FLORIDA PUBLIC SERVICE COMMISSION

ANNUAL REPORT ON

Activities Pursuant to the

Florida Energy Efficiency and Conservation Act

As Required by Sections 366.82(4) and 377.703(4)(f), Florida Statutes

FEBRUARY 2005

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Prepared by
Division of Economic Regulation
Florida Public Service Commission

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INTRODUCTION

Sections 366.80 through 366.85 and Section 403.519, Florida Statutes, are known as the Florida Energy Efficiency and Conservation Act (FEECA), which was enacted in 1980. FEECA places emphasis on reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, and reducing the consumption of expensive resources such as petroleum fuels. Pursuant to FEECA, the Florida Public Service Commission (Commission) has adopted rules requiring those electric utilities which are subject to FEECA to implement cost-effective conservation, or demand-side management (DSM) programs.

Section 366.82(4), Florida Statutes, directs the Commission to provide the Legislature and the Governor an annual report of the DSM goals it has adopted under FEECA, and the progress toward meeting these goals. Section 377.703(4)(f), Florida Statutes, directs the Commission to provide an annual report to the Department of Environmental Protection on "electricity and natural gas and information on energy conservation programs." The purpose of this report is to fulfill the requirements of Sections 366.82(4) and 377.703(4)(f), Florida Statues.

SECTION 1: OVERVIEW OF FLORIDA'S ELECTRICITY MARKET

1.1 FLORIDA'S GENERATING FLEET

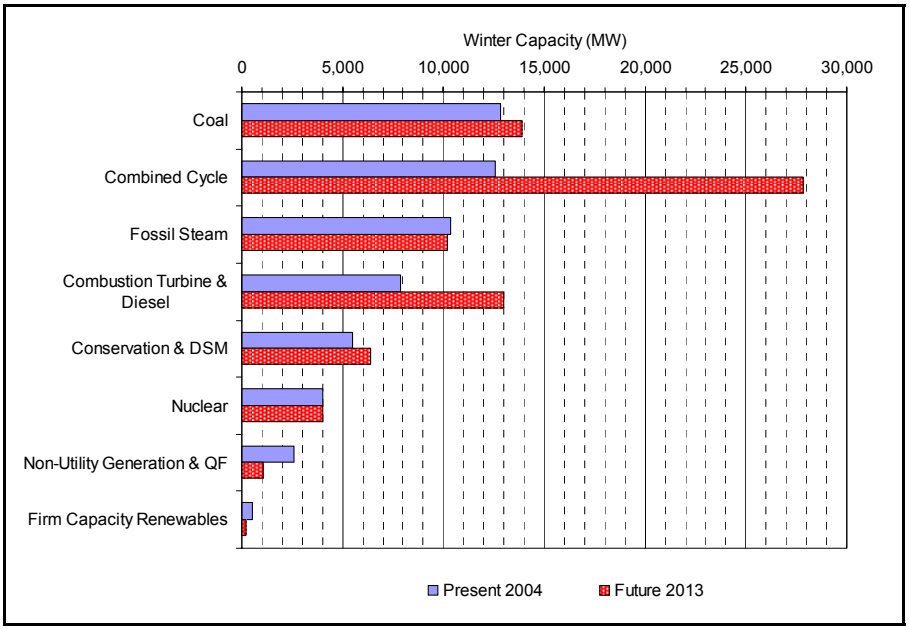
Utility conservation efforts can best be understood when placed in the context of Florida's electricity market. Florida's electrical energy needs are met by:

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

Combined, these utilities currently have 44,553 megawatts (MW) of summer electric generating capacity and 47,276 MW of winter generating capacity. During the last 10 years, Florida has added an average of approximately 900 MW of new generating capacity per year. Based on the latest planning documents, Florida is expected to add 1,500 MW of new capacity per year for the next 10 years. This additional capacity will replace long-term purchased power contracts and serve new load growth.

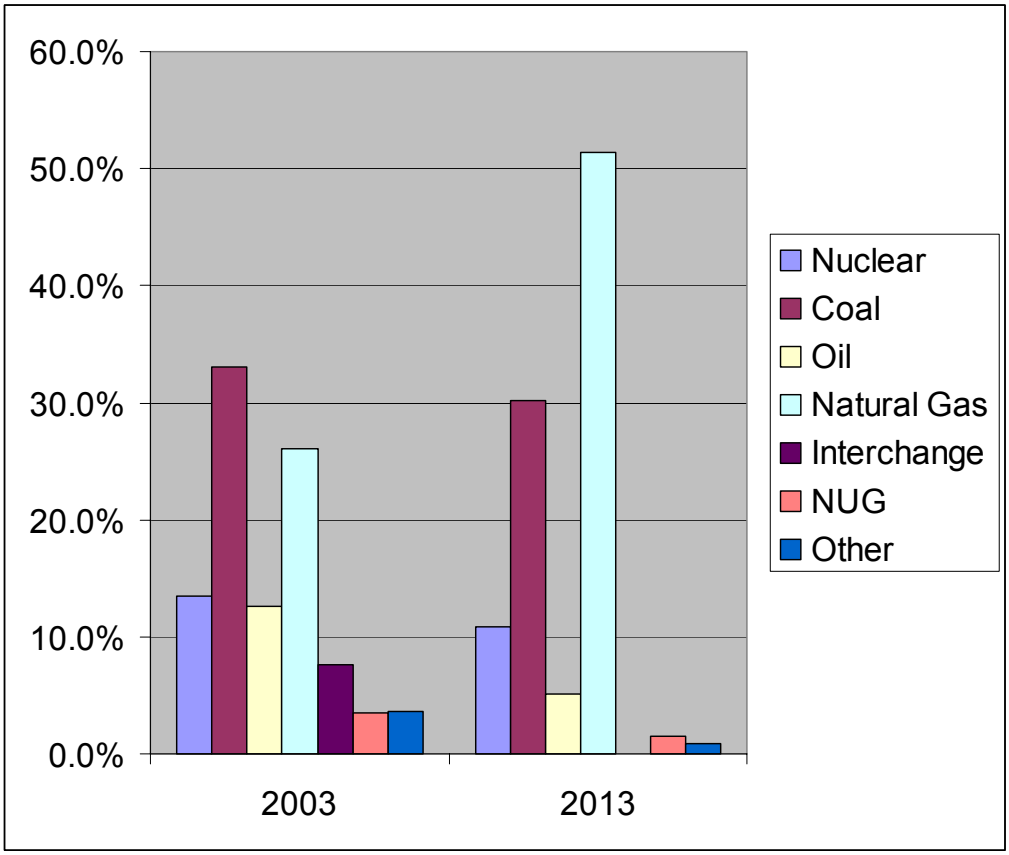
Figure 1, shown below, represents Florida's existing and planned resource mix. These resources include: the capacity from electric utility generators, conservation and demand-side management programs, purchased power contracts, and renewable generators. The electricity produced or avoided by each of these resources plays a key role in meeting Florida's growing electrical energy needs.

Figure 1: State of Florida - Electric Utility Resource Mix



Florida's electricity is produced with a diversified mix of fuel inputs. As demonstrated in Figure 2, approximately 47 percent of the net generation in year 2003 was derived from coal and nuclear generation technology. Natural gas-fired generation provided an additional 25 percent. The contribution played by natural gas is expected to increase to almost 50 percent by 2013. In 2003, 12 percent of the energy produced by Florida's electric industry was fueled by oil. By 2013, the contribution of oil in Florida's fuel mix is expected to decline to 5 percent.

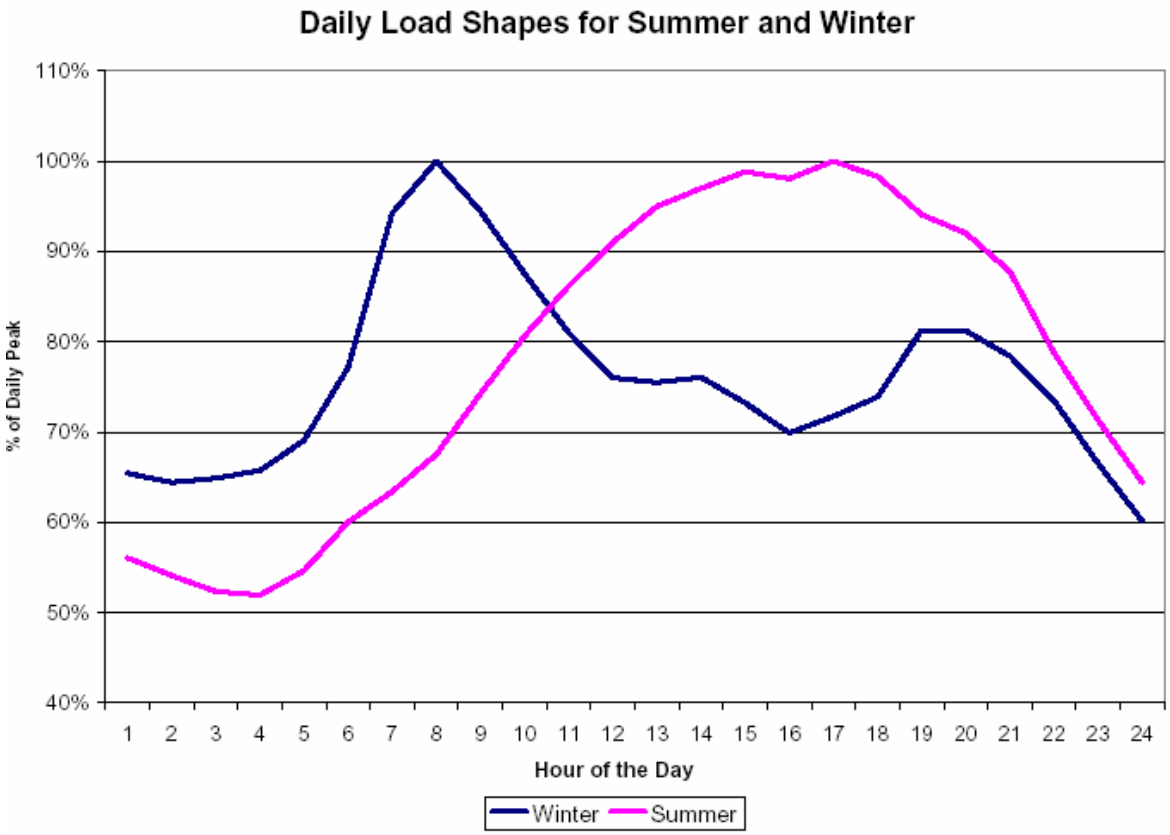
Figure 2: Energy Generation by Fuel Type in Florida



1.2 ENERGY DEMAND IN FLORIDA

Florida's peak electric demand in 2003 reached 42,583 MW in the summer and 38,223 MW in the winter months. Figure 3 depicts an example of daily load shape curves for a peak summer and winter day in Florida. As can be seen, in the summer, customer demand begins to climb in the morning and peaks at about 6 o'clock in the evening, which corresponds to the sun heating buildings, resulting in increased air conditioning loads. In contrast, the winter load curve has two peaks, the largest at 8 to 9 o'clock in the morning, followed by a smaller peak in the late evening, which corresponds to heating loads.

