

# ANNUAL REPORT ON Activities Pursuant to the Florida Energy and Efficiency Conservation Act

As required by Sections 366.82(10), and 377.703(2)(f), and 355.975, Florida Statutes

NOVEMBER 2023

## Florida Public Service Commission

# **Annual Report** on Activities Pursuant to

# The Florida Energy Efficiency and Conservation Act

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November 2023

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#### **List of Acronyms**

C/I Commercial and Industrial (Customers)

Commission or FPSC Florida Public Service Commission

COVID-19 Coronavirus Disease of 2019
CUC Chesapeake Utilities Corporation

DEF Duke Energy Florida, LLC
DOE U.S. Department of Energy
DSM Demand-Side Management

**ECCR** Energy Conservation Cost Recovery

**EV** Electric Vehicle

**F.A.C.** Florida Administrative Code

FCG Florida City Gas

**FEECA** Florida Energy Efficiency and Conservation Act

**FLBC** Florida Building Code

FPL Florida Power & Light Company
FPUC Florida Public Utilities Company

FRCC Florida Reliability Coordinating Council

**F.S.** Florida Statutes **GPR** Gross Power Rating

**GRIM** Gas Rate Impact Measure Test

Gulf Power Company
GWh Gigawatt-Hour

**HVAC** Heating, Ventilation, and Air Conditioning

IGCIndiantown Gas CompanyIOUInvestor-Owned Utility

**JEA** Formerly known as Jacksonville Electric Authority

**kWh** Kilowatt-Hour

LDC Natural Gas Local Distribution Company

MMBtu One Million British Thermal Units

MW Megawatt

MWh Megawatt-Hour

NGCCR Natural Gas Conservation Cost Recovery

OUC Orlando Utilities Commission
O&M Operations and Maintenance

**PV** Photovoltaic

PGS Peoples Gas System
RIM Rate Impact Measure Test

SGS Sebring Gas System
SJNG St. Joe Natural Gas

TECO Tampa Electric Company
TRC Total Resource Cost Test

#### **Executive Summary**

#### **Purpose**

Reducing the growth of Florida's peak electric demand and energy consumption became a statutory objective in 1980, with the enactment of the Florida Energy Efficiency and Conservation Act (FEECA). FEECA emphasizes four key areas: reducing the growth rates of weather-sensitive peak demand and electricity usage, increasing the efficiency of the production and use of electricity and natural gas, encouraging demand-side renewable energy systems, and conserving expensive resources, particularly petroleum fuels. Sections 366.82(2) and 366.82(6), Florida Statutes (F.S.), require the Florida Public Service Commission (FPSC or Commission) to establish goals for the FEECA utilities and review the goals every five years, at minimum. The utilities are required to develop cost-effective demand-side management (DSM) plans that meet those goals and submit them to the Commission for approval.

Energy conservation and DSM in Florida are accomplished through a multi-pronged approach that includes energy efficiency requirements in building codes for new construction, federal appliance efficiency standards, utility programs, and energy education efforts. Utility programs, which are paid for by all customers, are aimed at increasing efficiency levels above building codes and appliance efficiency standards.

The Commission is required by Section 366.82(10), F.S., to provide an annual report to the Florida Legislature and the Governor by March 1 summarizing the adopted goals and the progress made toward achieving those goals. Similarly, Section 377.703(2)(f), F.S., requires the Commission to file information on electricity and natural gas energy conservation programs with the Department of Agriculture and Consumer Services. This report reviews the 2022 annual goal results for each of the FEECA utilities and fulfills these statutory obligations.

The six electric utilities and single natural gas utility subject to FEECA in 2022 are listed below in order of sales:<sup>1</sup>

#### **Electric Investor-Owned Utilities**

- Florida Power & Light Company (FPL)
- Duke Energy Florida, LLC (DEF)
- Tampa Electric Company (TECO)
- Florida Public Utilities Company (FPUC)

#### **Municipal Electric Utilities**

- JEA
- Orlando Utilities Commission (OUC)

Investor-Owned Natural Gas Local Distribution Company (LDC)

Peoples Gas System (PGS)

<sup>&</sup>lt;sup>1</sup>Effective January 1, 2022, FPL and Gulf Power Company (Gulf) operationally merged. By Order No. PSC-2021-0446-S-EI, the Commission approved consolidating the rates and tariffs of FPL and Gulf, and all former Gulf customers became FPL customers.

The Commission regulates the rates and conservation cost recovery of the four electric IOUs and the single FEECA natural gas LDC. The Commission does not regulate the rates or conservation program costs of the two municipal electric utilities for which it sets DSM goals.

#### Report Layout

This report presents the FEECA utilities' progress towards achieving the Commission-established goals and the Commission's efforts in overseeing these conservation initiatives. This report details these efforts through the following five sections and appendices:

- Section 1 provides a brief history of FEECA and a description of existing tools for increasing conservation throughout the State of Florida.
- Section 2 discusses the DSM goalsetting process and the most recent Commissionestablished goals set for the FEECA utilities.
- Section 3 reviews the utilities' goal achievements, and information on audit, low-income, and research and development programs. In the 2020 and 2021 reports, additional information in this section was included discussing the program impacts of COVID-19. Because the impact was minimal in 2022, that additional information is no longer included in this section.
- Section 4 provides an overview of the associated 2022 DSM program costs recovered through the Energy Conservation Cost Recovery (ECCR) Clause (as applies to electric IOUs) and Natural Gas Conservation Cost Recovery (NGCCR) Clause (as applies to LDCs).
- Section 5 discusses methods the Commission has used to educate consumers about conservation during the prior period, including a list of related websites.
- Appendices A and B provide a list of the 2022 conservation programs offered by FEECA Utilities and a description of each program's purpose.

#### 2019 Goalsetting Proceeding

In November 2019, the Commission chose to continue with the goals that were established in the 2014 goalsetting proceeding for the period 2020-2024 and directed its staff to review the FEECA process for potential updates and revisions as may be appropriate.<sup>2</sup> In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C.<sup>3</sup> In 2020, the

<sup>&</sup>lt;sup>2</sup>Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, in Docket Nos. 20190015-EG through 20190021-EG, *In re: Commission review of numeric conservation goals*.

<sup>&</sup>lt;sup>3</sup>See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities. Rule development workshops for this docket were conducted in January 2021, May 2021, and November 2022. On May 2, 2023 a Rule Hearing was held, and on May 17, 2023, a Rule Certification Packet was forwarded to the Administrative Code and Register Section of the Florida Department of State. The amendments to Rule 25-17.0021, F.A.C. that were adopted in May 2023 will be used when the DSM goalsetting proceeding is initiated in 2024.

