051,381	$80,954,071	$32,243,415	$10,576,197	$540,433	$310,365,497
Total						$2,495,629,342

During the annual ECCR proceedings in November, the Commission determines an energy conservation cost recovery factor to be applied to the energy portion of each customer's bill during the next calendar year. These factors are set based on each utility's estimated conservation costs for the next calendar year, along with a true-up for any actual conservation cost under- or over-recovery for the previous year. The Commission most recently set conservation cost recovery factors on November 29, 2010.[2] These factors will take effect with the first billing cycle of 2011. Table 6 shows the electric investor-owned utilities' conservation cost recovery factors which will be applied to residential customer bills. These factors were applied to a bill based on 1,200 kilowatt-hour (kWh) energy usage to estimate the impact on a typical residential customer's monthly bill. Due to a District Court Appeal, the values for Florida Power & Light have yet to be approved and will be updated upon Commission approval. As new programs are added to meet the new goals established by the Commission, the cost recovery factors will likely increase.

[2] Order No. PSC-10-0703-FOF-EG, issued November 29, 2010, in Docket No. 100002-EG, In Re: Energy Conservation Cost Recovery Clause. Order No. PSC-10-0705-FOF-GU, issued November 29, 2010, in Docket No. 100004-GU, In Re: Natural gas conservation cost recovery.

Table 6. Residential Conservation Cost Recovery Factors in 2011

Utility	Residential ECCR Factor (cents/kWh)	Typical Residential Monthly Bill Impact (based on 1,200 kWh)
FPL	0.188*	$2.26*
PEF	0.299	$3.59
TECO	0.274	$3.29
Gulf	0.080	$0.96
FPUC	0.115	$1.38

***2010 factor

The Commission does not set goals for the natural gas local distribution companies even though these companies offer conservation programs to their customers. The more popular natural gas programs are those that provide incentives for the replacement of less efficient appliances with more efficient versions. The gas distribution companies are permitted to seek recovery for their conservation programs pursuant to Commission Rule 25-17.015, F.A.C.

Table 7 displays the local distribution companies' conservation cost recovery factors which will be applied to a typical residential customer's bill using 20 therms of natural gas per month.

Table 7. Residential Natural Gas Cost Recovery Factors in 2011

Utility	Residential ECCR Factor (cents/therm)	Typical Residential Monthly Bill Impact (based on 20 therms)
Chesapeake Utilities	11.485	$2.30
Florida City Gas	10.753	$2.15
Florida Public Utilities	5.742	$1.15
Peoples Gas System	4.135	$0.83
St. Joe Natural Gas	32.519	$6.50
Indiantown Gas Company	1.163	$0.23
Sebring Gas System	14.035	$2.81

Section 2. Overview of Florida's Electricity Market

2.1 Energy Demand in Florida

Because of its large population and fluctuating climate, Florida's total energy consumption ranks among the highest in the country. Florida's electrical demand and energy consumption follow unique patterns because of the state's largely residential customer base. Understanding this pattern and why it occurs, mostly due to high air-conditioning during the hot summer months and electricity for home heating during winter months, is key to grasping conservation's importance in Florida. As shown in Table 8, residential customers comprise almost 89 percent of Florida's electricity customers and purchase about 53 percent of electrical energy in the state. Commercial electrical energy usage in Florida is about 38 percent, and industrial customers purchase the remaining 10 percent of Florida's electrical energy.

Table 8. Florida's Electric Customers by Class and Consumption in 2009

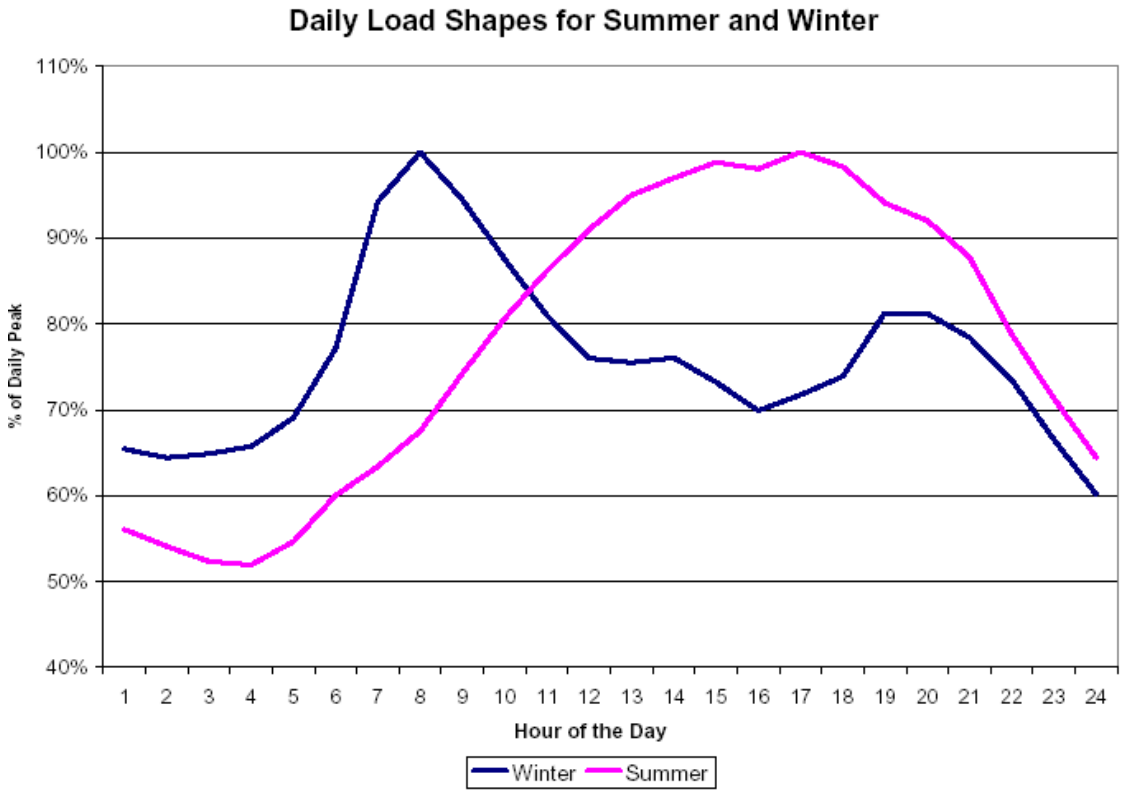
Customer Class	Number of Customers	% of Customers	Energy Sales (gigawatt-hours)	% of Sales
Residential	8,338,964	88.7	113,341	52.7
Commercial	1,032,948	11.0	80,939	37.6
Industrial	27,627	0.3	20,811	9.7
Total	9,399,539	100.0	215,091	100.0

Florida's high temperatures and humidity levels cause residential customers' electrical usage to fluctuate throughout the day. Residential energy use peaks in the early evening in the summer and in the mid-morning and late evening in the winter compared to industrial use, which tends to be more uniform throughout the day. These usage patterns cause a need for greater variation in the amounts of energy consumed in Florida than in other states with higher industrial energy usage rates and smaller populations.

Figure 1 depicts the daily load shape curves for typical summer and winter days in Florida. In the summer, customer demand begins to increase in the morning and peaks in the early evening, a pattern which corresponds to the sun heating buildings and the resulting increase in air conditioning loads. In contrast, the winter load curve has two peaks, the largest in mid-

morning, followed by a smaller peak in the late evening. Both peaks correspond to heating loads.

Figure 1. Typical Florida Daily Electric Load Shapes



In the past few years, Florida has experienced a trend in which the winter peak demand has exceeded summer peak demand. For example, in 2009, Florida's winter peak demand was 54,430 MW compared to 49,140 MW in the summer of 2009. The forecast for 2019 is expected to show the same results. Winter peak demand is forecasted to reach 52,220 MW, while summer peak demand is expected to reach 51,226 MW in the summer.

Current forecasts are affected by Florida's economic conditions. In addition, many utilities have reported net customer losses and the state as a whole has seen its population decline. Historically, however, utilities have seen an increase in energy sales following a recession. It is unclear at this time whether this decline is a short-term phenomenon based on current economic conditions in Florida and the nation as a whole or is a part of a longer downturn in population growth and energy usage in the state.

2.2 Florida's Electric Generating Resources

An electric utility's resource-planning process is designed to ensure sufficient installed capacity exists to meet projected customer demand and provide a reserve for contingencies. During the planning process, once the timing of capacity additions is determined, the technology and fuel type to provide the energy is chosen. Generating plants are generally categorized as base load, peaking, or intermediate. Base load units operate continuously with the exception of planned outages. Peaking units operate less frequently, mostly at times of highest demand. Intermediate units provide power to follow load for periods longer than peaking units, but not as continuously as base load units. Utility-sponsored conservation programs help to lessen peak demand and energy consumption, which as a result, postpones the need for new generating capacity.

Florida's electric utility industry is comprised of the following types of companies:

- 5 investor-owned electric utilities
- 33 municipally owned electric utilities
- 18 rural electric cooperatives

Collectively, these utilities currently possess 53,695 MW of summer electric generating capacity and 57,343 MW of winter generating capacity. Non-utility generators in the state provide an additional 4,725 MW of summer electric generating capacity and 5,090 MW of winter generating capacity. Supplementary capacity is purchased from out-of-state utilities over the Florida-Georgia transmission interties.

Historically, Florida's electric utilities pursued fuel diversity by maintaining a balanced fuel supply with a relative mix of energy generation from coal, nuclear, natural gas, oil, and other sources. However, Florida's utilities in the early 1990s began to rely more on natural gas to meet the increasing need for energy because of its low prices and availability. Between 1990 and 2009, most new generating capacity constructed in Florida was natural gas-fired, increasing the percentage of the state's total energy generated by gas from 11.4 percent in 1990 to approximately 49 percent in 2009. Natural gas is projected to provide over 51 percent of Florida's energy in 2019. The price volatility associated with natural gas has caused concern regarding the ratepayers' ability to afford their electric bill.

The topic of fuel diversity has garnered much interest from Florida lawmakers and the Commission. Utilities have acted on those concerns by planning for other resources besides natural gas for electric generation. Renewable energy facilities provide approximately 1,220

MW of firm and non-firm capacity. In addition, the Public Service Commission has approved four new nuclear plants (FPL's Turkey Point Units 6 and 7 and Progress' Levy Units 1 and 2.) Progress' Levy Units 1 and 2 have been certified by the Governor and Cabinet and have projected in-service dates of 2021 and 2022, respectively. FPL's Turkey Point 6 and 7 are projected to be in-service in 2022 and 2023 respectively, but have yet to receive certification. The Commission also approved uprates to FPL's and PEF's existing nuclear facilities that will allow an increase in the amount of capacity generated at each facility. Combined, the four new nuclear facilities and the uprates will add approximately 4,965 MW of additional nuclear capacity in Florida when placed into service.