Figure 3: Typical Florida Daily Load Shapes



Electric utilities' resource planning processes are designed to result in sufficient installed capacity to meet the highest customer demand projected to occur, and to provide a reserve for contingencies. As such, the growth in peak demand is the primary driver of the need for new electric generating capacity. As discussed further in Section 2, utility-sponsored conservation programs serve to reduce peak demand and energy consumption, with the goal of avoiding or deferring the need for new generating capacity.

Florida's load profile is somewhat unique because the state's customer base is heavily weighted toward residential customers. As shown in Table 1, residential customers make up over 88 percent of Florida's electricity customers, purchasing 53 percent of the state's total electrical energy. Approximately 36 percent of all retail electrical energy is sold to commercial customers. At approximately 11 percent, Florida's industrial electrical energy usage is much smaller than the national average of 31 percent. Residential customers' electrical energy usage typically varies more throughout the day than industrial customers' usage. Residential customers' electrical energy usage shows more pronounced peaks in the early evening in the summer, and in the mid-morning and late evening in the winter. In contrast, industrial customers' electrical energy usage is more uniform throughout the day. Therefore the high

proportion of residential customers in Florida results in more pronounced summer and winter peak demands than in a state with a higher proportion of industrial customers.

Table 1: Customers by Class and Consumption - State of Florida, 2003

Customer Class	Number of Customers	% of Customers	Sales (GWh)	% of Sales
Residential	7,564,064	88.7	110,821	53.0
Commercial	932,976	11.0	75,647	36.2
Industrial	31,077	0.3	22,453	10.7
Total:	8,528,117	100.0	208,921	100.0

Florida has experienced high population growth rates, averaging 2.1 percent per year over the past decade. The growth in total electrical energy consumption has averaged 2.61 percent per year over the same period, exceeding Florida's population growth rate. Florida's population is expected to grow at 1.75 percent per year over the next decade, indicating a continued strong growth in electrical energy consumption within the state. According to the Florida Reliability Coordinating Council, summer and winter peak demand are expected to grow at 2.45 and 2.53 percent annually over the next ten years, respectively. Total electrical energy consumption is projected to grow at 2.41 percent per year over the next ten years.

SECTION 2: THE FLORIDA ENERGY EFFICIENCY ACT

2.1 HISTORY OF FEECA

The Florida Energy Efficiency and Conservation Act (FEECA) was enacted in 1980. FEECA places emphasis on reducing the growth rates of weather-sensitive peak demand, reducing and controlling the growth rates of electricity consumption, and reducing the consumption of expensive resources such as petroleum fuels. FEECA initially required the Public Service Commission to adopt rules requiring all electric utilities to implement cost-effective conservation, or demand-side management (DSM) programs.

Two major changes resulted from the legislative sunset review of the FEECA statute in 1989: 1) addition of language to encourage cogeneration; and, 2) 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. At the time, the 12 utilities which exceeded the sales threshold comprised approximately 94 percent of all retail electricity sales in Florida.

The Legislature further revised the FEECA statute in 1996. This revision increased the minimum retail sales threshold for municipal and cooperative utilities subject to FEECA to 2,000 GWh. All investor-owned utilities are subject to FEECA, regardless of sales. Pursuant to the statute, retail sales for each utility were measured as of July 1, 1993. Table 2 lists the utilities currently subject to FEECA. These utilities are currently responsible for approximately 87.6 percent of the state's total electrical energy sales.

Table 2: Energy Sales by Utilities Subject to FEECA

Utilities Subject to FEECA	2003 Energy Sales (GWh)	% of Total State Energy Sales
Investor-Owned Utilities:		
Florida Power & Light Company	99,635.3	46.5 %
Progress Energy Florida	37,956.7	17.7 %
Tampa Electric Company	18,242.3	8.5 %
Gulf Power Company	11,248.9	5.2 %
Florida Public Utilities Company	723.0	0.3 %
Municipal Utilities:		
JEA	12,582.9	5.9 %
Orlando Utilities Commission	7,567.4	3.5 %
State Total:	**214,493.0**	**87.6%**

2.2 COMMISSION RULES IMPLEMENTING FEECA

In 1980, the Commission adopted rules requiring all electric utilities to implement cost-effective DSM programs to meet the requirements of the newly enacted FEECA statute. In June 1993, the Commission revised its rules, requiring the establishment of numeric DSM goals for summer and winter demand (MW), and annual energy sales (GWh), over a ten-year period. These rules now apply to the seven Florida utilities subject to FEECA. The rules also require annual reporting, allowing the Commission to more closely monitor and evaluate the DSM activities of the FEECA utilities. Pursuant to Rule 25.17.0021(2), Florida Administrative Code, the Commission sets DSM goals for each utility at least once every five years. Within ninety days after the Commission issues its order approving DSM goals, each affected utility must file a DSM Plan with the Commission for approval. These plans describe the DSM programs to be offered to customers which are designed to generate the demand and energy savings required by each utility's DSM goals.

DSM goals were most recently established for the seven utilities subject to FEECA on August 9, 2004, in dockets numbered 040029-EG through 040035-EG. The Commission voted to maintain the numeric goals set at zero for JEA and OUC, because these two utilities could not identify any additional cost-effective DSM programs to offer. The level of demand and energy goals for several of the investor-owned utilities subject to FEECA is lower than the goals approved by the Commission in 1999. One of the primary reasons for decreased numeric goals was the declining cost of new generating units. This reduced the potential benefits resulting from the deferral of generating capacity to the general body of a utility's ratepayers. Without a corresponding decrease in the cost of delivering DSM programs, fewer utility-sponsored DSM programs were cost-effective. Also, expected changes in the building code will reduce the potential for utility-sponsored DSM program demand and energy savings by increasing the energy-efficiency level required in new construction. In addition, some existing DSM programs had approached their saturation levels, reducing the future market potential of these DSM measures.

The Commission approved DSM Plans filed by Progress Energy and FPUC, and acknowledged the DSM Plans of OUC and JEA, on August 9, 2004. The Commission approved TECO's DSM Plan with modifications and FPL's DSM Plan on February 1, 2005. Gulf Power filed a petition for approval of its proposed DSM Plan on December 1, 2004. Gulf Power's petition is scheduled to be heard by the Commission at its March 1, 2005 Agenda Conference.

2.3 CONSERVATION COST-EFFECTIVENESS REQUIREMENT

Historically, investor-owned utility DSM programs approved by the Commission for cost-recovery have benefited all utility ratepayers, not just those ratepayers participating in the programs. DSM programs benefit program participants by reducing their electric bills. Cost-effective DSM 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.

The Commission also requires investor-owned utilities to address the dynamic nature of the cost-effectiveness of DSM programs by re-evaluating the programs on a regular basis. If a program is found to be no longer cost-effective, the utility should file a petition before the Commission requesting changes to, or discontinuation of, the program.

As discussed above, the Commission sets numeric DSM goals for the two municipal utilities currently subject to FEECA, OUC and JEA. However, the Commission does not regulate the rates of municipal utilities. Therefore, the Commission does not review the DSM costs of these utilities for cost-recovery.

2.4 CONSERVATION ACHIEVEMENTS

As a whole, utility-sponsored DSM programs have reduced statewide summer peak demand by an estimated 4,588 MW, winter peak demand by 5,491 MW, and energy consumption by an estimated 5,132 GWh, since 1980. These estimated savings include DSM programs sponsored by both the FEECA utilities and those which are not currently covered under FEECA. Based on the winter demand reduction, this has deferred the need for eleven typical 500 MW plants, or enough capacity to serve approximately 1.6 million households. By 2013, DSM programs are forecasted to further reduce aggregate peak demand and energy consumption, as summarized in Table 3. This will benefit Florida's ratepayers by deferring the need for additional generating capacity.

Table 3: Estimated Cumulative Savings from Utility-Sponsored DSM Programs

	2003	By 2013
Summer Peak Demand	4,588 MW	5,165 MW
Winter Peak Demand	5,491 MW	6,393 MW
Energy Consumption	5,132 GWh	6,618 GWh

Figures 4 and 5, display the projected impact of DSM on summer and winter peak demand, respectively, through 2013.