Commission approved the DSM plans proposed by the investor-owned electric utilities and the municipal electric utilities.<sup>4</sup>

The numeric goals are based on estimated energy and demand savings from individual DSM measures that passed the Rate Impact Measure (RIM) and Participants cost-effectiveness tests.<sup>5</sup> These tests are used to ensure that all ratepayers benefit from energy efficiency programs due to downward pressure on electric rates.

Section 366.82(2), F.S., also requires that the Commission adopt goals for increasing the development of demand-side renewable energy systems. The Commission recognized in its 2019 review, that Rule 25-6.065, F.A.C., Interconnection and Net Metering of Customer-Owned Renewable Generation, adopted in 2008, offered an effective means to encourage the development of demand-side renewable energy in the state.

The Commission also established numeric therm savings goals for a natural gas utility for the first time in 2019. In August 2019, the Commission approved 2019-2028 goals for PGS, based upon programs it found were cost-effective.<sup>6</sup> PGS also developed audit programs for its residential and commercial customers as part of the proceedings. The 2019 goalsetting processes for all FEECA utilities are further discussed in Section 2.

#### 2022 Achievements and Related Program Costs

Florida utilities have been successful in reducing the growth rates of winter and summer peak electric demand and reducing annual energy consumption. On a cumulative basis through 2022, statewide totals reflect that summer peak demand has been reduced by 8,156 MW, winter peak demand has been reduced by 7,573 MW, and annual energy consumption has been reduced by 11,975 GWh. During 2022, the electric FEECA utilities offered 103 residential and commercial programs which focused on demand reduction and energy conservation (see Appendices A and B). In addition, FEECA electric utilities performed over 255,000 residential and commercial energy audits in 2022, as shown in Section 3.2. Each FEECA utility's achievements toward the 2022 Commission-approved goals are detailed in Section 3.1.

The Commission has authority, by statute, to allow investor-owned utilities to recover costs related to conservation.<sup>8</sup> The Commission has implemented this authority for electric IOUs through the ECCR clause since 1980. For 2022, Florida's investor-owned electric utilities

<sup>&</sup>lt;sup>4</sup>Order No. PSC-2020-0140-PAA-EG, issued May 12, 2020, in Docket No. 20200058-EG, *In re: Petition for approval of 2020 demand-side management plan, by Orlando Utilities Commission*; Order No. PSC-2020-0200-PAA-EG, issued June 24, 2020, in Docket No. 20200057-EG, *In re: Petition for approval of 2020 demand-side management plan, by JEA*; Order No. PSC-2020-0274-PAA-EG, issued August 3, 2020, in Docket Nos. 20200053-EG (TECO), 20200054-EG (DEF), 20200055-EG (FPL), 20200056-EG (Gulf), and 20200060-EG (FPUC), *In re: Petition for approval of 2020 demand-side management plans*.

<sup>&</sup>lt;sup>5</sup>Order No. PSC-14-0696-FOF-EU, issued December 16, 2014 (2014 Goalsetting Order), in Docket Nos. 20130199-EI through 20130205-EI, *In re: Commission review of numeric conservation goals*.

<sup>&</sup>lt;sup>6</sup>Order No. PSC-2019-0361-PAA-GU, issued August 26, 2019, in Docket No. 20180186-GU, *In re: Petition for approval of demand-side management goals and residential customer assisted and commercial walk-through energy audit programs, by Peoples Gas System.* 

<sup>&</sup>lt;sup>7</sup>FRCC's 2023 Load & Resource Plan (S-3, S-4, S-5). The demand and energy savings from FEECA utility DSM programs are included in these statewide FRCC totals.

<sup>&</sup>lt;sup>8</sup>Section 366.05(1), F.S.

recovered approximately \$313 million in conservation program expenditures, and the investor-owned natural gas utilities recovered about \$33.6 million in conservation program expenditures.

#### Conclusion

Conservation in Florida is prompted by customer actions to conserve energy, federal appliance efficiency standards, state building codes for new construction, and utility-sponsored DSM programs. Customers can save energy and reduce their bills through behavioral changes and by investing in energy efficient homes, appliances, and equipment. Federal appliance efficiency standards have become more stringent over time, thus increasing the baseline energy efficiency of new appliances and heating, ventilation, and air conditioning (HVAC) equipment available to Florida's consumers. Likewise, changes in the Florida Building Code (FLBC) have resulted in more energy efficient homes. Florida's electric and natural gas utilities also encourage conservation by offering energy audits, customer education, rebates on energy efficient equipment and building envelope improvements, and demand response programs.

Utilities design DSM programs to encourage the installation of appliances and equipment that exceeds levels set by current building codes and minimum efficiency standards. More stringent efficiency standards and building codes, as well as customer actions to implement efficiency outside of utility programs, reduce the potential incremental demand and energy savings available from utility-sponsored DSM programs. The level of realized savings from utility programs is dependent upon voluntary participation and, in some cases, changes in customer behavior.

Because all customers pay for the utility conservation programs as a portion of their monthly utility bills, the Commission focuses on ensuring that all customers benefit from utility-sponsored DSM programs. The Commission also encourages customers to use energy efficiently through its customer education efforts. Overall, reducing Florida's demand and energy usage for electric customers and therm usage for natural gas customers relies on customer education and participation in utility DSM programs, along with each individual's efforts to save electricity.

Conservation and renewable energy will continue to play an important role in Florida's energy future. The Commission is continuing its efforts to encourage cost-effective conservation that defers the need for new electric-generating capacity and reduces the use of fossil fuels. These initiatives support a balanced mix of resources that reliably and cost-effectively meet the needs of Florida's ratepayers.

#### Section 1. Florida Energy Efficiency and Conservation Act

#### 1.1 FEECA History and Implementation

FEECA emphasizes four key areas: reducing the growth rates of weather-sensitive peak demand and electricity usage, increasing the efficiency of electricity and natural gas production and use, encouraging demand-side renewable energy systems, and conserving expensive resources, particularly petroleum fuels. Pursuant to FEECA, the Commission is required to establish appropriate goals and the FEECA utilities must develop DSM programs to meet those goals.

Upon enactment in 1980, all electric utilities in Florida were subject to FEECA. In 1989, changes were made to the law limiting the requirement to electric utilities with more than 500 gigawatthours (GWh) of annual retail sales. At that time, 12 Florida utilities met this threshold requirement and their combined sales accounted for 94 percent of Florida's retail electricity sales. An additional change to the law encouraged cogeneration projects.