Despite the focus on fuel diversity and the approval of the aforementioned nuclear units, natural gas still is projected to provide over 51 percent of Florida's energy in 2019. To ensure Florida can sustain and afford its growing need for energy, utilities must pay special attention to DSM, conservation, renewable energy, and public education efforts.

Section 3. DSM Goal Setting Process

3.1 Historic Goal Setting Process

Demand-side management programs benefit the general body of electric utility ratepayers by: (1) deferring the need for future power plant construction, (2) reducing current production cost, and (3) improving reliability.

Section 366.82, F.S., requires utility conservation programs to be cost-effective. The Commission adopted Rule 25-17.008, F.A.C., which codifies the cost-effectiveness methodologies and cost and benefit information which must be submitted to the Florida Public Service Commission by utilities whenever an evaluation of the cost-effectiveness of an existing, new, or modified conservation program is requested. In order to obtain cost recovery, utilities must provide, at a minimum, a cost-effectiveness analysis of each program using three tests: the Participants test, the Ratepayer Impact Measure (RIM) test, and the Total Resource Cost (TRC) test. Each test is summarized below.

Participants test. The Participants test reviews costs and benefits from a program participant's point of view and ignores the impact on the utility and other ratepayers not participating in the program. The costs customers pay for equipment and maintenance are considered under the Participants test. Benefits considered in the test include incentives that are paid by the utility to the customers and a reduction in customer bills.

RIM test. The RIM test includes the costs associated with incentive payments to participants and decreased revenues to the utility which typically must be recovered from the general body of ratepayers at the time of a rate case. In particular, the RIM test is designed to ensure that all ratepayers, not just the program's participants, will benefit from a proposed DSM program. A DSM program that passes the RIM test ensures that all customer rates are lower than they otherwise would have been without the DSM program.

TRC test. The TRC test measures the overall economic efficiency of a DSM program from a societal perspective. This test measures the net costs of a DSM program based on its total cost, including both the participant's and the utility's costs. Unlike the RIM test, customer incentives and decreased revenues are not included as costs in the TRC test; instead, these factors are treated as transfer payments among ratepayers.

The Commission's traditional policy has been to set goals for utilities based on measures that pass both the Participants and RIM tests. In addition, the Commission encourages utilities to

evaluate implementation of TRC measures when the savings are large and the rate impacts are small.[3] TRC measures that have a large savings but small impact on rates are reviewed and approved by the Commission on a case-by-case basis.

During the current goal setting process, the initial cost-effectiveness screening included two enhanced versions of the RIM and TRC tests: the Enhanced Rate Impact Measure (E-RIM) test and the Enhanced Total Resource Cost (E-TRC) test. The difference between these versions and the traditional RIM and TRC tests is that these versions included additional savings from potential avoided carbon compliance costs. In addition, the E-TRC benefit values are higher than the E-RIM values because the test does not include utility lost revenues or customer incentive payments. At the December 30, 2009 Commission Conference, the Commission approved goals that passed the E-TRC test.

The Commission also requires investor-owned utilities to reevaluate programs on a regular basis. If a program is no longer cost-effective, the utility is required to file a petition before the Commission to request changes to or discontinuation of the program. Conversely, if new programs become available which are cost-effective, the utility is required to file a petition before the Commission requesting inclusion of the new program.

3.2 Current Goal Setting Process

New legislation enacted in 2008 amended the Florida Energy Efficiency and Conservation Act statute and placed upon the Commission additional responsibilities when adopting goals. These responsibilities include consideration of benefits and costs to program participants and ratepayers as a whole as well as the need for energy efficiency incentives for customers and utilities. The Commission must also evaluate the costs imposed by state and federal regulations on greenhouse gas emissions. In addition, the Commission is responsible for evaluating the technical potential of all demand-side and supply-side energy conservation measures, including demand-side renewable energy systems. The statute was also amended to allow the Commission to provide appropriate financial rewards and/or penalties to utilities over which it has rate-setting authority. Finally, the 2008 legislation authorized the Commission to

[3] Order No. PSC-94-1313-FOF-EG, issued October 25, 1994, in Docket No. 930548-EG, In Re: Adoption of numeric conservation goals in consideration of National Energy Policy Act Standards (Section 111) by Florida Power and Light Company; Docket No. 930549-EG, In Re: Adoption of numeric conservation goals in consideration of National Energy Policy Act Standards (Section 111) by Florida Power Corporation; Docket No. 930550-EG, In Re: Adoption of numeric conservation goals in consideration of National Energy Policy Act Standards (Section 111) by Gulf Power Company; and Docket No. 930551-EG, In Re: Adoption of numeric conservation goals in consideration of National Energy Policy Act Standards (Section 111) by Tampa Electric Company.

allow an investor-owned utility to receive an additional return on equity of up to 50 basis points for exceeding 20 percent of its annual load growth through energy efficiency and conservation measures.

The purpose of the goals is to bolster conservation efforts, particularly where expensive resources are concerned, and to reduce the growth rate of peak load demand. To prepare for the new goal-setting process, the Commission conducted a series of workshops regarding energy efficiency initiatives and the new requirements in Section 366.82, F.S., starting in 2007. Subsequently, on June 26, 2008, Dockets 080407-EG through 080413-EG were opened to review numeric conservation goals for the utilities subject to FEECA. GDS Associates, Inc. (GDS) provided independent technical consulting and witness services for Commission staff during the conservation goal-setting proceeding. GDS was retained to review and critique the overall goals proposed by each utility and provide expert testimony and recommendations on alternative goals.

An evidentiary hearing in Dockets 080407-EG through 080413-EG was held on August 10-13, 2009. The FEECA utilities requested goals based on an enhanced RIM (E-RIM) test, which included estimates of anticipated future carbon regulation costs. When estimates related to carbon costs are included, the results are higher goals than those derived from the traditional RIM test. Staff filed its recommendation regarding the review of the FEECA utilities numeric goals on October 15, 2009. At the November 10, 2009 Commission Conference, the Commissioners directed staff to develop more robust goals for each utility.

By Order No. PSC-09-0855-FOF-GU,[4] issued December 30, 2009, the Commission established annual numeric goals for the FEECA utilities for summer peak demand, winter peak demand, and annual energy for the 2010 through 2019 period. The Commission ruled that the annual numeric DSM goals for Florida Power & Light (FPL), Progress Energy Florida, Inc. (PEF), Tampa Electric Company (TECO), Gulf Power Company (Gulf), and Florida Public Utilities Company (FPUC) were based on the enhanced TRC (E-TRC) test and the top ten residential energy savings measures that have a two-year or less payback. In addition, the Commission also ruled that the annual numeric goals for Orlando Utilities Commission and JEA were based on their current program levels so that the ratepayers of those utilities are not unduly

[4] See Order No. PSC-09-0855-FOF-EG, issued December 30, 2009, in Docket No 080407-EG, In Re: Commission review of numeric conservation goals by Florida Power and Light Company; Docket No. 080408-EG, In Re: Commission review of numeric conservation goals by Progress Energy Florida; Docket No. 080409-EG, In Re: Commission review of numeric conservation goals by Tampa Electric Company; Docket No. 080410-EG, In Re: Commission review of numeric conservation goals by Gulf Power Company; and Docket No. 080411-EG, In Re: Commission review of numeric conservation goals by Florida Public Utilities Company.

subjected to increased rates. Upon setting of these goals, the utilities were directed to file demand-side management plans designed to meet the utilities' goals approved by the Commission within 90 days. Table 9 illustrates the summer demand, winter demand, and annual energy goals proposed by the utilities compared to the Commission's approved goals.

Table 9. 2010-2019 Incremental Demand-Side Management Goals

Utility Proposed Compared to Commission Approved DSM Goals								
	Summer Demand Goals (MW)			Winter Demand Goals (MW)			Annual Energy Goals (GWH)	
	Utility Proposal	Commission Approved Goals		Utility Proposal	Commission Approved Goals		Utility Proposal	Commission Approved Goals
FPL	607	1,498		338	605		878	3,082
PEF	521	1,183		560	1,072		614	3,488
TECO	82	138		41	109		202	360
Gulf	69	144		46	110		159	574
FPUC	0	4		0	2		0	13
OUC	0	12		0	9		0	36
JEA	0	44		0	30		0	290
Total	1,279	3,023		985	1,937		1,853	7,843

On March 30, 2010, the FEECA utilities filed petitions requesting approval of their DSM plans for the ten-year period 2010 through 2019. The Commission approved the proposed plans from OUC,[5] JEA,[6] and FPUC,[7] on September 3, October 4, and November 12, 2010, respectively.

At the September 14, 2010 Commission Conference, the Commission denied the proposed DSM plans of PEF, TECO, and Gulf because they did not meet the annual goals established by the Commission. The utilities were directed to submit revised plans to the Commission within 30 days after the issuance of the Order in their specific dockets. As a result, the timing related to approving the annual goals and programs for the year 2010 through 2019 has been delayed. It should be noted that if any FEECA utility fails to meet the criteria set by the

[5] See Order No. PSC-10-0554-PAA-EG, issued September 3, 2010, in Docket No. 100161-EG, In Re: Petition of approval of demand-side management plan of Orlando Utilities Commission.

[6] See Order No. PSC-10-0609-PAA-EG issued, October 4, 2010, in Docket No. 100157-EG, In Re: Petition of approval of demand-side management plan of JEA.

[7] See Order No. PSC-10-0678-PAA-EG, issued November 12, 2010, in Docket No. 100158-EG, In Re: Petition of approval of demand-side management plan of Florida Public Utilities Company.

Commission, consequences could result in financial penalties or any other appropriate action by the Commission as authorized by Section 366.82(8), F.S.

The Commission did approve most of investor-owned utilities' request to establish solar programs as part of their DSM plans at the September 14, 2010 Commission Conference. FPL's request for approval received a vote for approval at the January 11, 2011 Commission Conference. The decisions were based on the Commission's directive to allow the investor-owned utilities to spend 10 percent of their historic energy conservation cost recovery expenditures as an annual cap for solar water heating and solar photovoltaic pilot programs. Table 10 represents the Commission approved expenditures for the solar technologies mentioned previously.