Figure 4: Impact of DSM on Summer Peak Load - State of Florida

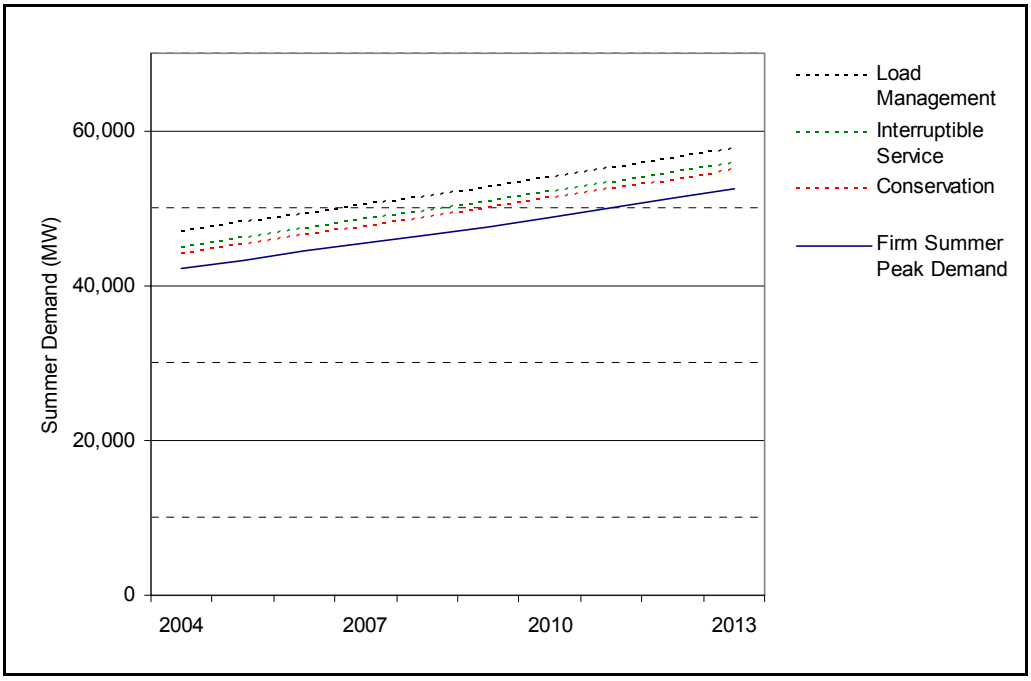


Figure 5: Impact of DSM on Winter Peak Load - State of Florida

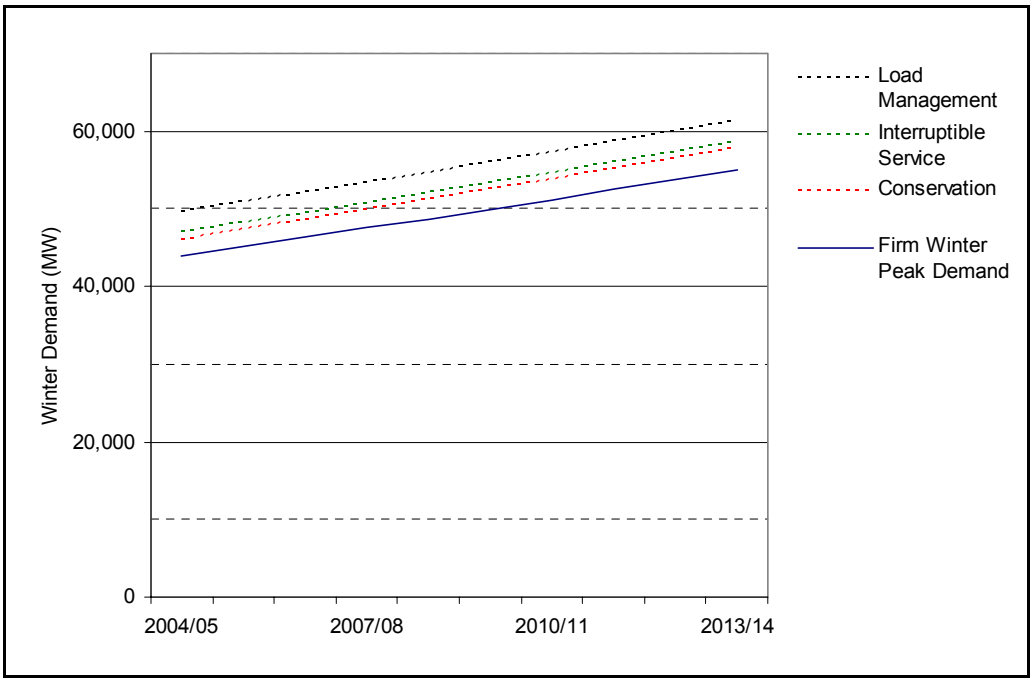


Figure 6 represents the projected impact of the energy savings from DSM programs on energy usage through 2013.

Figure 6: Impact of DSM on Net Energy for Load - State of Florida

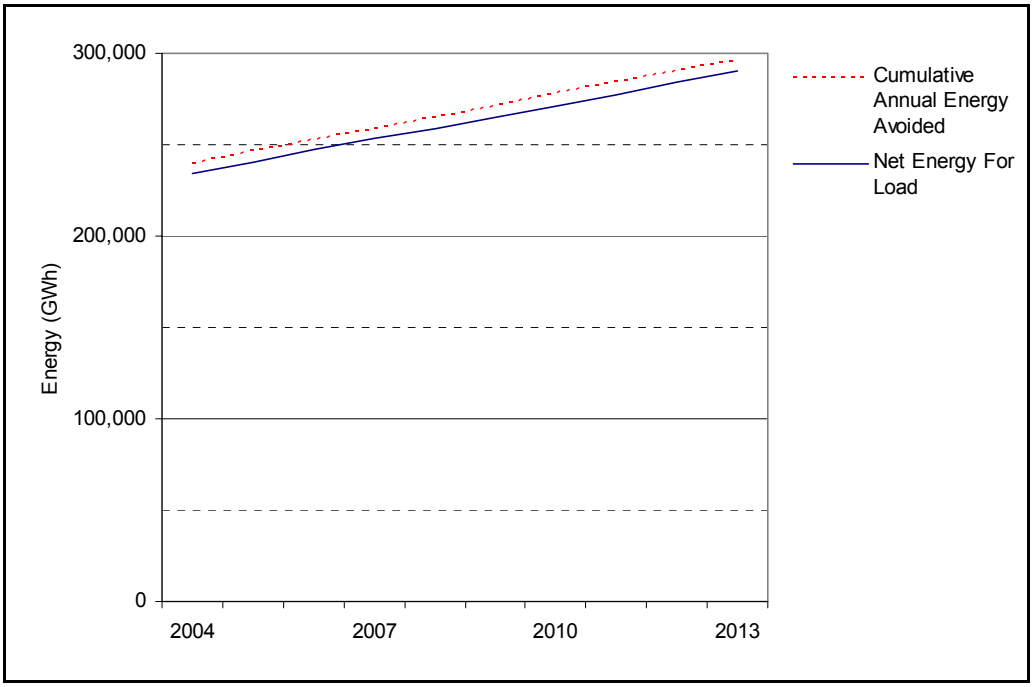


Table 4 displays the reported DSM achievements of the five investor-owned utilities during 2003, compared to the utilities' 2003 DSM goals as set by the Commission in 2000. Each utility's DSM goals were re-set in 2004.

Table 4: Comparison of 2003 DSM Achievements with Approved Goals

	Winter MW Goals	Reported Winter MW Reduction	Summer MW Goals	Reported Summer MW Reduction	Annual GWh Goals	Reported GWh Reduction
Progress Energy:						
Residential	40	41	13	16	19	25
Commercial/Industrial	4	5	4	7	2	4
FPL:						
Residential	30.4	30.8	43.4	50.3	90.2	84.6
Commercial/Industrial	12.7	94.1	27.0	115.0	30.7	111.6
Gulf Power:						
Residential	25	8	21	6	15	7
Commercial/Industrial	1	10	1	19	2	9
TECO:						
Residential	12.9	12.7	4.6	6.4	8.5	16.1
Commercial/Industrial	1.4	0.8	3.1	1.8	11.7	13.0
FPUC:						
Residential	.16	.15	.13	.12	.28	.22
Commercial/Industrial	.07	.11	.12	.19	.30	.53

Progress Energy met or surpassed all its demand and energy goals for 2003. FPL met or surpassed all of its demand goals and its Commercial/Industrial (C/I) energy goal for 2003. FPL did not meet its residential energy goal for 2003; however, FPL has surpassed its cumulative residential energy goal when previous years are taken into account. Gulf Power did not meet its residential demand or energy goals, due primarily to lower than expected results from two programs, the GoodCents Select and Ground Source Heat Pump programs. Gulf lowered the expected participation levels for these two programs in its newly revised goals, which were approved by the Commission on August 9, 2004. TECO met its 2003 residential summer demand and its energy goals. TECO did not meet its residential winter demand goal or C/I demand goals for 2003 due primarily to lower than expected participation levels. TECO's most recently approved goals have been reduced to reflect current participation levels. TECO has met its cumulative C/I demand goals. FPUC surpassed all of its C/I goals for 2003. FPUC did not meet its 2003 residential goals; however, FPUC has surpassed its cumulative residential goals.

2.5 CONSERVATION COST RECOVERY

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 (ECCR). As discussed above, utilities are required to present evidence that these programs are cost-effective and therefore benefit the general body of ratepayers prior to seeking cost recovery through the ECCR. Program modifications must also be approved by the Commission prior to a utility seeking cost recovery through the ECCR.

The Commission conducts ECCR proceedings during November each year. During these proceedings, 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 for each rate class on November 30, 2004. These factors take effect with the first billing cycle of 2005. Table 5 displays the current conservation cost recovery factors which are applied to residential customers' bills, and the impact on a typical residential customer's monthly bill.

Table 5: 2005 Residential Conservation Cost Recovery Factors

	Residential Conservation Cost Recovery Factor (cents per kWh)	Typical Residential Monthly Bill Impact (based on 1,000 kWh)
FPL	.148	$1.48
FPUC	.054	$0.55
Gulf	.088	$0.88
Progress	.170	$1.70
TECO	.098	$0.98

Since the enactment of FEECA in 1980, investor-owned electric utilities have recovered over $3.6 billion of conservation program expenditures through the ECCR clause. Table 6 depicts the annual DSM expenditures which have been recovered from customers by Florida's investor-owned utilities through the ECCR clause over the past ten years.

Table 6: DSM Expenditures Recovered Through the ECCR Clause

	FPL	Gulf	Progress	TECO	FPUC	Total
1994	158,994,633	2,223,518	102,953,070	18,424,807		282,596,028
1995	168,281,117	2,364,898	86,088,341	17,593,583		274,327,939
1996	179,009,536	2,635,285	80,423,465	19,273,026	125,688	281,467,000
1997	170,921,157	2,689,297	74,359,150	18,462,512	223,589	266,655,705
1998	164,483,007	2,356,560	77,936,016	19,421,194	284,326	264,481,103
1999	158,376,162	2,963,888	68,431,962	18,129,268	300,415	248,201,695
2000	158,312,902	3,872,004	66,052,277	16,656,250	323,102	245,216,535
2001	157,660,093	4,984,286	64,831,597	17,600,060	358,054	245,434,090
2002	162,062,655	5,436,083	63,150,036	16,970,240	418,498	248,037,512
2003	151,354,540	6,710,375	62,943,509	17,253,491	392,653	238,654,568

2.6 INTERCONNECTION OF SMALL PHOTOVOLTAIC SYSTEMS

In addition to establishing conservation goals, the Commission has recently adopted a rule regarding small photovoltaic systems which furthers the goals of FEECA. On October 2, 2001, the Commission voted to approve Rule 25-6.065, Florida Administrative Code, Interconnection of Small Photovoltaic Systems (SPS). The SPS Rule was adopted to facilitate the interconnection of small solar powered generators to the electric grid, reducing the need for fossil-fueled generation.