In 1996, the Florida Legislature raised the minimum retail sales threshold for municipal and cooperative electric utilities to 2,000 GWh. Retail sales for these utilities were fixed as of July 1, 1993, and two municipal utilities met the threshold of the amended statute: JEA and OUC. In addition to these two utilities, all five Florida investor-owned electric utilities must comply with FEECA regardless of sales levels. No rural electric cooperatives are subject to FEECA.

FEECA also includes natural gas utilities whose annual retail sales volume is equal to or greater than 100 million therms. PGS is the only natural gas utility that meets the therm sales threshold for conservation goals under FEECA, and thus has its own Commission-approved DSM goals.

The statute also allows the Commission to provide appropriate financial rewards and penalties to the utilities over which it has rate-setting authority. The Commission also has the authority to allow an IOU 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. To date, the Commission has not awarded financial rewards or assessed penalties for any of the IOUs through FEECA. The Commission does not have rate-setting authority over JEA and OUC and therefore cannot assess financial penalties or provide financial rewards under its authority.

Table 1 lists the seven electric FEECA utilities and shows their 2022 retail electricity sales and the percentage of total statewide electricity sales by each utility. The table also includes the total energy sales for all non-FEECA utilities. Currently, the six electric utilities that are subject to FEECA account for approximately 83.7 percent of all Florida energy sales.

Table 1
Energy Sales by Florida's Electric FEECA Utilities (2022)

Florida's Electric FEECA Utilities	Energy Sales (GWh)	Percent of Total Energy Sales
Florida Power & Light Company	126,450	51.0%
Duke Energy Florida, LLC	40,513	16.3%
Tampa Electric Company	20,467	8.2%
JEA	12,491	5.0%
Orlando Utilities Commission	7,024	2.9%
Florida Public Utilities Company	637	0.3%
<b>Electric FEECA Utilities' Total</b>	207,582	83.7%
Non-FEECA Utilities' Total	40,547	16.3%
<b>Total Statewide Energy Sales</b>	248,129	100.0%

Source: FPSC's Statistics of the Florida Electric Utility Industry (Table 26), published in October 2023.

Sections 366.82(2) and 366.82(6), F.S., require the Commission to set goals at least every five years for the utilities subject to FEECA. The Commission sets electric goals with respect to summer and winter electric-peak demand and annual energy savings over a ten-year period, with a re-evaluation every five years. Once goals are established, the electric FEECA utilities must submit DSM plans containing programs intended to meet the goals for Commission approval.

In 2008, the Florida Legislature amended the FEECA statute, placing upon the Commission additional responsibilities when adopting conservation goals. These responsibilities included the consideration of the 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 consider any costs imposed by state and federal regulations on greenhouse gas emissions.

#### 1.2 FEECA's Influence on the Florida Energy Market

FEECA's mission is important to Florida's overall energy market. Florida's total electric consumption ranks among the highest in the country due to its sizeable population and climate-induced demand for cooling. When compared to the rest of the country, Florida's energy market is unique. The distinction is largely due to the state's climate, the high proportion of residential customers to total customers, and the significant reliance on electricity for heating and cooling.

Florida is typically a summer-peaking state, since the summer peak demand generally exceeds winter peak demand. On a typical summer day, the statewide demand for electricity can increase significantly over a span of hours. Additionally, 87.7 percent of Florida's electricity customers are residential and consume 53.9 percent of the electrical energy produced. In contrast, nationally, residential customers account for 39 percent of total electric sales, while commercial

<sup>&</sup>lt;sup>9</sup>FPSC's Review of the 2022 Ten-Year Site Plans of Florida's Electric Utilities (October 2023).

customers represent 35 percent of electric consumption, and industrial customers represent 26 percent. <sup>10</sup> Table 2 shows the makeup of Florida's electric customers by class and consumption.

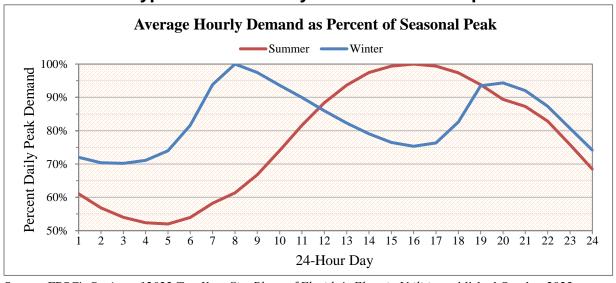
Table 2
Florida's Electric Customers by Class and Consumption (2022)

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Customer Class	Number of Customers	Percent of Customers	Energy Sales (GWh)	Percent of Sales
Residential	10,117,256	87.7%	133,791	53.9%
Commercial	1,224,259	10.6%	87,206	35.1%
Industrial	26,885	0.2%	20,494	8.3%
Other*	163,196	1.4%	6,638	2.7%
Total	11,531,596	100.0%	248,129	100.0%

\*Street and highway lighting, sales to public authorities, and interdepartmental sales. Source: FPSC's *Statistics of the Florida Electric Utility Industry* (Tables 26 and 33), published October 2023.

Figure 1 shows the daily electric load curves for typical Florida summer and winter day. In the summer, air conditioning demand starts to increase in the morning and peaks in the early evening; a pattern which aligns with the sun's heating of buildings. In comparison, the winter load curve has two peaks—the largest in mid-morning, followed by a smaller peak in the late evening—which correspond to heating loads.

Figure 1
Typical Florida Daily Electric Load Shapes



Source: FPSC's Review of 2022 Ten-Year Site Plans of Florida's Electric Utilities published October 2023.

<sup>&</sup>lt;sup>10</sup>National data as reported for 2022 by the U.S. Energy Information Administration in the annual *Electric Sales*, *Revenue*, *and Average Price (ESR)* report (Table 2): <a href="https://www.eia.gov/electricity/sales revenue price/">https://www.eia.gov/electricity/sales revenue price/</a>

Residential load patterns shift rapidly and have high peak-to-trough variation. In contrast, commercial or industrial loads demonstrate more consistency throughout the 24-hour day and experience fewer spikes in demand.

Utilities dispatch additional generating capacity throughout the day in order to follow the customer load patterns. Peaking generating units, which are dispatched during high demand periods of the day, are less fuel-efficient than baseload or intermediate generating units. Utility DSM programs play a role in reducing energy usage and shifting peak demand, thus reducing the need to dispatch fuel-inefficient generating units. Over time, the need for additional generating capacity has increased in Florida, largely due to population growth. In addition to providing fuel savings at existing generating units, utility-sponsored DSM programs and individual consumer conservation efforts can avoid or defer the need for new electric generating capacity.