Table 10. Commission Approved Annual Expenditures for Solar Technologies

Utility	Commission Approved Annual Expense
FPL	$15,536,870
Gulf	$900,338
PEF	$6,467,592
TECO	$1,531,018
FPUC	$47,233
Total	$24,483,051

At the November 30, 2010 Commission Conference, the Commission approved the revised DSM plan of TECO. Currently, the status of the DSM plans for FPL, PEF, and Gulf are pending. The Commission is expected to vote on these proposed DSM plans in early 2011.

Appendix 1. Educating Florida's Consumers on Conservation

The PSC's consumer education program employs a variety of tools to share conservation information with consumers via the PSC Web site, e-mail, public events, brochure distribution, and press releases. Conservation information is also available to consumers through other governmental and utility Web sites. Appendix 2 to this report supplies a list of related Web sites belonging to state and federal entities, investor-owned electric utilities, and local gas distribution companies to assist consumers in researching additional conservation opportunities.

Electronic Outreach

An assortment of information is available on the PSC Web site to help consumers save energy. According to Google Analytics, from January through December 2010, more than 126,000 people accessed the more than 560 consumer-oriented pages on the PSC Web site. The second most popular destination for Web site visitors was the PSC's Energy Conservation House, with more than 44,000 visitors during that period. The interactive graphic provides informative "point and click" conservation tips for the home. The Energy Conservation House may be viewed at http://www.floridapsc.com/consumers/house/.

The PSC features six brochures online and in print that address conserving energy at home. The brochures may be viewed and printed directly from the Web site, http://www.floridapsc.com/publications/, ordered free via an online order system, or requested by mail or phone. In 2010, 96,538 brochures were requested to be sent by mail.

In 2010, the PSC redesigned the *Consumer Connection E-Newsletter* for a modern, colorful look, and energy conservation was spotlighted in two of its consumer tips. In January, new meters were explained in *What is a Smart Meter?*, and in March, consumers learned home energy savings tips in *Save Money During Spring Break*. Each consumer tip highlighted in the newsletter has both text and an in-house produced video available through You Tube. By the end of 2010, tracking statistics on You Tube show the two videos had been viewed 1,040 times.

Events

National Consumer Protection Week (March 7-13, 2010). National Consumer Protection Week played a significant role in the PSC's 2010 conservation education efforts. The Commission partnered with six senior centers and a public library in North Florida to help Florida's senior residents save money on their telephone and utility bills. PSC staff began the week's activities

with a presentation to consumers and library visits throughout Tallahassee and surrounding areas. In keeping with the 2010 national theme, *Dollars and Sense: Rated A for All Ages*, presentations at all Florida events included information about reducing utility expenses through conservation, and consumers were provided with educational brochures featuring tips on energy and water conservation.

Community Events. The PSC participates in consumer programs and distributes conservation-related materials through partnerships with governmental entities, consumer groups, and many other organizations. Examples of events where conservation information was shared during 2010 include Ambassadors for Aging Day, Active Living Expo, Canal Point Community Day, Volusia County Community Day, Florida Assisted Living Association's Annual Conference, City of Riviera Beach Community Day, National Employ Older Workers Week, Wakulla Public Library event, Tenth Annual Central Florida Kidfest and Family Expo, and senior days in the following communities: Bradfordville, Woodville, Tallahassee, Ft. Braden, Chaires-Capitola, McLean, Miccosukee, and Citrus County. The PSC also provided a variety of conservation brochures to be distributed by the Waldo Community Center and at the Villa Aida/Goodlet Park Community Day.

Hearings and Customer Meetings. As an ongoing outreach initiative, the Commission supplies conservation brochures to consumers at hearings and customer meetings across the state. These public meetings give staff an opportunity to distribute information and address consumer questions. Consumers who file a complaint with the Commission about high electric or natural gas bills also receive conservation information.

Historic Display. For more than four months, conservation was highlighted in the PSC's historical exhibit, "Trains, Planes, and Solar PVs," at the Florida Historic Capitol Museum in Tallahassee. The exhibit included information and items from the Commission's early years to the present and featured a special display case on conservation. Also included in the exhibit were brochures for public distribution.

Library Outreach Program. The Commission's Library Outreach Program is an effective consumer education program with a statewide impact. Each year the PSC provides educational brochures to Florida's 280 public libraries for distribution to consumers. Special emphasis is placed on publications that feature practical energy and water conservation tips.

In 2010, nearly 30,000 brochures were sent, or requested by, Florida's libraries. Annual survey results from library administrators indicate their continuing support for the program and their willingness to partner with the Commission on future outreach projects. Many libraries

also request additional materials throughout the year to maintain brochure supplies for library patrons.

Also included for consumers in this year's Library Outreach Program was a White Pages Phone Book Survey. In select areas of Florida, automatic distribution of the printed telephone directory has been temporarily discontinued through a PSC-approved two-year waiver. Survey results will help gauge consumer preference and use of hard copy white pages.

Media Outreach

News releases are sent to the media on major Commission decisions, meetings, and public events. The Office of Public Information also issues news releases urging conservation. For instance, a release was sent for the 2010 Martin Luther King Junior holiday encouraging citizens to participate in a Day of Utility Service on the holiday geared to the national theme, *Anybody Can Serve, So Let's Conserve.* A March release touted the federal government's, *Fix a Leak Week,* and in May, the Commission published a release on the growing number of Floridians using renewables to generate their own electricity.

Youth Education

The PSC has placed increased emphasis on teaching Florida's young consumers as an effective way to expand conservation education. In 2010, the PSC participated in the Earth Day celebration at the Florida Capitol, and PSC staff provided students and their teachers with energy and water conservation tips to use on campus and at home.

During 2010, the PSC continued to produce its, *Get Wise and Conserve,* student resource booklet to teach children about energy and water conservation, in addition to giving some telecommunications facts. The booklet has been distributed to all public libraries through the Library Outreach Program and is available at all senior outreach events, community events, and at Earth Day observances. The student resource book has also become a favorite during senior events.

In recent years, the PSC developed and helped produce two conservation plays: *Turn It On, Turn It Off* and *Water Wiser*. The plays were designed to be performed by teen drama groups or young school children for their classmates, thereby increasing the students' interest in learning about conservation. The PSC continues to work with school programs that are interested in producing these plays. Both plays are included in the, *Arts in Education Directory*,

produced by the Tallahassee-Leon County Council on Culture and Arts, that serves as a resource guide for teachers seeking information about educational programs available in the area.

Energy Awareness Month in October provides an opportunity to partner with schools' Green Teams to explore conservation in education. PSC staff continually explores areas where students can learn the value of conservation.

Appendix 2. Conservation Activities of FEECA Utilities

A. Florida Power & Light Company

Residential Programs

Residential Building Envelope. This program encourages qualified customers to install energy-efficient building envelope measures that cost-effectively reduce FPL's coincident peak air-conditioning load and customer energy consumption.

Duct System Testing and Repair Program. This program identifies air conditioning duct system leaks and has qualified contractors repair those leaks.

Residential Air Conditioning Program. This program provides financial incentives for residential customers to purchase a more efficient unit when replacing an existing air conditioning system.

Residential Load Management Program (On Call Program). This program offers voluntary load control to residential customers.

Residential New Construction Program (BuildSmart). The program's objective is to encourage the design and construction of energy-efficient homes that cost-effectively reduce FPL's coincident peak load and customer energy consumption.

Residential Low Income Weatherization Program. This program employs a combination of energy audits and incentives to encourage low-income housing administrators to perform tune-ups of heating and ventilation air conditioning (HVAC) systems and install reduced air infiltration energy efficiency measures.

Commercial/Industrial Programs

Business Heating, Ventilating, and Air Conditioning Program. This program reduces the current and future growth of coincident peak demand and energy consumption of business customers by increasing the use of high efficiency heating, ventilating, and air conditioning systems.

Business Efficient Lighting. This program encourages the installation of energy efficient lighting measures in business facilities.

Business Customer Incentive. This program assists FPL's business customers achieve electric demand and energy savings that are cost-efficient to all FPL customers. FPL provides incentives to qualifying customers who purchase, install, and successfully operate cost-effective energy efficiency measures not covered by other FPL programs.

Business Building Envelope Program. This program encourages eligible business customers to increase the efficiency of the qualifying portion of their building's envelope to reduce HVAC energy consumption and demand.

Business On Call Program. This program offers voluntary load control of central air conditioning to General Service and General Service Demand customers.

Commercial Demand Reduction. This program reduces coincident peak demand by controlling customer loads of 200 kW or greater during periods of extreme demand or capacity shortages.

Business Energy Evaluation. This program provides evaluations of business customers' existing and proposed facilities and encourages energy efficiency by identifying DSM opportunities and providing recommendations to the customer.

Commercial/Industrial Load Control. This program reduces coincident peak demand by controlling customer loads of 200 kW or greater during periods of extreme demand or capacity shortages.

Cogeneration and Small Power Production. This program facilitates the installation of cogeneration and small power production facilities.

Business Water Heating. This program encourages business customers to install qualifying heat recovery units (HRU) or heat pump water heater (HPWR) equipment.

Business Refrigeration Program. This program encourages eligible business customers to install energy-saving equipment to reduce or eliminate the use of electric heating elements needed to prevent condensation on display case doors and to defrost freezer doors.

Research and Development and Pilot Program

Conservation Research and Development Program. This program evaluates emerging conservation technologies to determine which are worthy of further evaluation as candidates for program development.

Residential Thermostat Load Control Pilot Project. This project provides participating residential customers a programmable thermostat and the option of overriding FPL's control of their central air conditioning and heating appliances via telephone or the Internet.

B. Progress Energy Florida

Residential Programs

Home Energy Check. This program provides Progress Energy Florida Inc.'s residential customers with an analysis of energy consumption and recommendations on energy efficiency improvements. Acting as a motivational tool to identify, evaluate, and inform consumers on cost-effective energy saving measures, the Home Energy Check is the foundation of the residential Home Energy Improvement program and is a program requirement for participation. Seven types of energy audits are available: the free walk-through, the paid walk-through ($15 charge), the energy rating (Energy Gauge), the mail-in audit, an Internet option, a phone-assisted audit, and a student audit.

Home Energy Improvement. This efficiency program provides existing residential customers incentives for energy efficient heating, air conditioning, insulation upgrades, duct leakage repair, reflective roofing products, high performance windows, window film, and solar screens.

Low-Income Weatherization Assistance Program. This program's goal is to integrate PEF's DSM program measures with the Department of Community Affairs (DCA) and local weatherization providers to deliver energy efficiency measures to low-income families. Through this partnership, Progress Energy assists local weatherization agencies by providing energy education materials and financial incentives to weatherize the homes of low-income families.