Previously in Florida, consumers interested in interconnecting a small photovoltaic system to the grid were forced to negotiate this interconnection with a utility on an individual basis. However, in order to reduce the costs of this process for consumers, the Commission approved the SPS Rule. The Rule defines an SPS as a solar powered generating system with a capacity of 10 kW or less which is primarily used to offset all or part of the customer's current electricity requirements. The Rule facilitates the interconnection of these systems by establishing standards for the interconnection of SPS with the electric grid and by requiring investor-owned electric utilities to file a standard interconnection agreement with the Commission. Pursuant to the Rule, if the photovoltaic system is 10 kW or less and the owner has signed an interconnection agreement with the utility in accordance with Commission Order No. PSC-02-0109-FOF-EU, then the photovoltaic installations may be interconnected with that utility's grid. The Rule further encourages interconnection by allowing net metering of the electrical energy generated from such systems, and reducing the insurance requirements for participating customers.

The Rule provides utilities two options for accounting for any power that is delivered to the utility by the SPS. The SPS customer may "net meter" any excess energy delivered to the utility by using a single standard watt-hour meter capable of reversing directions to offset recorded consumption by the customer. Any excess may be accumulated over a 12-month period. Alternatively, at the option and expense of the utility, the utility may install additional metering equipment on the customer's premises to measure any excess kWh produced by the SPS and delivered to the utility. The value of such excess generation is credited to the customer's bill based on the host utility's COG-1 tariff (the rate paid to qualifying facilities for as-available energy), or by other applicable tariffs approved by the Commission.

The standardized Interconnection Agreements for each investor-owned utility (IOU) were administratively approved between February 22, 2002, and August 28, 2002, and incorporated into each of the IOU's tariffs. All of the SPS tariffs provided for the use of a single meter with dual metering capability. These meters are used to measure any energy which is delivered to the grid from a customer's SPS. Customers are compensated for any energy which is delivered to the grid according to each IOU's SPS interconnection tariff.

On July 15, 2003, the Commission directed its staff to continue to monitor the success of the Rule and to provide an update to the Commission after 18 months. The following list provides the progress of each IOU in interconnecting customer owned SPS:

Florida Power & Light: FPL reported that since its SPS standard interconnection agreement was approved on February 22, 2002, FPL has connected eight small photovoltaic customers. Four of the systems were interconnected in 2002, while two systems were connected per year in 2003 and 2004. The systems range in capacity from 1.2 kW to 7 kW. The total capacity for the eight systems is 22.7 kW. All interconnections are through single meters with dual capability. This allows FPL to record power in both directions. FPL credits each customer's electric bill for any excess kWhs supplied to the grid based on as-available energy according to its COG-1 tariff.

Florida Public Utilities Company: FPUC has received one inquiry on SPS interconnection since its SPS interconnection agreement was approved on April 29, 2002. This inquiry did not result in interconnection. No additional requests for interconnection have been made since FPUC's last update was provided to the Commission in June 2003.

Gulf Power Company: Gulf has interconnected one SPS since its SPS agreement was approved on June 28, 2002. The 2.4 kW capacity system is owned by a residential customer. No additional SPS systems have been interconnected since Gulf's last update in June 2003. Gulf is using single meters with dual capability to determine the quantity of excess energy supplied to

the grid by the interconnected SPS. Gulf plans to credit the customer's electric bill for any excess kWh supplied to the grid based on its COG-1 tariff.

Progress Energy Florida: Progress's SPS interconnection agreement was approved by the Commission on August 19, 2002. Progress reported that since its last report to the Commission in July 2003, the company has entered into 11 SPS interconnection agreements. These systems range in capacity from 1.2 to 5 kW, with a total capacity of 36.66 kW. Progress is using single, solid-state meters with dual capability; customers receive a credit to their bill at Progress's avoided cost for any excess kWh supplied to the grid.

Tampa Electric Company: TECO reported that since its SPS interconnection agreement was approved on May 14, 2002, the company has received 12 SPS interconnection inquiries and one proposal for interconnection. Eight of these inquiries and one proposal were received after TECO's last update was provided to the Commission in June 2003. According to TECO, the proposed interconnection agreement was not finalized due to an apparent lack of funding on the part of the interested customer. TECO noted that a 4 kW SPS owned by TECO was interconnected at the Walker Middle School in Odessa Florida on May 1, 2004.

SECTION 3: CONSERVATION ACTIVITIES OF ELECTRIC UTILITIES

3.1 TYPES OF CONSERVATION PROGRAMS

Each FEECA utility offers some form of education on energy conservation as well as energy audits. Educational programs and announcements provide consumers with basic information on techniques to conserve energy as well as information on energy programs available through the utility. The energy audit program serves as the foundation for all other DSM programs by helping customers determine which utility-sponsored conservation programs may be appropriate for their needs. As mandated by Section 366.82(1), Florida Statutes, energy audits are available free of charge to all residential customers. For a fee, many utilities will provide more detailed audits at the customer's request. Some of the major utilities also educate the construction industry on the Florida Energy Efficiency Code for Building Construction.

A variety of specific conservation programs are offered by the utilities. Programs such as ceiling insulation upgrade, residential energy management, window film and duct leak testing programs are offered, with the utility paying a financial incentive. Programs are also offered in which cash incentives are paid by the utility to encourage the purchase of energy-efficient equipment for new installations or retrofit, such as heating, air cooling, water heating and lighting equipment. Several utilities offer incentives to commercial and industrial customers to support their investment in capital equipment with the potential for substantial demand and energy savings.

Load management is an important part of the utilities' energy conservation plans. Participants are paid for allowing the utility to control when certain electric appliances are available for use. The few hours the appliances are not available usually occur during peak hours; however, these few hours translate into savings for the utilities in terms of avoiding the construction of high cost peaking generation.

An important part of conservation activities customers do not readily observe is research and development. Promising technologies currently being investigated are photovoltaics and additional uses of thermal storage. The next generation of approved conservation programs in Florida may come in large measure from the investment utilities are making today in research and development. For example, several Florida utilities are conducting research programs to identify customer interest in renewable energy, and the cost and technical feasibility of implementing these technologies.

3.2 CONSERVATION ACTIVITIES OF FEECA UTILITIES

A. Florida Power & Light Company

On August 9, 2004, by Order No. PSC-04-0763-PAA-EG, the Commission set new numeric goals for Florida Power & Light for the period 2005 through 2014. The Commission also required FPL to file a DSM Plan, containing programs designed to meet these goals, within 90 days. As displayed in Table 7, FPL's newly established residential demand goals are higher than its previous goals, while FPL's new energy and C/I demand goals are lower. FPL attributed the decrease primarily to the new minimum efficiency levels in the Florida State Energy Code, which will take effect in 2005. The increased efficiency level required by Florida's energy code will reduce the potential demand and energy savings of several of FPL's programs. The greatest impact of the building code changes can be seen in FPL's C/I Building Envelope; Heating, Ventilating, and Air-Conditioning; and Efficient Lighting Programs.

Table 7: Comparison of FPL's Previous and Revised DSM Goals

Year	*Residential*			*Commercial/Industrial*		
	Summer MW	**Winter MW**	**Annual GWh**	**Summer MW**	**Winter MW**	**Annual GWh**
Previous Goals *(cumulative 2000-2009)*	485.9	372.4	943.2	278.8	133.0	343.4
Revised Goals *(cumulative 2005-2014)*	586.9	405.1	931.0	214.9	107.3	127.6

The Commission approved FPL's 2005 DSM Plan on February 1, 2005, which includes the following DSM programs:

Residential Programs:

1. *Residential Building Envelope:* This program offers incentives to residential customers to install energy efficient roof and ceiling insulation measures. An the incentive of $570 per summer kW demand reduction is offered. The program also includes reflective roof measures, with a maximum incentive of $461 per summer kW.

2. *Duct System Testing and Repair Program:* This program provides reduced cost duct system testing to identify leaks in air conditioning duct systems, and encourages the repair of those leaks by qualified contractors. Incentives are offered for duct system repair. FPL offers a maximum incentive of $466 per summer kW reduction.

3. *Residential Air Conditioning Program:* This program offers incentives to customers to purchase higher efficiency heating, ventilating, and air conditioning equipment. FPL has expanded the program to include plenum repair measures, with a maximum incentive level of $412 per summer kW reduction. FPL has also increased incentive levels for straight cool and heat pump units to a range not exceeding $356 to $490 per summer kW reduction.

4. *Residential Load Management Program (On Call Program):* This is an existing load management program in which direct load control equipment is installed on selected customer end-use equipment, allowing FPL to control these customer loads as needed. Qualifying end-use equipment includes central electric air conditioners, central electric space heaters, conventional electric water heaters and swimming pool pumps. As part of its approved Residential Load Control Pilot Project, FPL has closed the On Call Program to new participants.

5. *Residential New Construction Program (BuildSmart):* BuildSmart encourages the design and construction of energy efficient homes by offering: education to contractors on energy efficiency measures, construction design reviews and home inspections, and an energy rating system. FPL proposed no changes to this program as modified by Order No. PSC-04-1046-PAA-EG, issued in Docket No. 040660-EG, in its 2005 DSM Plan. However this order is the subject of an ongoing protest, and will be addressed in a separate docket.

6. *Residential Low Income Weatherization Program:* This program combines energy audits and incentives to encourage low income housing administrators to retrofit homes with energy efficiency measures. FPL offers incentives for HVAC maintenance and reduced air infiltration measures.

7. *Residential Conservation Service:* This program offers a walk-through energy audit, a computer generated Class A audit, and a customer-assisted energy audit. For customer-assisted energy audits, a mail-in, phone, or Internet audit option may be offered. FPL does not apply demand and energy savings from this program towards its goals.

Commercial/Industrial Programs:

1. *C/I HVAC Program:* This is an existing program which offers C/I customers financial incentives to upgrade to higher efficiency HVAC equipment. FPL has made several changes to the program in its 2005 DSM Plan, including: 1) decreasing the maximum thermal storage incentive from $367 per kW to $350 per summer kW reduction; 2) decreasing the maximum incentive for chillers from $77 per kW to $75 per summer kW; 3) adopting minimum program efficiencies using ASHRAE 90.1 2001 as a baseline; 4) adding incentives for energy recovery ventilator units with a maximum incentive of $399 per summer kW reduction; and, 5) eliminating incentives for rooftop unit sealing.

2. *C/I Efficient Lighting Program:* The Efficient Lighting program offers C/I customers financial incentives to install high efficiency lighting measures at the time of replacement. FPL offers an incentive of $101 per summer kW reduction.

3. *C/I Building Envelope Program:* This existing program offers financial incentives to C/I customers to install high efficiency building envelope measures such as roof/ceiling insulation and reflective roof coatings. FPL offers an incentive not exceeding $181 per kW. FPL has eliminated incentives for window-related technologies.

4. *Business Custom Incentive Program:* This is an existing "catch-all" program for cost-effective C/I efficiency measures which are not included in other FPL programs. DSM measures must reduce or shift at least 25 kW during peak hours, have verifiable demand and energy savings, and pass RIM.