Utility-sponsored DSM programs are funded by all ratepayers. Therefore, in order to meet FEECA requirements, the Commission and utilities must ensure that the DSM programs created to reap the benefits of reduced fuel usage and deferred generating capacity are cost-effective, i.e. less costly than generation. The Commission's methodologies to determine the cost-effectiveness of demand-side management programs are explained in detail in Section 2.1.

Since its enactment, implementation of FEECA has been successful in reducing the growth rate of weather-sensitive electric peak demands, and in conserving expensive resources. These savings have avoided or deferred the need for new generating capacity and offset the use of existing generating units, resulting in savings of fuel, as well as variable operations and maintenance (O&M) costs. During 2022, FEECA utility DSM programs continued contributing to the reduction of statewide energy needs and deferred the need for new generating capacity. Table 3 details statewide cumulative savings for summer peak demand, winter peak demand, and overall energy consumption through 2022, as reported in the Florida Reliability Coordinating Council's (FRCC) 2023 Regional Load & Resource Plan. In 2022, the FEECA DSM programs contributed annual energy savings of 175.3 GWh, which is enough electricity to power approximately 13,089 homes for a year.

<sup>&</sup>lt;sup>11</sup>Electric generating units are typically categorized as baseload, intermediate, or peaking. Aside from planned and forced outages, baseload units are scheduled to operate continuously. Intermediate units generate power to follow load for periods of time, but are not planned to operate nonstop. Peaking units supplement baseload and intermediate power, operating during high-demand, or peak periods.

<sup>&</sup>lt;sup>12</sup>The cumulative MW savings for summer peak demand and winter peak demand shown in Table 3 reflect the maximum capability of demand response programs.

<sup>&</sup>lt;sup>13</sup>This estimate is based on an average annual household energy use of 13,389 kWh for Florida in 2022 as reported by the U.S. Energy Information Administration in the annual *Electric Sales, Revenue, and Average Price (ESR)* report (Table 5.a): <a href="https://www.eia.gov/electricity/sales revenue price/">https://www.eia.gov/electricity/sales revenue price/</a>

Table 3
Statewide Cumulative Demand and Energy Savings (1980-2022)

Туре	Achieved Reduction
Summer Peak Demand	8,156 MW
Winter Peak Demand	7,573 MW
Annual Energy Reduction	11,975 GWh

Source: Florida Reliability Coordinating Council's 2023 Regional Load & Resource Plan (S-3, S-4, S-5).

In 2022, the electric FEECA utilities offered 103 programs for residential, commercial, and industrial customers (see Appendices A and B). Programs focus on either reducing energy use at a given moment, which shifts/reduces demand, or toward reducing overall energy consumption over a period of time. Utility-sponsored DSM programs are an important means of achieving demand and energy savings and these programs are designed to encourage customer conservation efforts.

Additionally, residential energy audits, required by Section 366.82(11), F.S., serve as an avenue to identify and evaluate conservation opportunities for customers, including their potential participation in utility-sponsored DSM and conservation programs. Energy audits also educate customers about behavioral changes and energy efficiency investments they can make outside of utility-sponsored DSM programs. During 2022, FEECA electric utilities performed 248,398 residential audits. Though FEECA does not require commercial energy audits, FEECA electric utilities also performed 6,931 commercial energy audits in 2022. Additional information about these results is presented in Section 3.

#### 1.3 Recovery of Conservation Expenditures

The IOUs are allowed by Commission Rule 25-17.015, F.A.C., to recover reasonable expenses for DSM programs through the ECCR clause. Such expenses may include administrative costs, equipment, and incentive payments. Before petitioning the Commission to recover costs through the ECCR clause, a utility must provide data on DSM program cost-effectiveness. Utilities must have Commission approval for any new programs or program modifications prior to seeking cost recovery.

Commission Rule 25-17.015, F.A.C., also permits natural gas LDCs to seek recovery for costs related to Commission-approved conservation programs. While PGS is the only natural gas utility subject to FEECA, the other Florida LDCs offer Commission-approved DSM programs without a specific therm savings goal. Natural gas conservation programs have historically focused on providing rebates to residential customers that support the replacement of less efficient appliances with new, energy-efficient gas appliances. However, several LDCs have expanded their rebate programs to commercial customers.<sup>14</sup>

On an annual basis, the Commission conducts financial audits of DSM program expenses that are included in the electric IOUs' and LDCs' cost recovery requests. A full evidentiary hearing is

<sup>&</sup>lt;sup>14</sup>Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida*.

held to determine the cost recovery factors to be applied to customer bills in the following year. The Commission-approved 2024 conservation cost recovery factors are discussed further in Section 4.

#### Section 2. DSM Goalsetting

#### 2.1 DSM Program Cost-Effectiveness and Energy Savings

Section 366.81, F.S., emphasizes that it is critical to utilize cost-effective conservation. This statutory provision is codified in Rule 25-17.008, F.A.C., for electric utilities and Rule 25-17.009, F.A.C., for natural gas LDCs. The rules identify the cost-effectiveness methodologies to be used and require that utilities provide cost and benefit information to the Commission when requesting to add a program or make changes or additions to an existing program.

The Commission requires that electric utilities measure cost-effectiveness from three perspectives, at a minimum - the program participant, the utility's ratepayers, and society's overall cost for energy services. The Participants test, the Rate Impact Measure (RIM) test, and the Total Resource Cost (TRC) test capture these viewpoints. The electric FEECA utilities are required to provide the results of all three tests when seeking to add a new program or make changes to an existing program.

Similarly, Rule 25-17.009, F.A.C., requires natural gas LDCs to provide the results of the Participants test and Gas Rate Impact Measure Test (GRIM). The GRIM test is a modified version of the RIM test, specific to gas utilities. Natural gas LDCs are also required to provide the results of these tests when seeking to add a new program or modify an existing program.

Table 4 summarizes the costs and benefits considered in the three Commission-approved electric cost-effectiveness methodologies for electric utilities.

Table 4
Summary of Electric Cost-Effectiveness Methodologies

	<b>Participants</b>	RIM	TRC	
Benefits				
Bill Reduction	X			
Incentives Received	X			
Avoided Generation (Capital and O&M)		X	X	
Avoided Transmission (Capital and O&M)		X	X	
Fuel savings		X	X	
Costs				
Program Costs		X	X	
Incentives Paid		X		
Lost Revenues		X		
Participant's Costs (Capital and O&M)	X		X	

#### **Participants Test**

The Participants test analyzes costs and benefits from a program participant's point of view, rather than the impact on the utility and other ratepayers not participating in the program. The Participants test includes the up-front costs customers pay for equipment and costs to maintain

this equipment. Benefits considered in the test include the incentives paid by utilities to the customers and the reduction in customer bills. Failure to demonstrate cost-effectiveness under this test would infer that rational customers would not elect to participate in this program.