Energy Management (Residential and Commercial). This load management program incorporates direct radio control of selected customer equipment to reduce system demand during peak capacity periods and/or emergency conditions by temporarily interrupting selected consumer appliances for special periods of time. Customers have a choice of options and receive

a credit on their monthly electric bills depending on the options selected and their monthly kWh usage.

Neighborhood Energy Saver. This program assists low-income families with escalating energy costs by implementing a comprehensive package of electric conservation measures at no cost to eligible customers. In addition to installing these measures, PEF seeks to achieve three important goals: educate participating families on proper energy efficiency techniques and best practices, change their energy-use behavior, and manage their energy usage.

Renewable Energy Program. This program consists of two areas that are designed to encourage the installation of renewable energy systems:

(1) Solar Water Heater with EnergyWise. This measure encourages residential customers to install a solar thermal water heating system. The customer must have whole house electric cooling, electric water heating, and electric heating to be eligible for this program.

(2) Solar Photovoltaics with EnergyWise. This measure promotes environmental stewardship and renewable energy education through the installation of solar energy systems at schools within PEF's service territory. Customers participating in the Winter-Only EnergyWise or Year-Round EnergyWise Program can elect to donate their monthly credit toward the Solar Photovoltaics with EnergyWise Fund.

All proceeds collected from participating customers and their associated monthly credits, are used to promote photovoltaics and renewable energy educational opportunities.

Commercial/Industrial Programs

Business Energy Check. This free audit for non-residential customers can be completed at the facility by an auditor or online by the business customer. A paid audit provides a more thorough energy analysis for non-residential facilities. The program acts as a motivational tool to identify, evaluate, and inform consumers on cost-effective energy saving measures for their facilities. The Business Energy Check is the foundation of the Better Business Program and a requirement for participation.

Better Business. This efficiency program provides incentives to existing commercial and industrial customers for heating, air conditioning, motors, water heaters, roof installation upgrade, direct leakage and repair, window film, cool roof, and lighting.

Commercial/Industrial New Construction. This efficiency program provides incentives for the design and construction of energy efficient commercial and industrial facilities, including energy efficient heating, air conditioning, motors, water heating, window film, insulation, leak free ducts, cool roof, and lighting.

Innovation Incentive. The program encourages conservation efforts that are not supported by Progress Energy Florida Inc.'s other programs. Major equipment replacement or other actions that substantially reduce PEF peak demand requirements are evaluated to determine their impact on PEF's system. If cost-effective, these actions may qualify for an economic incentive in order to shorten the payback time of the project.

Standby Generation. This program provides an incentive for customers to voluntarily operate their on-site generation during times of system peak.

Interruptible Service Program. This program is a rate tariff which allows PEF to switch off electrical service to customers during times of capacity shortages. The signal to operate the automatic switch is operated by the Energy Control Center. In return for this interruption, the customers receive a monthly rebate on their kW demand charge.

Curtailable Service Program. This program is a dispatchable DSM program in which customers contract to curtail or shut down a portion of their load during times of capacity shortages. The curtailment is done voluntarily by the customer when notified by PEF. In return for this cooperation, the customer receives a monthly rebate for the curtailable portion of their load.

Technology Development Program. This program allows PEF to undertake certain development and demonstration projects which have promise to become cost-effective conservation and energy efficiency programs.

Solar Pilot Programs

Solar Water Heating for Low Income Residential Customers. PEF will collaborate with non-profit builders to provide low-income families with a residential solar thermal water heater at no cost to the non-profit builders or the residential participants. The incentive is the total cost of the solar thermal system plus associated installation cost. Participation is expected to be about 30 homes per year.

Solar Water Heating with Energy Management. An existing program that has been enhanced by increasing the amount of the rebate to increase customer participation and collecting demographic information to support PEF's marketing efforts and correlate anticipated energy savings to PEF's residential end-use metering study. The program encourages residential customers to install new solar thermal water heating systems on their residence by combining incentives from two programs. Customers are required to participate in the residential demand response program and receive the associated monthly bill credit in addition to a one-time $550 rebate to reduce the upfront cost of purchasing the renewable energy system. PEF projects about 2,250 homes will be participating in this program each year.

Residential Solar Photovoltaic. A program to reduce the initial investment required for a residential customer to install a new solar PV system on their home by providing a rebate of up to $2.00/Watt up to a $20,000 maximum. Customer is also required to participate in at least one existing residential energy efficiency measure. PEF expects about 100 homes per year will participate in this program.

Commercial Solar Photovoltaic. A program to reduce the initial investment required for a commercial customer to install a new solar PV system on their facility by providing a tiered rebate based on the PV power rating up to: $2.00/Watt for the first 10 KW; $1.50/Watt for 11 - 50 kW; and, $1.00/Watt for 51 – 100 kW. Customer is also required to participate in at least one commercial energy efficiency measure. Total incentives per participant will be limited to $130,000 based on a maximum installation of 100 kW. PEF projects about 23 commercial customers will participate annually.

Photovoltaic for Schools. Participating schools receive a new PV system at no cost to the school. Schools enter an agreement by which PEF will install, own, operate and maintain the system for five years. Program participation is limited to an annual target of one system with a rating up to 100 kW installed on a post secondary public school and ten systems of 10 kW each with battery backup option installed on other public schools, with a preference for schools serving as emergency shelters. The program has an educational component that will be funded in part by customers participating in other PEF energy management programs that elect to contribute their monthly credit toward an energy education fund.

*Research and Demonstration***.** A program designed to research renewable energy technologies and establish research and development initiatives to support the development of future solar and renewable energy pilot programs. Program is limited to a targeted annual expenditure cap of

$323,000. The number of projects that will be proposed for investigation within this program each year is unknown at this time.

C. Gulf Power Company

Residential Programs

GoodCents Select Program. This program provides the customer with a means of conveniently and automatically controlling and monitoring his/her energy purchases in response to prices that vary during the day and by season in relation to Gulf's cost of producing or purchasing energy.

Residential Geothermal Heat Pump Program. The program's purpose is to reduce the demand and energy requirements of new and existing residential customers through the promotion and installation of geothermal systems.

Residential Energy Survey Program. This program offers energy conservation advice to individuals and contractors building new homes. In addition, the program advises existing residential customers to implement efficiency measures resulting in energy savings. Owners of existing homes may choose to have a Gulf Power representative conduct an on-site survey of their home, or they may opt to participate in either a mail-in or online interactive version of the survey, the Energy Check Up. Qualifying new home owners and contractors may request a survey of their final construction plans. Regardless of the option chosen, these surveys provide customers with specific whole-house energy recommendations.

Commercial Programs

GoodCents Commercial Buildings Program. This program educates commercial and industrial customers on the most cost-effective methods of designing new and improving existing buildings. The program stresses efficient heating and cooling equipment, improved thermal envelope, operation and maintenance, lighting, cooking, and water heating. Field representatives work with architects, engineers, consultants, contractors, equipment suppliers, building owners, and occupants to encourage them to make the most efficient use of all energy sources and available technologies.

Commercial Geothermal Heat Pump Program. The program's objective is to reduce the demand and energy requirements of new and existing commercial/industrial customers through the promotion and installation of advanced and emerging geothermal systems.

Commercial/Industrial Energy Analysis. This program provides advice to Gulf Power's existing commercial and industrial customers on how to reduce and make the most efficient use of energy. The program includes semi-annual and annual follow-ups with the customer to verify conservation measures installed and to reinforce the need to continue with more conservation efforts. Customers may participate by requesting a basic Energy Analysis Audit through either an on-site survey or a direct mail survey. A more comprehensive analysis can be provided through a Technical Assistance Audit.

Energy Services Program. This program establishes the capability and process to offer advanced energy services and energy efficient end-use equipment customized to meet the individual needs of large customers. Potential projects are evaluated on a case-by-case basis and must be cost-effective to qualify for incentives or rebates. Types of projects covered under this program include demand reduction or efficiency improvement retrofits, such as lighting (fluorescent and incandescent), motor replacements, HVAC retrofit (including geothermal applications), and new electro-technologies.

Research and Development Programs

Conservation Demonstration and Development. This package of conservation programs explores and pursues research, development, and demonstration projects to promote energy efficiency and conservation. The program serves as an umbrella for the identification, development, demonstration, and evaluation of new or emerging end-use technologies.

Renewable Energy. This program encompasses a variety of voluntary renewable and green energy programs under development by Gulf Power Company. The voluntary pricing options for customers include, but are not limited to, EarthCents Solar (Photovoltaic Rate Rider) and the Solar for Schools program. In addition, the renewable energy program includes the expenses necessary to prepare and implement a green energy pilot program using landfill gas, wind, solar, or other renewable energy sources.

Solar Programs

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.

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.

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.

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 15 low-income installations per year. Specific eligibility requirements for the program will be provided in the Program Participation Standards.

D. Tampa Electric Company (TECO)

Residential Programs

Residential Walk-Through Audit (Free). A conservation program adopted by Florida under Section 366.82(5), F.S., and Rule 25-17.003, F.A.C. This program is offered to all residential customers and is designed to save demand and energy by increasing customer awareness of energy use in personal residences. Savings are dependent on the customer implementing energy saving recommendations. Recommendations are the same as the Computer-Assisted Audit but are standardized and include an estimated range of savings.

The audit is conducted by a trained analyst who notes only those recommendations which apply to the residence. In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output. Audits are kept on file with the company for three years. There is no charge to the customer for the Walk-Through Audit.

On-Line Residential Energy Audit. A conservation program designed to save demand and energy by increasing customer awareness of energy use in personal residences. Savings are dependent on the customer implementing energy saving recommendations. Recommendations are the same as the Computer-Assisted Audit but are standardized and include an estimated range of savings.

To access the audit, customers will go to Tampa Electric Company's internet site, under online audits, and automatically link to the audit. Customers will answer questions about their home and energy usage. Personalized audit results are then immediately displayed to customers for review and implementation. The audit recommendations are based on the customers' answers to the questions and their actual energy consumption. There is no charge to customers.

In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.

Residential Computer-Assisted Energy Audit. A conservation program originally developed in response to the Energy Policy Act (1978) and adopted by Florida under Section 366.82 (5), F.S., and Rule 25-17.003, F.A.C. The program is designed to save demand and energy and is offered to all residential customers. Savings are achieved by increasing customer awareness of the energy use in personal residences. Savings are dependent on customers implementing energy saving recommendations. The audit is performed by a trained analyst who collects specific data about the structure of the home and the customer's lifestyle. The following information is then provided on the applicable energy saving measures:

- Estimated cost for contractor installation
- Estimated cost for do-it-yourself installation
- Payback period for customer investment
- Estimated first year energy savings

Analysts note only those recommendations which apply to the individual residence. Audit findings are kept on file with the utility for three years. The audit charge to the customer is $15.00. In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.