5. *Business On Call Program:* This is an existing program which offers incentives to General Service and General Service Demand customers for the direct control of participating customers' direct expansion, central air conditioners.

6. *C/I Demand Reduction Program:* This is an existing program designed to reduce peak demand by allowing the direct control of customer loads of 200 kW or greater during periods of extreme demand or capacity shortages. Participants contract for a firm demand level which may not be exceeded during capacity shortage periods. In return, participants receive a monthly credit of $4.75 per kW during a specified control period less their firm demand. Participants must provide a five-year termination notice to discontinue service under this rider.

7. *Business Energy Evaluation:* This is a C/I audit program which offers free standard level energy evaluations. More detailed evaluations are available with costs shared between FPL and the participating customer. Participation in FPL's other C/I DSM programs is promoted through this program.

8. *Cogeneration and Small Power Production:* This program is designed to facilitate FPL in complying with all regulatory requirements concerning qualifying facilities and small power producers. One role of the program is to assist customers in the evaluation of potential cogeneration projects, including self-generation. FPL does not project demand and energy savings from this program. Therefore a cost-effectiveness analysis is not performed, and demand and energy savings attributable to the program are not included in FPL's goals.

9. *C/I Load Control (CILC):* The CILC program reduces peak demand by controlling customer loads of 200 kW or greater during peak periods. In return, participating customers receive service under a reduced rate. Pursuant to Order No. PSC-99-0505-PCO-EG, issued March 10, 1999, the program has not been offered to new participants since December 31, 2000. However, the program will continue for customers participating prior to December 31, 2000.

Research & Development and Pilot Programs:

1. *Conservation Research and Development Program (CRD)*: This is an umbrella research project under which new DSM technologies are analyzed.

2. *Residential On Call Pilot Project*: Under this project, approved by the Commission on March 31, 2003, FPL has opened a new pilot project rate schedule with reduced incentives for all new residential load control participants. FPL has also closed the existing On Call rate

schedule to additional participants. FPL will monitor dropout rates and response rates of new participants. As of July 2004, FPL had over 141,000 participants, with a savings to the ECCR Clause (as compared to incentives offered under the On Call Program) of $4.6 million. FPL has experienced few customer complaints regarding the reduced incentives. The project was approved through March 31, 2006.

3. *Green Power Pricing Research Project*: This voluntary program provides interested residential customers with the opportunity to support renewable energy development. The three-year pilot program was approved by the Commission on January 16, 2004, and includes a special tariff, under which participating residential customers voluntarily pay a $9.75 monthly premium. In exchange, FPL purchases a 1,000 kWh block of tradable renewable energy credits. For every 10,000 customers participating in the program, FPL will also install or purchase the energy from 150 kW of solar generation in Florida. The research project will be completed in December 2006, and has a Commission-approved spending cap of $1.5 million over the study period. As of June 2004, FPL had 4,088 participating customers, with revenues of $101,322 and expenses of $91,925.

4. *Business Green Energy Research Project*: Under the newly-approved Business Green Energy Research Project, FPL will investigate its business customers' preferences regarding renewable energy and their willingness to pay the incremental costs of such energy. If it is determined to be feasible, FPL plans to design and implement a green pricing program that addresses the interests of its business customers. FPL expects that the development and analysis phase of the project will be completed within 2 years, and has requested recovery of expected expenditures capped at $700,000 over the life of the project.

B. Progress Energy Florida

On August 9, 2004, by Order No. PSC-04-0769-PAA-EG, the Commission set new numeric goals for Progress Energy for the period 2005 through 2014. As seen in Table 8, with the exception of the C/I energy goal, the Commission approved slight reductions in each of Progress Energy's numeric goals as compared to Progress Energy's previous goals. The primary reasons for the reduced goals are: 1) the forecasted impact of more stringent energy codes, particularly on residential air conditioning systems; and, 2) decreased participation in certain existing DSM programs due to saturation.

Table 8: Comparison of Progress Energy's Previous and Revised DSM Goals

Year	*Residential*			*Commercial/Industrial*		
	Summer MW	**Winter MW**	**Annual GWh**	**Summer MW**	**Winter MW**	**Annual GWh**
Previous Goals *(cumulative 2000-2009)*	125	389	185	38	37	19
Revised Goals *(cumulative 2005-2014)*	92	366	161	36	34	29

The Commission also approved Progress Energy's DSM Plan on August 9, 2004, which includes the following DSM programs:

Residential Programs:

1. *Home Energy Check:* Residential energy audit program. Company auditor examines home and makes recommendations on low-cost or no-cost energy-saving practices and measures. Offers six types of audits: free walk-through, customer-completed (mail-in), customer-completed (online), phone-assisted customer survey, paid walk-through ($15 cost), and home energy rating.

2. *Home Energy Improvement:* Umbrella program for existing homes. Combines thermal envelope efficiency improvements with upgraded equipment and appliances. Offers choice of rebates, as described below, or interest-free installment billing over 12 months. Promotes the following energy-efficiency measures:

   - Attic Insulation Upgrade: Encourages customers who have electric space heat to add ceiling insulation. Progress pays a portion of the installed cost. Specific incentive amount based on increase in insulation level above a maximum of R-12, with maximum incentive of $100 per customer.
   - Duct Test and Repair: Promotes energy-efficiency through improved duct system sealing. Program helps identify and reduce energy loss by measuring air leakage rate through the central duct system. Customer must have electric heating and centrally-ducted cooling system to participate. Progress pays up to $30 for the first unit ($20 for each additional unit at the same address) for duct leakage test and up to $100 per unit for duct repair.
   - High Efficiency Electric Heat Pumps: Pays financial incentive, not exceeding $350 per unit, to replace existing electric heating equipment with high-efficiency electric heat pumps. Specific incentive based on minimum heating and/or cooling efficiency levels. Indoor air handler and outdoor condenser must both be replaced with new equipment to qualify for this rebate.
   - Supplemental Incentive Bonus: Encourages adoption of several energy-efficiency measures through an additional incentive of up to $50. Incentive is paid to a participant in Progress Energy's high-efficiency electric heat pump program who also

implements the ceiling insulation upgrade, duct leakage repair, or both, within 90 days.

3. *Residential New Construction:* Umbrella program for new home construction, multi-family, and manufactured homes. Promotes energy-efficient construction which exceeds the building code. Provides information, education, and advice to home builders and contractors on energy-related issues and efficiency measures. Promotes energy-efficient electric heat pumps with an incentive identical to that offered in the Home Energy Improvement program for existing homes.

4. *Low-Income Weatherization Assistance:* Umbrella program to improve the energy-efficiency of low-income homes. Efficiency measures and incentives are identical to those offered in the Home Energy Improvement Program, with the following additions:

   - Reduced Air Infiltration: A $75 incentive is paid for work which reduces air infiltration by a minimum specified amount.
   - Water Heater Wrap/Replacement: Provides wrap for water heater and associated piping near the tank. A $25 incentive may be paid towards the purchase of a high-efficiency water heater in lieu of an insulating jacket.
   - High-Efficiency Alternate Water Heating: Promotes installation of high-efficiency alternative electric water heating equipment. Provides incentive of $100 for each heat recovery unit and $200 per unit for each dedicated heat pump water heater unit.
   - Heating and Air Conditioning Maintenance: A $40 incentive is paid for service/tune-up maintenance on an existing electric central heating and air conditioning system.

5. *Residential Energy Management:* Voluntary load control program in which Progress Energy reduces winter peak demand by interrupting electric service to water heaters and central electric heating units. Maximum monthly bill credit is $11.50, but is paid only during winter months (November through March) when customer usage exceeds 600 kWh per month.

Commercial/Industrial Programs:

1. *Business Energy Check:* C/I energy audit program. Offers a free walk-through audit (inspection), a paid walk-through audit (energy analysis), and an online business energy check (customer-completed internet audit).

2. *Better Business:* Umbrella efficiency program for existing C/I buildings. Gives customers information and advice on energy-related issues and efficiency measures. Offers choice of rebates, as described below, or interest-free installment billing over 12 months. Promotes the following energy-efficiency measures:

   - HVAC Equipment: Pays financial incentive, of up to $100 per kW reduced, for the purchase of high-efficiency HVAC equipment such as packaged terminal heat pumps, packaged rooftop units, water-cooled and air-cooled chillers, and unitary heat pumps and air-conditioners.

- Energy Recovery Ventilation: Pays financial incentive of up to $1,500 for the installation of high-efficiency energy recovery ventilation units that remove heat and humidity from conditioned space. Customer must have electric heating and cooling system to participate.
- Duct Leakage Test and Repair: Promotes energy-efficiency through improved duct system sealing. Program helps identify and reduce energy loss by measuring air leakage rate through the central duct system. Customer must have electric heating and centrally-ducted cooling system to participate. Progress Energy pays up to $30 per unit for duct leakage test and up to $100 per unit for duct repair.
- Roof Insulation Upgrade: Encourages customers who have electric space heat to add roof insulation. Progress Energy pays portion of the installed cost. Eligibility based on demonstration that additional insulation results in heating and/or cooling use reductions. Specific incentive amount based on increase in insulation amount above a maximum of R-12, with maximum incentive of $100 per customer.
- Cool Roof: Promotes the installation of "cool roof" coating which reflects heat and sun. Customer must have electric cooling system to participate. Progress Energy pays $50 per 1,000 square feet of cool roof coating installed, up to a maximum of $1,000.

3. *C/I New Construction:* Umbrella efficiency program for new C/I buildings. Provides information, education, and advice on energy-related issues and efficiency measures. Allows Progress Energy to be involved early in the building's design process. Also provides incentives for energy-efficient equipment, such as HVAC equipment, energy recovery ventilation, and cool roof coating. Incentive levels are identical to those offered in the Better Business program for existing buildings.

4. *Innovation Incentive:* Provides incentives for customer-specific demand and energy conservation projects, on a case-by-case basis, where cost-effective to all Progress Energy customers. To be eligible, projects must reduce or shift a minimum of 10 kW of peak demand. Rebates will be limited to $150 per kW reduced or shifted. Focuses on measures not offered in Progress Energy's other DSM programs. Examples include: refrigeration equipment replacement, thermal energy storage, microwave drying systems, and inductive heating (to replace resistance heat).

5. *Standby Generation:* Voluntary demand control program available to all C/I customers having on-site generation capability. Customer controls the equipment but operates it when needed by Progress Energy. Incentive is based on the load served by the customer's generator and on Progress Energy's GSLM-2 rate schedule.