#### Rate Impact Measure (RIM) Test

The RIM test is designed to ensure that all ratepayers, not just the program's participants, will benefit from a proposed DSM program. The RIM test includes the costs associated with incentive payments to participating customers and decreased revenues to the utility. DSM programs can reduce utility revenues due to reduced kilowatt-hour (kWh) sales and reduced demand. The decreased utility revenues typically are recovered from the general body of ratepayers at the time of a rate case. A DSM program that passes the RIM test ensures that all customer rates are the same or lower than rates would be without the DSM program.

#### **Total Resource Cost (TRC) Test**

The TRC test measures the overall economic efficiency of a DSM program from a social perspective. This test measures the net costs of a DSM program based on its total costs, including both the participants' and the utility's costs. Unlike the RIM test, customer incentives and decreased utility revenues are not included as costs in the TRC test. Instead, these factors are treated as transfer payments among ratepayers. Moreover, if appropriate, certain external costs and benefits such as environmental impacts may be taken into account. Because incentives and foregone revenues are not treated as "costs," electric rates for all customers tend to be higher for programs implemented solely using the TRC test to judge cost-effectiveness.

#### **Ensuring Cost-Effectiveness**

Ensuring utility-sponsored DSM programs remain cost-effective benefits the general body of electric ratepayers. These programs can reduce costs to ratepayers by postponing capital expenditures such as future power plant construction, and reducing current electrical generation costs, including fuel and variable O&M costs. DSM programs can also benefit customers by improving reliability.

When an IOU determines that a DSM program is no longer cost-effective, the utility should petition the Commission for modification or discontinuation of the program. In many instances, programs may need to be modified due to the adoption of a more stringent appliance efficiency standard or building code. In contrast, if new efficiency measures become available that are cost-effective, the utility may petition the Commission for approval of a new program.

#### 2019 Electric DSM Goalsetting Proceeding

Pursuant to Sections 366.82(2) and 366.82(6), F.S., the electric FEECA utilities filed proposed goals for the 2020-2029 period in April 2019. The utilities' proposed goals were lower overall than those established in the 2014 goalsetting proceeding, with some utilities proposing goals of zero or near-zero for the 10-year period. A technical hearing on the proposed goals was held on August 12 and 13, 2019. The Commission heard testimony on cost-effectiveness tests, whether a goal of zero fulfilled statutory requirements, how to account for free ridership, and how to ensure low-income customers are able to effectively participate in DSM programs.

By issuing Order No. PSC-2019-0509-FOF-EG<sup>15</sup> on November 26, 2019, the Commission rejected the goals proposed by the electric FEECA utilities and chose to continue with the 2020-2024 portion of the goals established in the 2014 goalsetting proceeding. While the goalsetting process produces annual goals, the cumulative goals for the entire 10-year period are shown in Table 5 for illustrative purposes.

The Commission also expressed a desire to review the goalsetting process for potential revisions. In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C.<sup>16</sup> Rule development workshops for this docket were conducted in January 2021, May 2021, and November 2022, and on May 2, 2023 a rule hearing was held. On May 17, 2023, a rule certification packet was forwarded to the Administrative Code and Register Section of the Florida Department of State. Rule 25-17.0021, F.A.C., was primarily amended to: (1) make goals based upon projected savings from potential programs offered to customers rather than upon aggregated savings from individual conservation measures; and (2) to require utilities to provide projected savings or goals developed under two cost-effectiveness scenarios, rather than a single cost-effectiveness test, in order to provide a more robust record of evidence. Specifically, the Commission's objective with the updated rule was to bring into the goal-setting phase a greater focus on potential conservation programs that could be offered to customers in order to reach a utility's approved goals.<sup>17</sup> The changes that were adopted in May 2023 will be used when the DSM goalsetting proceeding is initiated in 2024.

Table 5
Cumulative Commission-Approved Electric DSM Goals (2015-2024)

Electric Utility	Summer Demand Goals (MW)	Winter Demand Goals (MW)	Annual Energy Goals (GWh)
FPL	526.1	324.2	526.3
DEF	259.1	419.3	195.0
TECO	56.3	78.3	144.3
Gulf	68.1	36.7	84.2
FPUC	1.3	0.4	2.0
OUC	5.0	8.4	13.0
JEA	10.8	9.7	25.8
Total	926.7	877.0	990.6

Source: Order No. PSC-14-0696-FOF-EU.

The goals established in 2014 were based upon estimated energy and demand savings from measures that passed both the RIM and Participants cost-effectiveness tests. Measures that pass the Participants test ensure that participating customers' benefits exceed the costs of the measure or program to the participants. Use of the RIM test minimizes subsidies between customers who

<sup>&</sup>lt;sup>15</sup>Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, in Docket Nos. 20190015-EG through 20190021-EG, *In re: Commission review of numeric conservation goals*.

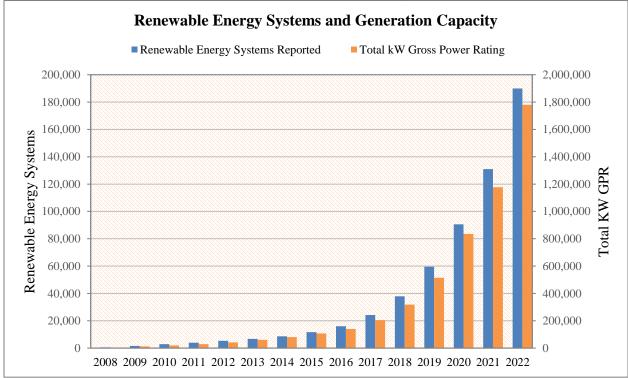
<sup>&</sup>lt;sup>16</sup>See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

<sup>&</sup>lt;sup>17</sup>Order No. PSC-2023-0165-FOF-EU, Notice of Adoption of Rule, issued May 18, 2023, in Docket No. 20200181-EU, *In re: Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.* 

participate in DSM programs and those who do not participate but pay for program expenditures. The RIM test also ensures rates would remain the same or lower than otherwise would occur.

As part of its review of goals in 2019, the Commission recognized Rule 25-6.065, F.A.C., (Customer-Owned Renewable Generation Rule) as an effective means of encouraging the development of demand-side renewable energy systems. Figure 2 shows the growth in the number of customer-owned renewable energy systems in Florida, as well as the growth in gross power ratings (i.e., generating capacity) since the Commission's approval of net-metering in 2008.

Figure 2
Demand-Side Renewable Energy Systems
Renewable Energy Systems and Generation Capacity



Source: Data compiled from Interconnection and Net Metering Reports provided to the Commission from IOU, municipal, and rural electric cooperative electric companies, 2008-2022.