Residential Phone Assisted Audit. A conservation program designed to save demand and energy by increasing customer awareness of energy use in personal residences. This program is

intended to provide an additional option to customers who may not be available for a walk-through audit, however, they would benefit from speaking directly with a Tampa Electric representative.

To access this service, customers will speak directly with a Tampa Electric representative who will have the customers answer questions about their home and energy usage. The representative will input the information provided into the on-line audit form at Tampa Electric's internet site and personalized audit results are then immediately available for review with customers. Results can then be sent to the customer via e-mail or regular mail. The audit recommendations are based on the customer's answers to the questions and their actual energy consumption. There is no charge to customers.

In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.

Residential Heating and Cooling. A conservation program that offers a rebate to encourage the installation of high efficiency heating and cooling systems in existing residential dwellings. The program is aimed at reducing the growth of weather sensitive peak demand and energy through two types of equipment replacement. Type One equipment replacement is defined as a heat pump replacing resistance heat and Type Two equipment replacement is defined as a heat pump replacing a heat pump. Both types of equipment replacement have a threshold for qualification of 15.0 SEER. Tampa Electric's rebate is paid to the contractor performing the installation. There are two incentive levels for this program, based upon equipment install type. Type One rebate is $400/customer. Type Two rebate is $275/customer.

Residential Electronically Commutated Motor (ECM) Program. A conservation incentive program designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. The program is designed to help residential customers improve the overall efficiency of their existing HVAC equipment by replacing the existing motor in the air-handler with an Electronically Commutated Motor (ECM). This will in turn help participating customers reduce demand and energy usage. The Residential ECM Program Rebate is $135/customer.

Residential HVAC Re-commissioning. A conservation incentive program designed to help residential customers ensure HVAC equipment is operating at optimal efficiency through maintenance and equipment tune-up. This will, in turn, help participating customers reduce

demand and energy usage and help to promote good long-term maintenance habits. The Residential HVAC Re-commissioning rebate is $75/customer.

Residential Duct Repair. A conservation incentive program designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. This program eliminates or reduces areas of HVAC air distribution losses by sealing and repairing the air distribution system (ADS). The ADS is defined as the air handler, air ducts, return plenums, supply plenums and any connecting structure. Customers call Tampa Electric to request appointments for duct repair and a HVAC contractor appointed by Tampa Electric will seal and repair all accessible components of the ADS in the residence. Tampa Electric's incentive is included in the payment to the participating contractor performing ADS repairs. The Residential Duct Repair rebate is $183/customer.

Residential Building Envelope. The Residential Building Envelope Program is designed to encourage customers to make cost-effective improvements to existing residences in the areas of ceiling insulation, wall insulation, and window improvements. The goal is to offer customer incentives for making these improvements while helping them reduce energy consumption and reducing Tampa Electric's peak demand. The following measures are a part of this program:

- **Ceiling Insulation -** This measure is designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. Qualifying residential structures are eligible for an incentive which is in the form of a certificate. Customers use the certificate as partial payment for the ceiling insulation installed. Ceiling Insulation Rebate is $516/customer.
- **Wall Insulation -** This measure is designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. Qualifying residential structures are eligible for an incentive to insulate exterior walls adjacent to the living area. Wall Insulation Rebate is $516/customer.
- **Window Replacement -** This measure is designed to encourage qualifying customers replacing windows in their home to do so with high-performance windows. This program is intended to reduce the solar heat gain into a home which, in turn, reduces HVAC load and improves comfort. Window Replacement Rebate is $824/customer.
- **Window Film -** This measure is designed to encourage qualifying customers to apply film on windows with eastern and western exposures. This is intended to reduce the solar heat gain into a home which, in turn, reduces HVAC load and improves comfort. Window Film Rebate is $100/customer.

New Construction (Residential). The company's New Construction Program known as Energy Plus Homes is a residential new construction conservation program designed to reduce the growth of peak demand and energy in the residential new construction market through the installation of high efficiency equipment and building envelope options. The program utilizes incentives to encourage the construction of new homes to be above the minimum energy efficiency levels required in the State of Florida Energy Efficiency Code for New Construction. This will be achieved through the actions listed below:

- The certification of new home construction that meets or exceeds the standards used in the Environmental Protection Agency's Energy Star Program.
- Promoting the construction and purchase of energy efficient housing by educating builders (for profit and not-for-profit), trade groups, architects, realtors, lenders and home buyers in a manner designed to transform the residential new construction market by influencing decisions toward energy efficiency in building techniques and practices.
- Placing an emphasis on securing participation by affordable housing builders and buyers through educational efforts, coordinated through affordable housing financiers and affordable housing builders.
- Encouraging the use of environmentally friendly building techniques. There are multiple incentives within the New Construction Program, including for Duct Systems, Attic Insulation, HVAC, Windows, and HERs Certification. These range from $100 to $400/customer.

Neighborhood Weatherization and Agency Outreach. The Neighborhood Weatherization and Agency Outreach Program is designed to assist low-income families in reducing their energy usage. The goal of the program is to establish a package of conservation measures at no cost for the customer. In addition to providing and/or installing the necessary materials for the various conservation measures, a key component will be educating families on energy conservation techniques to promote behavioral changes to help customers control their energy usage.

Customer eligibility is by utilization of census data to identify eligible customer geographic regions or referral through local community assistance agencies which serve low-income households.

Neighborhood Weatherization. Census data will be utilized to identify qualified geographic regions of low-income customers. Through direct customer contact, distributed literature, and communication through key community contacts, local residents will have the opportunity enroll for participation in the program at no cost. Tampa Electric will deliver the following applicable measures:

- **Duct Sealing:** For qualified dwellings with a ducted central HVAC system, this will provide sealing of the duct system to include all joints, seams, and penetrations.
- **Ceiling Insulation:** For qualified dwellings where the existing ceiling insulation is below R-19, this will provide for an R-13 to be installed. Any home where roof pitch limits accessibility, a lower R-value may be installed.
- **Compact Fluorescent Bulbs:** This provides the resident with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.
- **Water Heater Wrap:** This will furnish and install a water heater wrap for an electric water heater manufactured prior to 1996.
- **Water Heater Temperature Check and Adjustment:** This provides a temperature check of the water heater and informs the customer of the possibility for turn-down adjustment.
- **Low Flow Faucet Aerator:** This allows for the installation of a maximum of three aerators per household.
- **Low Flow Showerhead:** This allows for the installation of a maximum of two low flow showerheads per household.
- **Wall Plate Thermometer:** This will provide for the installation of one wall plate thermometer per home where there is only wall/window units in use.
- **Refrigerator Coil Cleaning and Brush:** This will provide for the cleaning of the refrigerator coil. The brush will be provided to the customer for future cleaning.
- **HVAC Weather Stripping Kit:** This will provide for the installation of a weather stripping kit for window/wall a/c units. The customer will receive or have installed up to two kits.
- **Change Filter Reminder:** This provides each homeowner with a filter whistle to help remind them to clean or change filter monthly.
- **Weatherization Measures:** This portion of the program will provide weather stripping, caulk, and foam sealant which will be used to reduce or stop air infiltration around doors, windows, attic entries, and where pipes enter the home. Reducing air infiltration is vital to saving energy and improving comfort.

Agency Outreach. This portion of the program will allow for delivery of energy efficiency kits that will help educate agency clients on practices that help to reduce energy consumption. The suggested practices will mirror the recommendations provided to customers who participate in a free energy audit. As a means to encourage adoption of the recommendations, agency clients who are seeking energy-related assistance will be provided with:

- Four compact fluorescent lamps to replace incandescent lamps with similar lumens outputs

- Three low-flow faucet aerators
- Air filter whistle to help remind them to clean or change filter monthly
- A hot water temperature card to check for necessary temperature adjustment of the water heater
- No-cost energy efficiency recommendations that can be immediately adopted in their home

Energy Education Outreach. The Energy Education Outreach Program is comprised of two distinct initiatives: (1) public education, and (2) energy awareness. The program is designed to establish opportunities for engaging groups of customers and students, in energy-efficiency related discussions in an organized setting. Tampa Electric recognizes the importance of educating students and motivating customers through participation in its energy audits, and this program will provide the opportunity to accomplish both initiatives for large groups in one setting.

In order to create an awareness of this offering, the company will establish participation avenues through its Speakers' Bureau and Community Relations teams. By working with local civic groups, churches, government sponsored public forums, homeowners associations, trade shows, rental property management groups, etc., Tampa Electric will establish informative presentations that help educate customers on no-cost practices they can implement to reduce their energy consumption, low-cost improvements to increase the efficiency of their homes, and incentives available for making larger, long-term investments. This type of forum will allow for dialogue with customers in such a setting that many customers will simultaneously benefit from the discussion.

This program will also focus on opportunities to promote energy efficiency education through local school systems. Students will be educated on ways to become active participants in saving energy at home and at school through the use of theater, educational modules, videos, or other learning tools that support Sunshine State Standards and are approved by school authorities.

Participants will be provided with energy saving devices and supporting information appropriate for the audience. Items available for distribution will include:

- Compact Fluorescent Lamps
- Low-Flow Faucet Aerators
- Filter Whistles
- Hot Water Temperature Check Cards
- Energy Savings Tips and Recommendations

Energy Planner – Residential Price Responsive Load Management. The company's program relies on a multi-tiered rate structure combined with price signals conveyed to participating customers during the day. This price information is designed to encourage customers to make behavioral or equipment usage changes to their energy consumption thereby achieving the desired high cost period load reduction to assist in meeting system peak.

Price information from the utility is used by the customer to program a "smart" thermostat into preset actions based on the level of pricing. Equipment may be turned on, turned off or changed to a different temperature setting automatically by the smart thermostat or manually by the customer through the smart thermostat in response to either the multi-tiered rates or critical price signals.

Tampa Electric will install a communication device along with a "smart" thermostat at the participant's home that will be able to control the operation of selected appliances such as space heating, air conditioning, water heating and pool pumps. Customers will be able to program the operation of this equipment and alter their energy consumption based the price tiers occurring at specific times of the day. The Energy Planner program incentive is approximately $103/customer annually.

Commercial/Industrial Programs

Commercial/Industrial Audit (Free). A conservation program designed to reduce demand and energy consumption by increasing customer awareness of the energy use in their facilities. The savings are dependent upon the customer's implementation of audit recommendations. Recommendations are based upon the replacement of less efficient equipment and systems or modifications to operations to enhance the customer's overall efficiency. Recommendations are primarily standardized and encourage the customer to implement measures that, if cost-effective, move the customer beyond the efficiency level typically installed in the marketplace. In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight fluorescent lamps to replace incandescent bulbs with similar lumens output.