6. *Interruptible Service:* Direct load control program. Progress Energy interrupts service by disconnecting electric service at the breaker during peak or emergency conditions. Offered under Progress Energy's IS-2 and IST-2 tariffs. Available to any non-residential customer with an average billing demand of at least 500 kW. Monthly credit paid based on level of billing demand and load factor.

7. *Curtailable Service:* Direct load control program that is similar to interruptible service, except the customer's entire load is not shed. Offered under the CS-2 and CST-2 tariffs. Available to any non-residential customer with an average billing demand of at least 500 kW. Customer must be willing to reduce 25 percent of its average monthly billing demand upon request by Progress Energy. Monthly credit paid to customer based on level of curtailable demand.

Green Pricing: Progress Energy has joined with Palm Harbor Homes, a manufactured housing company, to study the operation of photovoltaic systems in manufactured homes. One of the objectives of the project is to research customer acceptance and the technical feasibility of offering a green pricing program to interested customers.

C. Gulf Power Company

On August 9, 2004, by Order No. PSC-04-0764-PAA-EG, the Commission set new numeric goals for Gulf for the period 2005 through 2014. The Commission also ordered Gulf to file a DSM Plan, consisting of programs designed to meet the newly established goals, within 90 days. As seen in Table 9, with the exception of the C/I energy goal, Gulf's goals were reduced compared to its previous goals. Gulf has reduced its expected residential demand and energy savings due primarily to lower than expected participation levels in the GoodCents Select and Ground Source Heat Pump programs. Gulf also reduced the expected C/I demand and energy savings for its C/I GoodCents Commercial Building Program due to future, more stringent requirements in the building code. In addition, Gulf included interruptible service in its previous goals, but has not included this program in its newly-approved goals. The demand savings from interruptible service in Gulf's previous goals was attributed to one customer with a special service agreement. This contract has expired, and Gulf has not identified additional opportunities for interruptible service.

Gulf filed a petition for approval of its proposed DSM Plan on December 1, 2004. The petition is scheduled to be heard by the Commission at its March 1, 2005 Agenda Conference.

Table 9: Comparison of Gulf's Previous and Revised DSM Goals

Year	*Residential*			*Commercial/Industrial*		
	Summer MW	**Winter MW**	**Annual GWh**	**Summer MW**	**Winter MW**	**Annual GWh**
Previous Goals *(cumulative 2000-2009)*	125.9	145.9	113.1	44.8	35.8	19.3
Revised Goals *(cumulative 2005-2014)*	56.9	69.4	27.8	28.2	12.6	23.2

Green Pricing: Gulf has been participating in the EarthCents Solar green pricing program with its sister company, Alabama Power, since December 1999. The program is designed to install 1 MW of solar generation as soon as customers commit to provide $6 per month for 10,000 100-watt blocks. At this time, Gulf has not received sufficient customer commitments to fund the installation of solar generation. Gulf will not begin charging customers for the program until enough commitments are obtained.

Gulf also supports the Solar for Schools program, which promotes the installation of small photovoltaic generating facilities.

D. Tampa Electric Company

On August 9, 2004, by Order No. PSC-04-0765-PAA-EG, the Commission set new numeric goals for TECO for the period 2005 through 2014. The Commission also ordered TECO to file a DSM Plan, with programs designed to meet these goals, within 90 days. As displayed in Table 10, TECO's newly-approved goals are lower than its previous goals. The primary reasons for the reduced goals are: 1) the existing Residential Load Management program, a substantial contributor to demand savings in past years, is no longer cost-effective and is not included in TECO's new goals; 2) TECO expects decreased participation in existing DSM programs due to saturation; and, 3) the cost of combustion turbine generating units has substantially declined in the last five years.

Table 10: Comparison of TECO's Previous and Revised DSM Goals

Year	*Residential*			*Commercial/Industrial*		
	Summer MW	**Winter MW**	**Annual GWh**	**Summer MW**	**Winter MW**	**Annual GWh**
Previous Goals *(cumulative 2000-2009)*	40.3	109.1	75.3	30.8	13.4	114.1
Revised Goals *(cumulative 2005-2014)*	15.2	20.1	43.5	15.3	8.2	41.5

The Commission approved TECO's DSM Plan with modifications on February 1, 2005, which includes the following programs:

Residential Programs:

1. *Residential Walk-Through Audit:* Free residential energy audit. Company auditor examines home and makes recommendations on low-cost or no-cost energy-saving practices and measures.

2. *Residential Computer-Assisted Audit:* Comprehensive energy audit where specific data on home structure and customer lifestyle is analyzed to calculate installation cost, investment payback period, and estimated energy savings of available conservation programs. $15.00 charge for this audit.

3. *Residential On-Line Audit:* Replacement program for former mail-in audit program. Customers access TECO's website to answer questions about their home and energy usage. Personalized audit results are displayed for customer review and implementation.

4. *Residential Duct Repair*: Program to check for losses in HVAC equipment by use of a blower door test. The customer receives an assessment of any problems discovered, and will receive a certificate, equal to 75% of the total repair cost up to a maximum of $200, to be used towards HVAC system repairs. Customer cost for the blower door test is $25.

5. *Residential New Construction*: 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. Incentives for qualifying levels will be offered to the home buyer for the following installations:
   - Level one: No incentive. Requires duct closure with mastic and must meet TECO guidelines for allowable duct leakage.

   - Level two: $100 incentive. Must meet level one requirements plus requires one of the following two options: installation of heat pump with a minimum 12.0 Seasonal Energy Efficiency Rating (SEER) and a minimum 7.2 Heating Seasonal Performance Factor (HSPF); or, installation of air conditioning system that has a minimum 12.0 SEER and heating source must not be electric resistance heat or fuel oil

   - Level three: $200 incentive. Must meet level one and two requirements plus requires the installation of R-30 ceiling insulation.

   - Level four: $300 incentive. Must meet level one, two, and three requirements plus install a heat recovery unit or a heat pump water heater (applicable only when used with an electric water heater).

6. *Residential Heating and Cooling*: Program designed to reduce the growth of peak demand (particularly winter) and energy. Uses a rebate to encourage the installation of high efficiency heat pumps and/or central air conditioning (without oil or resistance heat). Program offers two types of equipment replacement in single family dwellings: type one (heat pump replacing resistance heat; $250 rebate) and type two (heat pump replacing heat pump; $100 rebate). Both types require new equipment to have a minimum SEER of 12.0

7. *Residential Ceiling Insulation*: Program designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. Customers must add a minimum of R-11 insulation in order to qualify for a $100 incentive.

8. *Residential Prime Time (RSL-3 tariff)*: Voluntary load control program in which TECO reduces peak demand by interrupting electric service to water heaters, pool pumps, and central electric heating / air conditioning units. Monthly credit for central heating and cooling appliances is $12.00 per month for a continuous 3-hour interruption and $6.00 per month for summer cycle interruption. Water heater and swimming pool pump monthly credits are $4.00 and $3.00, respectively. Program is not cost-effective under the RIM test; therefore, on February 1, 2005, the Commission ordered that the program should be closed to new customers, and to existing participants upon a change of address.

Commercial/Industrial Programs:

1. *Commercial/Industrial Audit*: Free energy audit program. Auditors recommend energy-efficiency measures and equipment. Demand and energy savings are dependent upon customer implementation of audit recommendations.

2. *Comprehensive Commercial/Industrial Audit:* Detailed audit which may involve monitoring of specific equipment on customer's premises. Auditors recommend additional energy-efficiency measures. Depending on customer's rate class, fees for this audit range from $15 to $75. Demand and energy savings are dependent upon customer implementation of audit recommendations.

3. *Commercial Cooling*: Program that provides an incentive for the installation of high efficiency direct expansion (DX) cooling systems in commercial buildings. This program encourages customers to replace worn out, inefficient cooling equipment with high efficiency equipment that exceeds minimum product manufacturing standards. Equipment must have a minimum energy efficiency rating (EER) of 10.0. Eligible commercial cooling equipment must be sized between 65,000 and 240,000 Btu. Customer rebate is $0.002083 per Btu, or approximately $25 per ton.

4. *Commercial Indoor Lighting*: Incentive program to encourage investment in more efficient fluorescent lighting technology within conditioned space. Customer receives a $.10 per watt incentive by achieving a minimum of 1 KW in lighting reduction from any lighting source retrofitted with a more efficient fluorescent lighting system (ballast and lamps).

5. *Commercial Load Management (GSLM-1 tariff)*: Voluntary load control program in which TECO reduces peak demand by interrupting electric service to end-use equipment. Extended control is for large loads, such as walk-in freezers, which are interrupted for up to three hours. Extended control customers receive a $3.00/kW monthly credit. Cyclic control is for commercial air conditioning equipment, and this is available only during the summer season. Cyclic control customers receive a $1.00/kW monthly credit.

6. *Commercial Standby Generator (GSSG-1 tariff)*: Program designed to utilize the on-site generation of C/I facilities in order to reduce weather-sensitive peak demand. Participating customers are given a one-hour notice to start their generators and arrange for orderly transfer of load from TECO. Standby generators are metered to determine the average portion of customer load served by the generators when called on by TECO. Participants receive a monthly credit of $3.00 per kW.

7. *Conservation Value*: Incentive program designed to encourage investment in demand shifting or demand reduction measures. Measures funded through this program will not covered under other TECO C/I conservation programs. Must be a C/I customer on firm rates to participate. Approved measures require a minimum summer and/or winter demand savings of 5 kW. TECO pays incentive of up to $200 per average kW of savings above a baseline case. Customer payback period, including incentive, must be at least two years.

8. *Industrial Load Management (GSLM-2 and GSLM-3 tariffs)*: Direct load control program for large industrial customers on a firm rate tariff and having interruptible loads of at least 500 kW. Requires participation for a 36-month term. Customers must give TECO at least 36 months notice prior to terminating participation in the program. Participants pay an additional customer charge of $200 per month. The contracted credit value (CCV) paid for this service is established annually as part of TECO's ECCR filing. The monthly CCV value for 2005 is $4.46/kW.

***Pilot Programs*:**

1. *Residential Price-Responsive Load Management Pilot (RSVP-1 tariff)*: Pilot program in which TECO uses price signals and a multi-tiered rate structure to alert participating customers to reduce load and energy consumption during high-cost periods. The program provides customers with a "smart" thermostat which can be programmed to switch controlled equipment on or off, or automatically change the temperature setting. Customers can also manually adjust the smart thermostat in response to either the multi-tiered rates or critical price signals.