#### 2.2 Summary of the 2019 Goalsetting Process for Peoples Gas

PGS is the only natural gas utility that meets the therm sales threshold for establishing conservation goals under FEECA.<sup>18</sup> In October 2018, PGS filed a petition for approval of numeric therm reduction goals for the 2019-2028 period. PGS estimated its goals based upon its current Commission-approved DSM programs. Because PGS had existing programs already in place, there is expected to be no additional cost to its customers, aside from the costs of the new

<sup>&</sup>lt;sup>18</sup>Section 366.82, F.S., provides that a natural gas utility is subject to FEECA requirements if a utility's annual retail sales volume is equal to or greater than 100 million therms.

audit programs. PGS utilized the Participants and GRIM tests to calculate its goals. <sup>19</sup> The Commission approved the goals for PGS in Order No. PSC-2019-0361-PAA-GU, issued on August 26, 2019. Table 6 shows the 10-year therm-savings goals for PGS over the 2019-2028 period. <sup>20</sup>

Table 6
Commission-Approved DSM Goals for PGS (2019-2028)

Cumulative Savings (Therms)					
Residential	Combined				
3,749,583	2,426,634	6,176,217			

Source: Order No. PSC-2019-0361-PAA-GU.

PGS was also required to develop a residential audit program as part of the goalsetting process. However, PGS filed for and was granted a waiver of Rules 25-17.003(3)(a) and (b), F.A.C., which require all FEECA utilities to offer residential customers three different types of on-site audits - Building Energy Efficiency Rating System (BERS) Audits, Computer-Assisted Audits, and Walk-Through Audits. PGS argued that the on-site audits would impose a substantial hardship on the Company and that the purpose of the underlying statute can be achieved by other means. The Commission allowed PGS to offer an electronic, online-only audit in lieu of on-site audits for residential customers. The Commission approved the implementation of the electronic audits for PGS's residential customers, as well as on-site audits for its commercial customers, beginning in 2020. Customers of PGS are still eligible to receive walk-through energy audits through their electricity provider.

In November 2019, a docket was established to consider the petition from PGS for Approval of Demand-Side Management Plan and Program Standards together.<sup>21</sup> In June 2020, PGS informed the Commission of its intention to revise programs in an amended filing. In February 2021, an Amended Petition for Approval of Demand-Side Management Plan was filed. By Order No. PSC-2021-0242-PAA-EG, the revised filing was approved.<sup>22</sup>

#### 2.3 Impact of Outside Factors on FEECA Utility DSM Programs

Conservation in Florida is prompted by customer actions to conserve energy, federal appliance efficiency standards, state building codes, and utility-sponsored DSM programs. Customers can save energy and reduce their bills through behavioral changes and by investing in energy efficient homes, appliances, and equipment. Federal appliance efficiency standards have become more stringent over time, thus increasing the baseline energy efficiency of new appliances and heating and air conditioning equipment available to Florida's consumers. Likewise, changes in the Florida State Building Code (FLBC) have resulted in more energy efficient homes.

<sup>&</sup>lt;sup>19</sup>Rule 25-17.009, F.A.C., requires natural gas utilities that seek to recover costs for conservation programs to file the cost-effectiveness test results of the Participants test and the GRIM test.

<sup>&</sup>lt;sup>20</sup>Order No. PSC-2019-0361-PAA-GU, issued August 26, 2019, in Docket No. 20180186-GU, *In re: Petition for approval of demand side management goals and residential customer assisted and commercial walk-through energy audit programs, by Peoples Gas System.* 

<sup>&</sup>lt;sup>21</sup>See Docket No. 20190210-EG, Petition for approval of demand-side management plan, by Peoples Gas System.

<sup>&</sup>lt;sup>22</sup>Order No. PSC-2021-0242-PAA-EG, issued July 2, 2021, in Docket No. 20190210-EG, *In re: Petition for approval of demand-side management plan, by Peoples Gas System.* 

Utilities design DSM programs to encourage conservation that exceeds levels achievable through current building codes and minimum efficiency standards. However, the cost-effectiveness of some DSM measures has declined due to several factors outside of the FEECA utilities' control. More stringent state and federal efficiency standards, building codes, and customer actions to implement efficiency outside of utility programs, reduce the potential incremental demand and energy savings available from utility-sponsored DSM programs.

Federal efficiency standards and state building codes establish a baseline in assessing the costeffectiveness of a potential DSM program. Florida utility DSM programs offer rebates and
incentives for appliances that exceed federally established minimum efficiency standards.
However, increases in federal efficiency standards, independent conservation efforts by
consumers, and general conservation practices make it more challenging for utilities to achieve
demand and energy savings through DSM programs. Moreover, participation rates in the utility
programs are driven by the anticipated payback to the participating customer. While utility
incentives tend to increase customers' "take rate" in conservation programs, electric rates are
also a contributing factor in customers' decisions to invest in more efficient appliances. Thus,
low or declining electric rates tend to reduce customer energy efficiency investments, while
increasing rates can have the opposite effect. This makes it crucial that the FEECA utilities
frequently evaluate conservation programs to ensure that they remain cost-effective. Likewise,
the FEECA utilities are also expected to evaluate the potential for new, cost-effective DSM
program opportunities as energy-efficiency technologies develop.

#### **State Building Code**

At the state level, the FLBC is amended annually to incorporate interpretations and clarifications as well as to update efficiency standards. The Florida Building Commission updates the FLBC with relevant new standards every three years, most recently in 2020 when the 7<sup>th</sup> Edition (2020) was issued. The 7<sup>th</sup> Edition (2020) became effective in December 2020. Two Supplements were issued in 2022, and one has been issued to-date in 2023.<sup>23</sup> While there were several changes in both documents that pertain to construction standards, no changes were made to Chapter 11, Energy Efficiency. After review of these resources and the DSM programs that were current when these codes became effective, FEECA utilities reported that the code updates had no impact on the programs that had been established in the 2014 goalsetting process. None of the FEECA utilities made regulatory filings to modify DSM Plans or programs as a result of 2020 or the 2022 FLBC code updates.

#### **Federal Government Efficiency Standards**

At the federal government level, the U.S. Department of Energy's (DOE) Building Technologies Office sets energy efficiency standards for more than 60 categories of appliances and other equipment, including HVAC equipment.<sup>24</sup> Within the Building Technologies Office, the

<sup>&</sup>lt;sup>23</sup>The 2022 Supplements to the 7<sup>th</sup> Edition added code language for consistency with changes in laws that became effective July 1, 2022. Details of the Seventh Edition (2020) Florida Building Code and all Supplements to it can be found at https://www.floridabuilding.org/fbc/Links\_to\_Code\_Resources.html. In addition, details are provided regarding the new federal standards for central air conditioners, effective January 1, 2023.