Comprehensive Commercial/Industrial Audit (Paid). A conservation program designed to reduce demand and energy by increasing customer awareness of energy used in their facilities. The paid audit may involve monitoring specific equipment within a customer's facility to determine its electric usage with respect to the time of operation. Based on the results, Tampa Electric will recommend changes to save energy on equipment and/or operations. Savings are

dependent upon the customer implementing recommendations. In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight fluorescent lamps to replace incandescent bulbs with similar lumens output.

Commercial Duct Repair Program. A conservation incentive program designed to reduce demand and energy by decreasing the load on commercial air conditioning and heating equipment. This program eliminates or reduces areas of HVAC air distribution losses by sealing and repairing the air distribution system (ADS). The ADS is defined as the air handler, air ducts, return plenums, supply plenums and any connecting structure. Customers call Tampa Electric to request appointments for duct repair and a HVAC contractor appointed by Tampa Electric will seal and repair all accessible components of the ADS in the facility. Tampa Electric's incentive is included in the payment to the participating contractor performing ADS repairs. The Commercial Duct Repair rebate is $300/customer.

Commercial Building Envelope. This is a conservation program designed to reduce demand and energy by decreasing the load on commercial air conditioning and heating equipment. Through incentives, the program will encourage commercial/industrial customers to invest in energy efficiency building envelope improvements. The improvements include solar window film, ceiling insulation, and wall insulation. The Commercial Building Envelope Program will be promoted during commercial/industrial energy audits in an effort to inform and educate the customer. Certificates for participation will be issued through energy audits or by direct evaluation of existing building envelope conditions.

Solar Window Film. A conservation measure designed to encourage commercial/industrial customers to apply solar film on windows facing east and west. This measure is intended to reduce the solar heat gain into a facility which, in turn, reduces HVAC load and improves comfort. The Solar Window Film rebate is $1.25/square foot, or approximately $1,655/customer.

Ceiling & Roof Insulation. A conservation measure designed to encourage commercial/industrial customers to install insulation in ceilings above conditioned spaces in their facility. This measure is intended to reduce heat transfer through ceilings which, in turn, reduces HVAC load and improves comfort. The Ceiling & Roof Insulation rebate is $0.25/square foot and $0.15/square foot, respectively. This results in a rebate of approximately $389 and $228/customer.

Wall Insulation. A conservation measure designed to encourage commercial/industrial customers to install insulation in walls of conditioned spaces in their facilities. This measure is

intended to reduce heat transfer through ceilings which, in turn, reduces HVAC load and improves comfort. The Wall Insulation rebate is $0.40/square foot, or approximately $403/customer.

Commercial Energy Efficient Motors. A conservation program designed to encourage commercial/industrial customers to install premium-efficiency motors in new or existing facilities through incentives. The program is aimed at reducing the growth of peak demand and energy by encouraging customers to replace worn out, inefficient equipment with high efficiency equipment that exceeds minimum product manufacturing standards. The Energy Efficient Motors rebate is $6/horsepower, or approximately $90/customer.

Commercial Cooling Program. This is a conservation measure that uses incentives for the installation of high efficiency cooling systems in commercial buildings. The program is aimed at reducing the growth of peak demand and energy by encouraging customers to replace worn out, inefficient cooling equipment with high efficiency equipment that exceeds minimum product manufacturing standards. This program includes both direct expansion (DX) and package terminal air conditioners (PTAC). There are two incentive levels for this program, based upon equipment type. DX Cooling receives $50/ton, and PTAC Cooling receives $38/ton.

Commercial Chiller Program. This is a commercial conservation program that uses incentives for the installation of high efficiency electric water-cooled chillers and electric air-cooled chillers in commercial buildings. The program is aimed at reducing the growth of peak demand and energy by encouraging customers to replace worn out, inefficient cooling equipment with high efficiency equipment that exceeds minimum product manufacturing standards. The commercial chiller rebate is $175/kw, or approximately $7,490/customer.

Commercial Lighting Program. This program is design to encourage commercial/industrial customers to invest in more efficient lighting systems. This program includes standards for lighting retrofit projects in conditioned spaces, non-conditioned spaces, and exit signs.

Conditioned Space Commercial Lighting. This is a conservation measure for existing commercial/industrial facilities to encourage investment in more efficient fluorescent lighting technology within conditioned space. Specifically, this program is designed to: (1) affect a significant number of eligible customers, (2) recognize the most probable lighting investment opportunities, and (3) contribute toward weather-sensitive peak demand reduction. The conditioned lighting rebate is $0.175/watt, or approximately $3,300/customer.

Non-Conditioned Space Commercial Lighting. This is a conservation measure for existing commercial/industrial facilities to encourage investment in more efficient lighting technology within non-conditioned space. Specifically, this program is designed to: (1) affect a significant number of eligible customers; (2) recognize the most probable lighting investment opportunities; and (3) contribute toward weather-sensitive peak demand reduction. The non-conditioned lighting rebate is $0.175/watt, or approximately $5,453/customer.

Exit Signs. This is a conservation measure for existing commercial/industrial facilities to encourage investment in more efficient LED exit signs. Specifically, this program is designed to: (1) affect a significant number of eligible customers, (2) recognize the most probable lighting investment opportunities, and (3) contribute toward weather-sensitive peak demand reduction. The exit sign rebate is $25/unit, or approximately $125/customer.

Commercial Lighting Occupancy Sensor Program. This program is aimed at reducing the growth of peak demand and energy consumption for commercial/industrial customers by increasing the use of occupancy sensors to efficiently control lighting systems. Tampa Electric will provide incentives to customers who install qualifying controls for lighting systems. The occupancy sensor rebate is $25/unit, or approximately $2,184/customer.

Commercial Water Heating Program. This is a conservation program designed to encourage commercial/industrial customers to install high efficiency water heating systems thereby reducing future growth of demand and energy consumption. Two technologies covered under this program are heat recovery units and heat pump water heaters. The Water Heating rebate is $0.0116/BTU, or approximately $700/customer.

Conservation Value Program. This is an incentive program available for all commercial/industrial customers designed to recognize and encourage investments in demand shifting or demand reduction measures. Measures funded in this program will not be covered under other Tampa Electric commercial/industrial conservation programs. Candidates are identified through the energy audit, or their engineering consultants can submit proposals for funding which offer energy reduction during weather sensitive peak periods. The Conservation Value rebate is $275/kW, or approximately $6,636/customer.

Commercial Load Management. Tampa Electric's Commercial Load Management Program is intended to help alter the company's system load curve by reducing summer and winter demand peaks. Large loads such as walk-in freezers are interrupted for up to three hours by radio controlled switches similar to those used in the residential load management. Commercial air conditioning equipment is cycled during summer control periods. Monthly incentive credits are

paid to customers participating in this program. The Load Management Program features two types of rebates, based upon the type of interruption. The Cycling rebate is $416/customer, while the Extended rebate is $3,776/customer annually.

Commercial Demand Response. Tampa Electric's Commercial Demand Response is a conservation and load management program intended to help alter the company's system load curve by reducing summer and winter demand peaks. The company will contract for a turn-key program that will induce commercial/industrial customers to reduce their demand for electricity in response to market signals. Reductions will be achieved through a mix of emergency backup generation, energy management systems, raising cooling set-points and turning off or dimming lights, signage, etc.

Tampa Electric will contract with a demand response vendor for an additional minimum of five MW of load reduction. Vendor will market program to potential customers and secure participants. In addition, vendor will audit the customer's facility to identify equipment to be utilized in demand reduction, install automated controls and provide participant with load tracking software for the customer's use. Vendor will pay customers on a dollar per kW -month basis. The Commercial Demand Response rebate is approximately $24,000/customer annually.

Commercial Standby Generator. This program is designed to utilize the emergency generation capacity of commercial/industrial facilities in order to reduce weather sensitive peak demand. Tampa Electric provides the participating customers a thirty minute notice that their generation will be required. This allows customers time to start generators and arrange for orderly transfer of load. Tampa Electric meters and issues monthly credits for that portion of the generator's output that could serve normal building load after the notification time. Normal building load is defined as load (type, amount, and time duration) that would have been served by Tampa Electric if the emergency generator did not operate. Under no circumstances will the generator deliver power to Tampa Electric's grid. The Standby Generator rebate is $4/kW, or approximately $21,816/customer.

Commercial HVAC Re-commissioning. A conservation program designed to help commercial/industrial customers ensure HVAC equipment is operating at optimal efficiency by incenting maintenance and tune-up of equipment. This will in turn help commercial/industrial customers reduce demand and energy usage. The Commercial HVAC Re-commissioning rebate is $25/ton, or approximately $188/customer.

Electronically Commutated Motors (ECM) Program. A conservation incentive program designed to encourage commercial/industrial customers to install electronically commutative

motors in existing air conditioning and refrigeration equipment. The program is aimed at reducing the growth of peak demand and energy by encouraging customers to replace worn out, inefficient equipment with high efficiency equipment that exceeds minimum product manufacturing standards. The ECM program offers different rebates based upon the type of equipment. The ECM Motors rebate is $180/horsepower, while the Refrigeration motors rebate is $125/ (1/15) horsepower.

Cool Roof. A conservation incentive program designed to encourage commercial/industrial customers to install a cool roof system above conditioned spaces. This measure is intended to reduce heat transfer through reflectance which, in turn, reduces HVAC load and improves comfort. The Cool Roof rebate is $0.60/square foot, or approximately $6,000/customer.

Energy Recovery Ventilation (ERV). A conservation incentive program designed to help commercial/industrial customers reduce humidity and HVAC loads in buildings. This measure is intended to reduce demand and energy while improving comfort of commercial buildings. The Energy Recovery Ventilation rebate varies, as described in Tampa Electric's petition.

Refrigeration Program (Anti-condensate Controls). A conservation incentive program designed to reduce the current and future growth of peak demand and energy consumption for commercial customers by increasing the use of efficient refrigeration controls. Tampa Electric will provide an incentive to customers who install qualifying anti-condensate controls that reduce electric demand and energy in refrigeration equipment. The Refrigeration rebate is $0.65/linear foot, or approximately $1,519/customer.

Cogeneration. Tampa Electric's Cogeneration program is administered by a professional team experienced in working with cogenerators. The group manages functions related to coordination with Qualifying Facilities (QFs) including negotiations, agreements and informational requests; functions related to governmental, regulatory and legislative bodies; research, development, data acquisition and analysis; economic evaluations of existing and proposed QFs as well as the preparation of Tampa Electric's Annual Twenty-Year Cogeneration Forecast.