2. *Green Pricing*: TECO instituted a customer optional three-year pilot green energy rate and rider program in November 2000. The program is designed to provide TECO's customers with an opportunity to purchase 50 kWh blocks of renewable energy from photovoltaic and biomass sources. Customer participation was less than predicted over the initial three-year period. In 2003, TECO petitioned the Commission to approve $150,000 of customer funding to extend the program an additional three years, and requested that the energy block size be increased to 100 kWh for each customer contribution of $5. On April 8, 2004, by Order No. PSC-04-0386-TRF-EI, the Commission approved TECO's request to extend the program, and required TECO to submit semi-annual progress reports. On November 1, 2004, TECO filed its first semi-annual progress report. During the previous six months, TECO achieved an average increase in its subscription rate of 32 new blocks of renewable energy per month. This fell short of TECO's projected increase of 50 new blocks per month. TECO intends to subscribe additional customers by continuing its efforts to: 1) utilize marketing efforts

structured by a consultant; 2) target business customers; and, 3) work with grass roots organizations. In addition, TECO plans to subscribe additional residential customers by initiating a telephone campaign, and by increasing its efforts to inform customers about the program through TECO's energy audit analysts.

E. Florida Public Utilities Company

On August 9, 2004, by Order No. PSC-04-0766-PAA-EG, the Commission set new numeric goals for FPUC for the period 2005 through 2014. FPUC's newly-approved goals are comparable to, and in some instances higher than, its previous goals, as displayed in Table 11.

Table 11: Comparison of FPUC's Previous and Revised DSM Goals

Year	*Residential*			*Commercial/Industrial*		
	Summer MW	**Winter MW**	**Annual GWh**	**Summer MW**	**Winter MW**	**Annual GWh**
Previous Goals *(cumulative 2000-2009)*	1.26	1.50	2.73	1.22	0.73	3.02
Revised Goals *(cumulative 2005-2014)*	1.00	1.92	2.26	1.69	1.04	4.51

The Commission also approved FPUC's DSM Plan on August 9, 2004. FPUC's DSM Plan includes the following programs:

Residential Programs:

1. *Geothermal Heat Pump:* Promotes the installation of advanced and emerging geothermal systems. Participants in single-family dwellings are guaranteed heating and cooling costs for two years. Multi-family installations receive a $500 rebate. New units must have a Seasonal Energy Efficiency Ratio (SEER) of 13.0 or higher. Due to uncertainty over future customer participation, FPUC does not plan for this program to contribute towards its DSM goals.

2. *Heating & Cooling Efficiency Upgrade:* Promotes the installation of high-efficiency heat pump systems (SEER of at least 12.0). Offers two types of equipment replacements: replacement of resistance-heating systems (Type 1) and replacement of lower-efficiency heat pump systems (Type 2). FPUC pays rebates to the customer ($100) and dealer ($25-$75).

3. *GoodCents Home/Energy Star:* Promotes the design and construction of energy-efficient homes. Certification requires the installation of measures with efficiencies higher than

required by the current building code. Homes may also qualify to receive the nationally recognized Energy Star efficiency label.

4. *GoodCents Energy Survey:* Residential walk-through energy audit program. Company's auditor examines home and makes recommendations on energy-saving practices and measures, including identification of potential duct leakage. FPUC intends to study the potential of expanding this program to include internet audits in the future.

5. *Ceiling Insulation Upgrade:* Encourages customers who have electric central air conditioning to add ceiling insulation. FPUC pays $100 incentives to customers for adding an amount of ceiling insulation equal to or greater than R-11.

Commercial/Industrial Programs:

1. *GoodCents Commercial Buildings:* Efficiency program that certifies commercial buildings meeting efficiency requirements higher than Florida Model Energy Code standards. Includes both HVAC efficiency and thermal envelope standards.

2. *Technical Assistance Audit:* Interactive program that assists commercial customers in identifying energy conservation opportunities. Customized to meet individual needs of large customers. FPUC evaluates customer's facility operations, equipment, and energy usage pattern.

3. *Indoor Efficient Lighting Rebate:* Promotes efficient lighting retrofit applications having demand savings of at least 1,000 watts per lighting source (lamp and ballast). FPUC pays cash allowance of 10 cents per watt reduced.

F. JEA

On August 9, 2004, by Order No. PSC-04-0768-PAA-EG, the Commission set numeric goals of zero for JEA for the period 2005 through 2014. However, JEA has continued its existing DSM programs, including:

1. *Green Power Program:* Encourages the widespread application of renewable energy technology in its service territory. Sets minimum levels of renewable capacity for 2007 and 2015. Provides incentives for solar photovoltaic (PV) and solar thermal systems, allows net metering for customer-generated electricity from PV systems, and encourages combustion of landfill gas at generating sites.

2. *District Chilled Water Storage:* Program utilizing underground chilled water system to serve a group of adjacent buildings. The chilled water is used in place of central air conditioning systems and on-site chillers. Reduces capital costs as well as operating costs.

3. *Performance Contracting:* Provides financing for customer-specific capital improvements, on a case-by-case basis, where the resulting demand and energy savings

offset project costs. Systems targeted for improvements include lighting, heating and air-conditioning, controls and automation, process systems, and building envelope.

4. *Lighting Solutions:* Promotes energy-efficient lighting by offering lighting energy audits, energy management programs, lighting design and retrofits, and maintenance.

5. *Residential and Commercial Audit:* Energy audit program in which JEA's auditor examines home or business and makes recommendations on low-cost or no-cost energy-saving practices and measures. Offers walk-through, customer-completed (online), and video-assisted audits.

6. *Low-Income Residential Audit:* Similar to traditional energy audit. In addition, JEA, in partnership with local housing agencies, funds energy-saving practices and measures. Also provides customer education presentations.

Green pricing: As mentioned above, JEA has a green power program to encourage the application of renewable energy technology. A component of the green power program is a solar reimbursement program, under which JEA reimburses customers for a portion of the installation cost of solar photovoltaic and solar hot water systems. JEA has installed 170 kW of solar photovoltaic modules in the Jacksonville area. JEA forecasts demand reductions from this program of nearly 9 MW by 2007.

JEA has committed to the Sierra Club and the American Lung Association to achieve 7.5 percent of summer peak capacity resources from clean power by 2015. This includes 6 percent, or 200 MW, of renewable capacity, and 1.5 percent, or 50 MW, of equivalent clean capacity. The equivalent clean capacity will consist of power generation efficiency measures, pollution control additions, and demand-side management programs. JEA does not currently have a green pricing program. However, JEA plans to meter the energy produced from each renewable facility installed by the utility so that renewable energy credits can be sold to produce additional revenue.

G. Orlando Utilities Commission

On July 20, 2004, in Docket No. 040035-EG, the Commission approved numeric DSM goals of zero for OUC for the period 2005 through 2014. However, OUC continues to offer the following five residential and one commercial/industrial DSM programs:

Residential Programs:

1. *Energy Survey Program*: Provides walk-through, video and compact disk, and online energy surveys for all residential customers.

2. *Energy Efficiency Rebate Program*: Provides incentives to customers to implement building envelope efficiency improvements as recommended in an energy audit.

3. *Low-Income Home Energy Fix-Up Program*: Offers 85 percent of the cost of specified home weatherization measures recommended in an energy audit to residential customers with total annual income less than $25,000.

4. *Insulation Billed Solution Program*: Provides $100 incentive and two-year financing for R-19 level attic insulation installation.

5. *Efficient Electric Heat Pump Program*: Provides incentives for customers to replace an inefficient existing HVAC system with energy-efficient heat pumps.

6. *Gold Ring Program*: New construction efficiency program which provides a free Energy Star Rating and blower door test to new homes which meet specified efficiency standards.

7. *Energy Conservation Rate*: In October 2002, OUC implemented a two-tier residential rate to encourage energy conservation. Customers using more than 1,000 kWh per month pay a higher rate for that energy which is above 1,000 kWh.

Commercial/Industrial Programs:

1. *Energy Survey Program*: Walk-through energy audit which provides detailed written recommendations to increase energy and water usage efficiency.

2. *Indoor Lighting Retrofit Program*: Provides discounted installation and special financing for replacement of inefficient lighting with more efficient lighting technologies.

3. *OUConsumption Online Program*: Provides the ability for customers to analyze energy usage and demand for multiple locations from a desktop computer. Customers benefit by the increased ability to manage their electric load. Participating customers are responsible for the costs of the additional infrastructure and must pay a $35 monthly fee.

4. *OUConvenient Lighting Program*: Provides complete efficient outdoor lighting services for commercial applications including industrial parks, sports complexes, and residential developments. Participants are responsible for the costs of each fixture.

5. *OUCooling*: Under this program, OUC will fund, install, and maintain a central chiller plant for each participating business district. This reduces air conditioning, capital, and operating costs for participating businesses.

Green Pricing: OUC launched a pilot green pricing program in January 2005, in concert with the SunSmart program, which utilizes partnerships with Florida's municipal utilities to provide interested customers with a green energy option. OUC's voluntary program will offer

customers the opportunity to pay $5 per 200 kWh block of energy to support photovoltaic installations. Please see www.ouc.com for additional information.

3.3 CONSERVATION EFFORTS OF NON-FEECA UTILITIES

Although the Commission no longer sets numeric DSM goals for the non-FEECA electric utilities, pursuant to Section 366.82(1), Florida Statutes, all Florida utilities are required to provide energy audits to residential customers at no charge. Many of the non-FEECA utilities offer additional DSM programs to their customers. In addition to the potential demand and energy savings, these utilities recognize that offering DSM programs may play a key role in increasing customer satisfaction.

SECTION 4: MEETING FLORIDA'S FUTURE GENERATION NEEDS

4.1 REVIEW OF ELECTRIC UTILITY TEN-YEAR SITE PLANS

During the 1995 Legislative session, Section 186.801, Florida Statutes, was revised to make the Commission the lead agency charged with determining the suitability of electric utility Ten-Year Site Plans. Commission Rules 25-22.070 through 25-22.072, Florida Administrative Code, regarding the submission of these plans, were adopted by the Commission on October 30, 1997. The Ten-Year Site Plans provide forecasts of future electric load requirements and the resource mix planned to meet these needs. A public workshop before the Commission to review the current Ten-Year Site Plans was held on September 20, 2004. At the workshop, utilities presented their plans, and interested parties were provided an opportunity to make comments in person and in writing regarding the adequacy of the plans. The Commission found each utility's Ten-Year Site Plan to be suitable at the December 7, 2004, Internal Affairs meeting. A report analyzing the plans of the utilities, which includes the comments of other interested state and local government agencies, may be obtained by contacting the Commission's Division of Records and Reporting at 850-413-6770, or from the Commission's website at www.floridapsc.com.