<sup>&</sup>lt;sup>24</sup>Pursuant to Section 553.975, F.S., the Commission must report the effectiveness of state energy conservation standards established by Sections 553.951-553.973, F.S. Florida's appliance efficiency standards are mandatory efficiency improvements but have not been updated since 1993, and therefore have likely been superseded by more recent federal efficiency standards.

Appliances and Equipment Standards Program maintains a multi-year rulemaking schedule that establishes minimum energy efficiency standards and test procedures which are the basis for these standards. The products regulated by DOE standards represent about 90 percent of home, 60 percent of commercial building, and 30 percent of industrial energy use. Some of the consumer products regulated by these Conservation Standards and Test Procedures include laundry appliances, dishwashers, microwave ovens, televisions, and several other common household products. In addition to consumer products, there are categories for lighting, plumbing, and commercial/industrial products.

In January 2021, an executive order from the President of the United States was issued which included direction to address the overdue rule and test procedure reviews.<sup>27</sup> In the August 2021 Report To Congress, the DOE conveyed that since the last Report to Congress (July 2019), 123 rulemaking actions related to energy conservation standards and test procedures have been completed. Of this total, 71 of the actions were related to energy conservation standards rulemaking notices, with 15 being final actions. Examples of the equipment for which final actions were taken include ceiling fans, commercial air compressors, dishwashers, fluorescent light ballasts, and portable air conditioners. The full list, including information on the fifty two rulemaking notices that relate to test procedures, is accessible via the link identified in the footnote below.<sup>28</sup>

Federal standards that change the baseline requirements for a product may have a direct effect on DSM programs. If a DSM program is no longer cost effective as a result of changing federal standards, then the utility should file a petition to modify or discontinue the program.

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<sup>&</sup>lt;sup>25</sup>Federal Appliance and Equipment Standards Program: https://www.energy.gov/eere/buildings/appliance-and-equipment-standards-program

<sup>&</sup>lt;sup>26</sup>Federal Conservation Standards and Test Procedures: https://energy.gov/eere/buildings/standards-and-test-procedures

<sup>&</sup>lt;sup>27</sup>Executive Order No. 13990, 86 Federal Register 7037 (January 25, 2021): https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01765.pdf

<sup>&</sup>lt;sup>28</sup>U.S. Department of Energy, Semi-Annual Report to Congress on Appliance Energy Efficiency Rulemakings, Energy Conservation Standards Activities (August 2021): <a href="https://www.energy.gov/sites/default/files/2021-08/EXEC-2019-005022%20-%20Final%20Report%20ksb.pdf">https://www.energy.gov/sites/default/files/2021-08/EXEC-2019-005022%20-%20Final%20Report%20ksb.pdf</a>

#### Section 3. FEECA Utilities' Goal Achievements

#### 3.1 Assessing Goal Achievement

Commission rules require separate goals be set for electric residential and commercial/industrial (C/I) classes, assigning context to measuring goal achievement within these two primary customer categories. Each utility's achievements in these categories are also combined and compared against total demand and energy savings goals.

Every FEECA utility must file an annual DSM report pursuant to Rule 25-17.0021, F.A.C., which summarizes demand savings, energy savings, and customer participation rates for each approved program. The report also includes the residential, C/I, and total energy efficiency achievements compared to the approved DSM goals. Each FEECA utility's current (2022) and archived annual DSM reports from prior years can be found on the Commission's website: <a href="http://www.psc.state.fl.us/">http://www.psc.state.fl.us/</a>.

Monitoring annual goal achievements enables the Commission to evaluate the effectiveness of each utility's programs. In addition to reviewing the FEECA utilities' annual DSM reports, staff issues discovery requests for additional information from the utilities on their demand and energy saving achievements. Staff's data requests also seek explanations of factors preventing the utilities from achieving projected participation levels. Each FEECA utility's DSM performance in 2022 is discussed below. The utility achievements have been compared to the annual goals established by the Commission in November 2014 and reapplied in November 2019. Table 7 provides a breakdown of each electric utility's goal achievements for the period.

#### **FPL**

FPL met 1 of 9 DSM demand and energy savings goals in 2022. FPL met its goal for annual energy reduction in the residential customer class. The company stated lower than projected participation in its Residential On Call program contributed to its failure to achieve all other residential goals. Some shortfalls were significant. For example, FPL's goal for summer demand reduction in this customer class was 35.70 MWs, but FPL recorded 24.17 MWs of summer demand reduction, a shortfall of 48 percent. About 14,000 fewer residential audits were conducted in 2022 (82,631), compared to 2021 (96,612). FPL attributes some of that decline to the impacts of Hurricanes Ian and Nicole in the fall of 2022. Although more C/I audits were conducted in 2022 (5,669) compared with 2021 (4,895), very low participation in the company's C/I Demand Reduction program contributed to FPL missing all of its C/I goals in 2022. FPL missed each of its total demand and energy savings goals by significant margin.

#### **DEF**

In 2022, DEF met its residential and total demand and energy savings goals. DEF's 2022 residential demand and energy savings were higher than those of 2021, and DEF conducted significantly more residential energy audits in 2022 (37,725), compared to 2021 (21,732). For the C/I customer class, the company met its goals for Winter Demand Reduction and Annual Energy Savings, but missed achieving its goal for Summer Peak Demand Reduction by a very small margin (1 MW). In 2022, DEF conducted only about half as many C/I audits (146) compared to 2021 (287).

#### **TECO**

TECO met its 2022 total goals and all individual customer class goals. In 2022, all demand and energy savings levels were higher compared to 2021, with enhanced participation in audit and other programs appearing to play a significant part in those results. In 2022, TECO conducted significantly more residential audits (114,112, compared to 70,394 in 2021), and also reported higher participation in residential Insulation and Duct Repair programs. In addition, the company conducted 766 audits for C/I customers, up from 206 in 2021.

#### **FPUC**

FPUC met all of its 2022 demand reduction and energy savings goals for the residential customer class, and in doing so, also met all of its total winter and summer demand reduction goals. Fewer residential audits were conducted in 2022, compared to 2021, although strong participation in its residential HVAC program contributed to the results achieved in that sector. In 2022, FPUC did not achieve any demand reduction and energy savings or meet any of its goals in the C/I customer class. The company states that a limited number of C/I customers in its service territory is a significant factor for it not contributing any demand reductions or annual energy savings from the C/I sector.