The Cogeneration team leads Tampa Electric's involvement with prospective cogeneration projects that may be developed within the company's retail service area. This involvement includes developing and providing interconnection cost estimates, determining appropriate relaying schemes, establishing operation and maintenance procedures and negotiating purchase power and transmission service agreement when appropriate. A detailed description of the activities conducted under the Cogeneration program is listed below:

- Plan, develop and assist in administering and implementing corporate and PSC policies and regulations in areas related to cogeneration activities.
- Provide consultation, data and other specific information on a daily basis to cogeneration customers, consultants, industry executives, PSC and other governmental agencies, developers, other utilities and various media publications regarding cogeneration policies, PSC rules, avoided cost rates and other related criteria.
- Prepare testimony and represent Tampa Electric at hearings, rulemaking and workshop sessions, and specific tariff activities before the PSC and other governmental agencies.
- Conduct research and development, data acquisition and economic analyses that provide reliable criteria upon which to evaluate the feasibility of cogeneration and small power production facilities.
- Prepare and issue monthly correspondence to cogeneration customers which includes a payment statement, hour-by-hour energy payment rates for preliminary and final energy payments, identification of hourly differences between preliminary and final energy payments and early capacity payment accrual accounts.
- Obtain appropriate initial and subsequent renewal Certificates of Insurance for each cogeneration customer interconnected with Tampa Electric and for each cogeneration customer under contract with the company, sufficient to cover the customer's liability with the company.
- Prepare monthly and quarterly reports of cogeneration activities, avoided costs, etc., for submittal to the PSC.
- Review monthly O&M bills for a customer's substation and transmission interconnections with the company.
- Determine if each customer's monthly contract standby demand level remains appropriate, and when ratcheted, the new level does not exceed the customer's generator capacity.
- Direct communications and develop the negotiations and final contractual language for interconnection, operating and transmission service agreements with cogeneration and small power production facilities.
- Assist the company's engineering and maintenance personnel with cogeneration maintenance procedures and cost estimates.
- Coordinate all cogeneration-related activities with other company departments.
- Develop the company's forecast of annual sales to cogeneration customers.
- Serve as a resource for budgeting non-fuel revenues from cogeneration customers for transmission service transactions, O&M on interconnected facilities and standby service from the company.
- Prepare and distribute the company's Twenty-Year Cogeneration Forecast.

Industrial Load Management (GSLM 2&3). This is a load management program for large industrial customers with interruptible loads of 500 kW or greater. The program was approved by the PSC in Docket No. 990037-EI, Order No. PSC-99-1778-FOF-EI, issued September 10, 1999. Assessments for customer participation are conducted every six months. The monthly credit for this program is determined annually in the ECCR Clause.

Conservation Research and Development (R&D). This program is in response to Rule 25-17.001 (5) (f), F.A.C., that requires aggressive R&D projects be, ". . . an ongoing part of the practice of every well managed utility's programs." It is also in support of PSC Order No. 22176, dated November 14, 1989, requiring utilities to ". . . pursue research, development, and demonstration projects designed to promote energy efficiency and conservation." R&D activity will be conducted on proposed measures to determine the impact to the company and its ratepayers and may occur at customer premises, Tampa Electric facilities or at independent test sites. Tampa Electric will report program progress through the annual ECCR True-Up filing.

Renewable Programs

Renewable Energy Systems Initiative. This initiative is a five-year renewable energy pilot program that uses rebates and incentives to encourage the following: (1) the installation of solar photovoltaic (PV) and solar water heating (SWH) technologies on existing and new residential and commercial premises; (2) the installation of PV on emergency shelter schools coupled with an educational component for teachers and students; and (3) the installation of SWH on low income housing done in partnership with local non-profit building organizations.

The program will have annual funding capped at $1.53 million. The projected annual allocation of the funding will be 69 percent for PV installations on residential and commercial premises, 10 percent for school PV, 11 percent for SWH installations, and 10 percent for overall program administration. With an annual funding cap in place, the company will use a reservation process to manage fund allocations. This will allow for any unused funds in a specific area to be reallocated to other components of the overall program so as to maximize the installation of various renewable technologies.

Residential and Commercial PV. This component of the program will provide incentives for the installation of PV on residential and commercial premises. The allocation of funds for this endeavor will be split at 60 percent for residential and 40 percent for commercial. Participants must agree to have the system interconnected to the grid with an interconnection agreement in place once installation has occurred. Residential & Commercial PV Systems are fixed at $2/Watt incentive, with a maximum incentive of $20,000

Residential SWH. This component of the program will provide incentives for the installation of SWH on residential premises. The projected allocation of funds for this endeavor will be split at a minimum of 80 percent for existing residential premises and a maximum of 20 percent for new residential premises. Residential Solar Water Heaters receive a rebate of $1,000 per unit.

School PV. This component of the program will provide capital funding for the installation of PV on emergency shelter schools and will be coupled with an educational component for teachers and students to evaluate and understand the performance and benefits of PV. Tampa Electric will explore partnership opportunities through the Florida Solar Energy Center's E-Shelter program to enhance the effectiveness and deployment of resources. The company anticipates installing one 10 kW system per year and maintaining each system for a five-year period. These five systems will allow for at least one emergency shelter school in each county of the company's service area to have PV as a backup source of power during emergencies. The equipment cost of each system will be capitalized for five years with the amortization costs collected through the company's ECCR Clause. Subsequent to full depreciation, the system will be donated to the respective school for the majority balance of its life.

Low Income SWH. This component of the program will provide for the installation of SWH systems on low income housing done in partnership with local non-profit building organizations. Based on historical building activity from these organizations, the company anticipates five installations per year for the five-year period.

Renewable Energy Program. This program provides customers with the option to purchase 200 kWh blocks of renewable energy for $5 per block to assist in the delivery of renewable energy to the company's grid system. This specific effort provides funding for renewable energy procurement, program administration, evaluation and market research.

Renewable energy participants will be served from the existing electrical system. Renewable energy may not be delivered to the customer, but will displace energy that would have otherwise been produced from traditional fossil fuels. Tampa Electric will report program progress through the annual ECCR True-up and Projection Filings.

E. Florida Public Utilities Company

Residential Programs:

Residential Energy Survey: The Residential Energy Survey is designed to provide customers with energy conservation advice and to encourage the implementation of efficiency measures resulting in energy savings. During the survey, up to ten compact fluorescent bulbs are installed by the FPUC auditor in locations with the highest probability of being in use during times of peak demand. The survey process also checks the residence for possible duct leakage, and the customer is provided with information regarding further analysis and repairs should a potential problem be identified. Follow-up work monitors and tracks the installation of additional conservation features and/or duct repairs.

Residential Heating & Cooling Efficiency Upgrade: The Residential Heating & Cooling Efficiency Upgrade program is designed to reduce the rate of growth in peak demand and energy consumption by increasing the saturation of high-efficiency heat pumps and central air-conditioning systems. This objective is accomplished by installing new equipment with a minimum 14 Seasonal Energy Efficiency Rating (SEER). FPUC will provide a $100 incentive to the customer, and a $25 or $75 incentive to the equipment dealer, depending on the type of system being replaced.

Commercial Programs:

Commercial Energy Survey. The Commercial Energy Survey program is designed to meet the individual needs of large customers in identifying advanced energy conservation opportunities. The process consists of an on-site review of the facility operation, equipment, and energy usage pattern by an FPUC Conservation Specialist, who identifies areas of potential reduction in peak demand and energy consumption. The economic payback or life cycle cost for recommended improvements, along with end-use technology opportunities, is determined. During the survey, up to ten compact fluorescent bulbs are installed by the FPUC auditor in locations with the highest probability of being in use during times of peak demand.

Commercial Indoor Efficient Lighting Rebate. The Commercial Indoor Efficient Lighting Rebate program is designed to reduce peak demand and energy consumption by decreasing the load presented by commercial lighting equipment, and also by reducing the load on cooling equipment. This program features a two-tiered rebate system. Tier 1 requires that commercial customers achieve a lighting load reduction of at least 1 kW by replacing both ballasts and lamps, while Tier 2 requires a reduction of at least 1kW by replacing lamps only. Customers that

improve the efficiency of their lighting systems in this way will qualify for incentives of $0.10 per watt (Tier 1), or $0.025 per watt (Tier 2).

Commercial Heating & Cooling Efficiency Upgrade. The Commercial Heating & Cooling Efficiency Upgrade program is designed to reduce the rate of growth in peak demand and energy consumption by increasing the saturation of high-efficiency heat pumps and central air-conditioning systems in the commercial sector. This objective is accomplished by installing new equipment with a minimum 14 Seasonal Energy Efficiency Rating (SEER). FPUC will provide a $100 incentive to the customer, and a $25 or $75 incentive to the equipment dealer, depending on the type of system being replaced.

Commercial Window Film Installation. The Commercial Window Film Installation program is designed to reduce peak demand and energy consumption by decreasing the load presented on commercial air-conditioning and heating equipment. The program requires commercial customers to install solar window film with a shading coefficient of 0.45 or less on eastern facing or western facing windows. This program features an incentive of $0.50 per square foot of covered area, up to a maximum of $100, in the form of a rebate.

Commercial Chiller Upgrade. The Commercial Chiller Upgrade program is designed to reduce the rate of growth in peak demand and energy consumption by replacing existing chillers in commercial buildings with a more efficient system. This program includes water-cooled centrifugal chillers, water-cooled scroll or screw chillers, and air-cooled electric chillers. Participating customers will qualify for a rebate of up to $100 per kW of additional savings above the minimum efficiency levels.

Renewable Energy Programs:

Solar Water Heating. The Solar Water Heating program is designed to encourage the installation of solar water heaters and thereby reduce the consumption of fossil fuels. Each participating customer is eligible for only one incentive payment of $200 for the installation of a solar water heating system. The payment of incentives under this program is subject to the cap for renewable energy systems.

Solar PV. The Solar PV program is designed to encourage the installation of solar photovoltaic systems and thereby reduce the consumption of fossil fuels. Each participating customer is eligible for only one incentive payment of $2 per watt of direct current solar PV installed, up to a maximum of $5,000. The payment of incentives under this program is subject to the cap for renewable energy systems.

Energy Education Programs:

Conservation Demonstration and Development. The Conservation Demonstration and Development (CDD) program is designed to promote energy efficiency and conservation by pursuing research, development, and demonstration projects for the identification and evaluation of promising new end-use technologies. The CDD program does not focus on any specific end-use technology but, instead, will address a wide variety of energy applications.