The review of the Ten-Year Site Plans is one activity performed by the Commission in implementing the legislative mandate of Section 366.04(3), Florida Statutes, commonly known as the 'Grid Bill.' Pursuant to the Grid Bill, the Commission has the authority to exercise jurisdiction over the "planning, development, and maintenance of a coordinated electric power grid throughout Florida to assure an adequate and reliable source of energy for operational and emergency purposes in Florida and the avoidance of further uneconomic duplication of generation, transmission, and distribution facilities."

Tables 12 and 13 display the expected capacity additions by Florida's electric utilities as reported in each utility's 2004 Ten-Year Site Plan. Table 12 shows the expected capacity additions by fuel type over the next ten years; while Table 13 identifies each utility's next planned electric generating unit.

Table 12: Net Firm Capacity Additions by Florida's Electric Utilities (2004 - 2013)

		WINTER CAPACITY (MW)
Combined Cycle	Additions	15,283
	Reductions	-33
Combustion Turbine & Diesel	Additions	5,547
	Reductions	-406
Coal	Additions	1,170
	Reductions	-92
Nuclear	Additions	0
	Reductions	0
Oil and Gas Fossil Steam	Additions	4
	Reductions	-173
Non-Utility Generation & QF	Additions	0
	Reductions	-1,558
Firm Capacity Renewables	Additions	0
	Reductions	-312
Net Firm Capacity Interchange	Additions	0
	Reductions	-621
TOTAL	Additions	22,004
	Reductions	-3,195
NET CAPACITY ADDITIONS		18,809

Table 13: Next Identified Generating Unit

UTILITY	GENERATING UNIT	WINTER CAPACITY (MW)	PROPOSED IN-SERVICE DATE
Seminole Electric Cooperative	Unsited CC[1] 1	182	12/2007
Seminole Electric Cooperative	Unsited CC 2	182	12/2008
Florida Power & Light Company	Corbett Unit 1 CC	1,181	6/2009
Progress Energy Florida	Hines Unit 5 CC	536	12/2009
Seminole Electric Cooperative	Unsited CC 3-5	546	12/2009
Progress Energy Florida	Hines Unit 6 CC	536	5/2010
Seminole Electric Cooperative	Unsited CC 6	182	12/2010
Gainesville Regional Utilities	Deerhaven Unit 3 CFB[2]	220	5/2011
Florida Power & Light Company	Unsited CC 1	1,181	6/2011
JEA	Unsited CFB 1	250	6/2011
Seminole Electric Cooperative	Unsited Coal 1	150	1/2012
Progress Energy Florida	Unsited CC 1	536	5/2012
Florida Power & Light Company	Unsited CC 2	1,181	6/2012
JEA	Unsited CFB 2	250	1/2013
Seminole Electric Cooperative	Unsited Coal 2-3	300	1/2013
Tampa Electric Company	Unsited CC	502	1/2013
Progress Energy Florida	Unsited CC 2	536	12/2013
Seminole Electric Cooperative	Unsited CC 7-9	546	12/2013
	TOTAL	8,997	

[1] Combined cycle generating unit.

[2] Circulating fluidized bed, coal-fired generating unit.

4.2 FEECA AND POWER PLANT NEED DETERMINATIONS

Pursuant to Section 403.519, Florida Statutes, of FEECA, the Commission is responsible for reviewing Florida's need for new supply-side sources of electricity. Before 1986, any proposed steam or solar electrical generating facility larger than 50 MW was subject to a Commission need determination. In 1986, the Legislature increased this capacity threshold to 75 MW. All electric utilities must provide evidence to the Commission that cost-effective conservation opportunities have been exhausted prior to obtaining a need determination order for new electric capacity.

Pursuant to the Power Plant Siting Act, Sections 403.501 through 403.518, Florida Statutes, these generating units are reviewed for certification by the Department of Environmental Protection (DEP). The DEP's certification order, which includes the Commission's need determination order, is then provided to the Governor and Cabinet, acting as the Power Plant Siting Board, for final approval.

The following generating units have been approved by the Commission, but are not yet in service. Several of these units have gone on to receive certification under the Power Plant Siting Act by the Power Plant Siting Board:

JEA – Brandy Branch Unit 4: In February 2001, the Commission granted JEA's petition to add a 191 MW heat recovery steam generator (HRSG) at the Brandy Branch site in Duval County. The HRSG is being fitted to two existing 191 MW combustion turbine units to form a 573 MW combined cycle unit. Brandy Branch Unit 4 was certified under the Power Plant Siting Act in March 2002, and is expected to enter service in June 2005.

Florida Power & Light Company – Martin Unit 8 and Manatee Unit 3: In November 2002, the Commission granted FPL's petition for approval to construct Martin Unit 8 and Manatee Unit 3. Martin Unit 8, an 835 MW expansion project at the existing Martin plant site in Martin County, will result from the addition of two 181 MW combustion turbine units, four HRSGs, and a steam turbine to two existing 181 MW combustion turbine units. When completed, Martin Unit 8 will be a 1197 MW combined cycle unit. Manatee Unit 3 is a new 1197 MW combined cycle unit at the existing Manatee site in Manatee County. Both units will be identical when completed. Both units were certified under the Power Plant Siting Act in April 2003, and are expected to enter service in June 2005.

Progress Energy Florida - Hines Unit 3: In February 2003, the Commission granted Progress Energy's petition to build a 582 MW natural gas-fired combined cycle unit at the existing Hines site in Polk County. Hines Unit 3 was certified under the Power Plant Siting Act in September 2003, and has an anticipated December 2005 in-service date.

FPL – Turkey Point Unit 5: In June 2004, the Commission granted FPL's petition to build a 1181 MW natural gas-fired combined cycle unit at the existing Turkey Point site in Dade County. Turkey Point Unit 5 is expected to enter service in June 2007, and is awaiting certification under the Power Plant Siting Act.

Progress Energy – Hines Unit 4: In August 2004, Progress petitioned the Commission for approval to build a 517 MW natural gas-fired combined cycle unit at the existing Hines site in Polk County. Hines Unit 4 has an anticipated December 2007, in-service date. The Commission voted to approve Progress Energy's petition for determination of need on November 3, 2004.

SECTION 5: CONSERVATION ACTIVITIES OF NATURAL GAS UTILITIES

Historically, conservation programs offered by participating gas utilities were used to reduce Florida's reliance on foreign oil, reduce the growth rates of electric consumption, and reduce weather-sensitive peak demand. Gas conservation programs were used to increase gas usage so that Florida could reduce its reliance on foreign oil and defer the construction of additional electric generation facilities. In contrast to Florida's investor-owned electric utilities, Florida's investor-owned natural gas utilities are not required to meet Commission-approved conservation goals. However, pursuant to Rule 25-17.009, Florida Administrative Code, prior to receiving authorization for cost-recovery for a conservation program, investor-owned natural gas utilities must file the cost-effectiveness results of the Ratepayer Impact and Participants tests.

Much of the recent growth in natural gas usage has been due to natural gas-powered peak electricity generation, though additional growth has occurred in the direct end-use consumption of natural gas for heating, cooling and industrial uses. Increases in the direct end-use of natural gas serve to reduce demand on the electric grid. Natural gas also has a positive impact because it is an environmentally friendly, clean burning fuel.

The increasing demand for natural gas use as an alternative source to conserve energy for electric generation, businesses and residential consumers, has brought interest for new natural gas pipeline construction in the state. Currently, Florida has two operating natural gas pipeline transporters in Florida Gas Transmission (FGT) and Gulfstream. Three new pipelines have been proposed to deliver liquefied natural gas (LNG) to Florida. AES's Ocean Express and Tractebel's Calypso proposals have received United State's regulatory approval; however, approval from the Bahamian government has not yet been given to either. Also, El Paso Corporation's Seafarer has filed formal plans recently with regulators to build an offshore natural gas pipeline that would run through part of Palm Beach County.

Under the Commission's Conservation Cost Recovery Clause, companies petition the Commission for approval to implement natural gas conservation programs. Cost-effective programs that are approved often provide customers with rebates to help defray the cost of appliances which, over time, will save the customer money. Residential customers can conserve natural gas by ensuring their appliances are well-maintained or installing higher efficiency appliances. Energy-efficiency investments could reduce future bills by nine percent, which translates into a savings of $73 annually for the average residential natural gas customer.

Table 14 summarizes the conservation expenditures of Florida's natural gas utilities in 2003:

Table 14: Natural Gas Conservation Cost Recovery for 2003

	EXPENDITURE
Chesapeake Utilities	$998,965
City Gas Company	$2,534,873
Florida Public Utilities	$1,936,004
Peoples Gas System	$11,645,529
St. Joe Natural Gas	$18,225
Total:	$17,133,596

SECTION 6: EDUCATING FLORIDA'S CONSUMERS ON CONSERVATION

The Public Service Commission continues its effort to educate Floridians on topics related to energy efficiency and the need for water conservation. The Commission's Outreach Team in the Division of Regulatory Compliance and Consumer Assistance complements existing conservation activities of the FEECA utilities and also serves as a central resource center for consumer information relating to conservation issues.

One of the most effective Consumer Outreach Team's programs is the Library Outreach program. In its ongoing Library Outreach Program, the Outreach Team continues to provide more than 170 public main libraries and branches across the state with publications highlighting practical energy and water conservation measures. A survey has also been developed to obtain regular feedback from library administrators about this program.

The Commission's Web site, (www.floridapsc.com), has been expanded and redesigned to supply consumers with greater amounts of information about energy conservation and the conservation efforts of Florida's electric and gas utilities. The Web site includes weekly consumer tips, which often focus on potential energy conservation measures. The Web site also includes copies of brochures which have been prepared by the Outreach team to educate Florida's consumers on energy efficiency measures. These brochures are also provided directly to consumers at each of the Commission's customer meetings and hearings held throughout Florida. In addition, the Commission provides conservation information to consumers who file a complaint with the Commission regarding high electric or natural gas bills. The Commission also provides conservation information directly to consumers by traveling to a different region of the state each quarter as a part of the Governor's Capital for a Day initiative.

This year the Outreach Team, in recognition of the U.S. Department of Energy's "Energy Awareness Month," worked with students at two local elementary schools in a pilot program to promote energy conservation awareness within the schools. Students performed an original play, *Turn It On; Turn It Off*, to show what happens to a family's energy usage when the Energy Hog comes for an unexpected visit. Immediate plans are to meet with the Florida Department of Education and determine if the energy awareness program could be included as a possible curriculum unit in Florida's elementary schools.