Low Income. FPUC presently has energy education programs that identify low-cost and no-cost energy conservation measures. These programs are tailored to better assist low-income customers in managing their energy purchases.

Affordable Housing Builders and Providers. FPUC will identify the affordable housing builders within the service area and will encourage them to attend educational seminars and workshops related to energy efficient construction, retrofit programs, and financing programs. FPUC will work with sponsors to reduce or eliminate attendance fees at a minimum of two seminars and/or workshops per year.

F. Orlando Utilities Commission

Residential Programs:

Residential Energy Survey. OUC will provide three types of Residential Energy Surveys (walk-through, DVD, and on-line) designed to provide customers with energy conservation advice and to encourage the implementation of efficiency measures resulting in energy savings. The survey process includes a complete examination of the attic; heating, ventilation, and air conditioning system; air duct and air returns; window caulking; weather stripping around doors; faucets and toilets; and lawn sprinkler systems. Follow-up work monitors and tracks the installation of additional conservation features and/or duct repairs. The primary benefit of the Residential Energy Survey Program is the education it provides to customers on energy conservation measures and ways their lifestyle can directly affect their energy use.

Duct Repair Rebate. The Duct Repair Rebate Program originated in 2000 and is designed to encourage customers to repair leaking ducts on existing systems. Customers will receive up to a $150 rebate for duct repairs on their homes.

Ceiling Insulation Rebates. The ceiling insulation rebate program is designed to encourage customers to upgrade their attic insulation. Customers will receive a $100 rebate for upgrading their attic insulation to R-19 or higher.

Window Film/Solar Screen Rebates. The window film/solar screen rebate program is designed to encourage customers to install solar shading on their windows. Customers will receive up to a $100 rebate for installation of solar shading film with a shading coefficient of 0.5 or less.

High Performance Windows Rebates. Energy-efficient windows can help minimize heating, cooling, and lighting costs. The high performance windows rebate program is designed to encourage customers to install windows that improve energy efficiency in their homes. Customers will receive a $1 rebate per square foot (up to $250) for the purchase of ENERGY STAR® rated energy efficient windows.

Caulking and Weather Stripping Rebates. The caulking and weather stripping rebate program is designed to encourage customers to caulk and weather-strip their homes. Customers will receive a rebate of 50 percent of the cost (up to $50) for the caulking and weather stripping of their homes.

Wall Insulation Rebates. The wall insulation rebate program is designed to encourage customers to insulate the walls of their homes. Customers will receive a rebate of $300 for wall insulation.

Cool/Reflective Roof Rebate. The cool/reflective roof rebate program has been offered in the last couple of years and is designed to encourage customers to install new roofing to help insulate their homes. Customers will receive a rebate of $150 for ENERGY STAR® cool/reflective roofing that has an initial solar reflectance greater than or equal to 0.70.

Home Energy Fix-Up Program. The home energy fix-up program is available to residential customers with a total annual family income of $35,000 or less. Each customer must request and complete a free Residential Energy Survey. Ordinarily, Energy Survey recommendations require a customer to spend money replacing or adding energy conservation measures, which low-income customers may not have the discretionary income to implement. Under this program, OUC will arrange for a licensed, approved contractor to perform the necessary repairs and will pay 85 percent of the total cost, not to exceed $2,000. The remaining 15 percent can be paid directly or over an interest-free 12-month period on the participant's monthly electric bill.

Efficient Electric Heat Pump Rebates. The efficient electric heat pump rebate program has been offered for several years and provides rebates to qualifying customers in existing homes who install heat pumps having a seasonal energy efficiency ratio of 14.0 or higher. Currently, customers will obtain a rebate in the form of a credit on their bill of $100, $200, or $300, if they install heat pumps with a SEER rating of 14, 15, or 16 and above, respectively.

Commercial Programs

Indoor Lighting Retrofit Program. The indoor lighting retrofit program reduces energy consumption for the commercial customer through the replacement of older fluorescent and incandescent lighting with newer, more efficient lighting technologies. A special alliance between OUC and the lighting contractor enables OUC to offer the customer a discounted project cost.

Efficient Electric Heat Pump Rebates. The efficient electric heat pump rebate program started in 2009. OUC will rebate $100 for SEER 14, $200 for SEER 15, and $300 for SEER 16 and above for customers' purchase of an energy-efficient heat pump.

Duct Repair Rebates. The duct repair rebate program started in 2009. OUC will rebate up to $150 on repairs made to leaking ducts on existing systems that are 5.5 tons (66,000 BTUs) or less.

Window Film/Solar Screen Rebates. The window film/solar screen rebate program started in 2009 and is designed to help reflect the heat during hot summer days and retain heat on cool winter days. OUC will rebate customers $0.75 per square foot, up to $55 per room for window tinting and solar screening with a shading coefficient of 0.5 or less.

Ceiling Insulation Rebates. The ceiling insulation rebate program started in 2009 and was designed to increase a building's resistance to heat loss and gain. OUC will rebate customers up to $100 plus $0.07 per square foot above 1,500 square feet for ceiling insulation of R-19 or higher.

Cool/Reflective Roofs Rebates. The cool/reflective roofs rebate program started in 2009 and was designed to reflect the sun's rays and lower roof surface temperature while increasing the lifespan of the roof. OUC will rebate customers at $0.10 per square foot up to $15,000 for ENERGY STAR® cool/reflective roofing that has an initial solar reflectance greater than or equal to $0.70.

G. JEA

Residential Programs

Residential Energy Audit Program. JEA offers a home energy survey for all residential customers at no charge. A JEA representative inspects the home and offers cost-effective ideas designed to help lower energy costs. Areas of the customers home that are inspected include:

attic insulation, windows and caulking, weather stripping, water heaters, water temperature, air conditioning and heating system visual inspections, supply air & return air temperature readings, and refrigerator/freezer inspection. JEA representatives also use a wide variety of tools and literature for customer education during the inspection. No cost measures such as air conditioning & heating thermostat temperature settings, proper use of ceiling fans, water heater settings, refrigeration temperature settings, management of plug (vampire) loads, management of computer, monitor and printer loads, management of lighting systems and cleaning surfaces of heat exchangers are encouraged.

Residential Energy Efficient Products. In partnership with retail stores within the JEA service territory and manufacturers of ENERGY STAR Compact Fluorescent Light bulbs and certain ENERGY STAR appliances, JEA offers in-store coupons and markdown prices for over 30 varieties of ENERGY STAR CFLs, energy efficient light fixtures, room air conditioning units, refrigerators, dish washers, and clothes washers for JEA customers. The program is conducted by an implementation contractor. In response to customer concerns, the program has been expanded to include a used-CFL disposal program with over 40 retailers acting as Green Partner disposal sites for customers. Through locally based field representatives, JEA rebate coupons and discount price markers are displayed at participating stores and store managers provide prominent shelf displays for the products. The local field representatives also provide in-store events to promote the CFL and ENERGY STAR appliances while responding directly to customer questions and concerns and distributing JEA fact sheets on energy savings.

Green Built Homes of Florida. Green Built Homes of Florida is an incentive-based program offered by JEA and the Northeast Florida Builders Association which promotes the use of green building practices in new single family homes constructed in JEA's electric and water service area. The program promotes resource-efficient home construction by serving as an umbrella for six of the state's leading building standards. There is a maximum rebate of $1,500 per home.

Residential Solar Water Heating. This program pays a financial incentive to customers to encourage the use of solar water heating technology. There is an $800 incentive per installed solar water heating system.

Residential Solar Net Metering. The Residential Solar Net Metering Program promotes the use of solar photovoltaic systems by purchasing excess power from residential customers implementing these systems. JEA will allow customer-owned renewable generation up to 100 kW under this net metering policy. The JEA net metering policy is primarily intended to facilitate generation from renewable energy sources to offset part or all of the customer's energy requirements.

Neighborhood Efficiency Program. In partnership with the City of Jacksonville, JEA offers a three-phase program for low income customers:

- Phase 1 provides installation of 10-12 electric and water conservation products as well as an energy education package of printed information material and consultation with an energy auditor for those customers already participating in the City of Jacksonville's Rehab program for low to moderate income eligible households. Completed units equal from 60 to 200 households per year depending on City Rehab funding availability. Beginning in 2010, approximately 60 homes will also receive up to a $500 subsidy towards attic insulation.

- Phase 2 provides installation of 15 electric and water conservation products as well as the energy education package of printed material and consultation with an energy audit on a door-to-door basis in targeted neighborhoods identified by the City as having more than 50 percent of the neighborhood population at 150 percent of the Federal Poverty Guidelines, and further identified by JEA as having high winter peak consumption. Approximately 800 homes are completed per year.

- Phase 3 provides an Energy Efficient Home Maintenance kit of 12 electric and water conservation products for participants in a Housing Counseling workshop required for first time home buyers involved in the City's loan assistance programs for low to moderate income residents. Approximately 600 kits are provided annually.

Appendix 3. Related Web Sites

State Agencies and Organizations

Florida Public Service Commission, http://www.floridapsc.com/

Florida Department of Environmental Protection, http://www.dep.state.fl.us

Florida Energy and Climate Commission,
http://myfloridaclimate.com/climate_quick_links/florida_energy_climate_commission

Florida Solar Energy Center, http://www.fsec.ucf.edu/

Florida Weatherization Assistance,
http://www.floridacommunitydevelopment.org/wap/index.cfm

Florida's Local Weatherization Agencies List,
http://www.floridacommunitydevelopment.org/CommunityAssistanceContactList.pdf

U.S. Agencies and National Organizations

National Energy Foundation, http://www.nef1.org/

U.S. Energy Star Program, http://www.energystar.gov/

U.S. Department of Energy – Energy Efficiency and Renewable Energy Information,
http://www.eere.energy.gov/

U.S. Department of Energy – Consumer Energy Efficiency Tips,
http://www.eere.energy.gov/consumer/your_home/

U.S. Department of Energy – Consumer Energy Saving Information,
http://www.energysavers.gov/

Florida's Electric Utilities Subject to FEECA

Florida Power & Light Company, http://www.fpl.com/

Florida Public Utilities Company, http://www.fpuc.com/

Tampa Electric Company, http://www.tampaelectric.com/

Gulf Power Company, http://www.gulfpower.com/

Progress Energy Florida, Inc., http://www.progress-energy.com/

Orlando Utilities Commission, http://www.ouc.com/

JEA, http://www.jea.com/

Florida's Investor-Owned Natural Gas Utilities

Florida City Gas, http://www.floridacitygas.com/

Florida Public Utilities Company, http://www.fpuc.com/

Peoples Gas System, http://www.peoplesgas.com/

St. Joe Natural Gas Company, http://www.stjoenaturalgas.com/