#### **JEA**

JEA met all its 2022 individual customer class goals, thus it met its total demand and energy savings goals as well.

#### OUC

OUC met all its 2022 individual customer class goals, thus it met its total demand and energy savings goals as well.

Table 7
Electric DSM Goals Compared to Annual Achievements (2022)

Winter (MW)		ter (MW)	Summer (MW)		Annual (GWh)	
Utility	Goals	Achieved Reduction	Goals	Achieved Reduction	Goals	Achieved Reduction
FPL*						
Residential	21.80	16.44	35.70	24.17	34.80	36.46
Commercial/Industrial	<u>17.20</u>	<u>13.50</u>	<u>28.00</u>	<u>25.56</u>	<u>34.60</u>	<u>16.87</u>
Total	39.00	29.94	63.70	49.73	69.40	53.33
DEF*						
Residential	24.50	25.00	12.20	16.00	3.75	49.00
Commercial/Industrial	4.70	5.00	6.00	5.00	2.40	3.00
Total	29.20	30.00	18.20	21.00	6.15	52.00
TECO						
Residential	7.40	9.50	3.00	11.10	6.90	30.40
Commercial/Industrial	<u>1.90</u>	<u>7.10</u>	3.30	12.30	10.20	26.60
Total	9.30	16.60	6.30	23.40	17.10	57.00
FPUC*						
Residential	0.034	0.101	0.073	0.174	0.073	0.320
Commercial/Industrial	0.027	0.000	0.058	0.000	0.202	0.000
Total	0.061	0.101	0.131	0.174	0.275	0.320
JEA						
Residential	0.960	1.830	0.940	2.100	2.500	4.110
Commercial/Industrial	0.007	0.260	0.140	0.490	0.080	2.540
Total	0.967	2.090	1.080	2.590	2.580	6.650
OUC						
Residential	0.200	0.581	0.190	0.531	0.720	1.137
Commercial/Industrial	0.780	<u>1.956</u>	0.370	<u>1.985</u>	0.850	<u>4.816</u>
Total	0.980	2.537	0.560	2.516	1.570	5.953

<sup>\*</sup>Bold numbers shown in Table 7 indicate the utility did not meet its annual goals within that category.

Source: FEECA utilities' 2022 demand-side management annual reports.

#### **PGS**

PGS met its 2022 total goals and all individual customer class goals. The annual energy reduction for the residential customer class (450,602 therms) not only exceeded the goal for 2022, but also outpaced the achieved reduction from 2021 (425,798 therms). The annual energy reduction for the Small Commercial customer class (558,218 therms) also exceeded the goal for 2022, and nearly doubled the achieved reduction from 2021 (292,210 therms). In both customer classes, 2022 participation levels were higher in New Construction programs.

Table 8 provides a breakdown of the goal achievements for PGS for the period. Therm-savings goals for PGS were first approved in August 2019. PGS met its 2022 total energy reduction goal and its individual customer class goals.

Table 8
DSM Goals Compared to Annual Achievements (2022)

DCS	Annual Energy Reduction (Therms)			
PGS	Goals	Achieved Reduction		
Residential	363,728	450,602		
Small Commercial	233,833	<u>558,218</u>		
Total	597,561	1,008,820		

Source: PGS' 2022 demand-side management annual report.

#### 3.2 Information on Audit Programs

Residential energy audits are required by Section 366.82(11), F.S. Energy audits serve as an avenue for utilities to identify and evaluate conservation opportunities for customers. FEECA utilities use energy audits as a gateway to their other DSM programs. For example, some rebate programs require customers to have an energy audit so that the utility can identify existing equipment to determine program eligibility before the customer is eligible to participate. Utilities also use energy audits to educate customers on behavioral changes and energy efficiency investments they can make outside of the utility-sponsored DSM programs.

Rule 25-17.0021, F.A.C., requires that all FEECA utilities offer a Walk-Through Audit, a Building Energy-Efficiency Rating System (BERS) Audit, and a Computer-Assisted Audit to their residential customers. All FEECA electric utilities offer Walk-Through Audits for their commercial customers as well. In addition to the required audits, FEECA utilities also offer online and phone audits which have become increasingly popular with customers. While online and phone audits are not as thorough as Walk-Through Audits, they give customers access to much of the same information on their own time, without the need to schedule appointments with their utility. These audits also typically have lower administrative costs than Walk-Through Audits.

As a part of its goalsetting process, PGS was granted a waiver which exempts the company from the requirement to offer Walk-Through Audits. The Commission allowed PGS to offer an electronic, online-only audit in lieu of on-site audits for residential customers. In April 2020, PGS launched its Residential Customer Assisted Audit program as an online audit program for residential customers. In 2022, a total of 12,834 audits of this type were conducted. In addition, PGS launched its Commercial Walk-Through Energy Audit program in July 20, 2023.

#### **Residential Audits**

As shown in Table 9 below, the FEECA electric utilities performed a total of 248,398 residential audits in 2022, which was about 41,000 more residential audits compared to 2021 when 207,066 audits were conducted.<sup>29</sup>

Table 9
Residential Audits by Type (2022)

	In-Person	Virtual		
Utility	Walk-Through, BERS, and Computer-Assisted	Online	Phone	Total
FPL	13,824	53,446	15,361	82,631
DEF	8,598	25,919	3,208	37,725
TECO	4,310	109,802	0	114,112
FPUC	18	56	0	74
JEA	4,758	7,629	0	12,387
OUC	1,469	0	0	1,469
Total	32,977	196,852	18,569	248,398

Source: FEECA utilities' 2022 demand-side management annual reports.

By type, the FEECA electric utilities were less restricted in 2022 to offer in-person audits compared to 2021, when periods of suspensions and restrictions occurred as a result of COVID. Collectively, the number of in-person audits conducted in 2022 rose by about 61 percent (32,977 in 2022 compared to 20,476 in 2021). For virtual audits, the overall number of online audits rose in 2022, while the number of audits by phone declined slightly. Across all FEECA electric utilities, the number of online audits conducted in 2022 rose by about 18 percent (196,852 in 2022, compared with 166,823 in 2021), while the number of audits by phone fell by about 6 percent (18,569 in 2022 compared to 19,767 in 2021).

Overall, DEF, TECO, FPUC and JEA all reported that more audits were conducted in 2022, compared to 2021. FPL reported more in-person and phone audits, but fewer online audits were conducted in 2022 compared to 2021, which resulted in a lower number of audits overall for 2022. FPL stated that two significant storm events in the fourth quarter of 2022 (Hurricanes Ian and Nicole) impacted the number of residential customers that requested audits. For OUC, the utility conducted more in-person audits (1,469 in 2022, compared to 1,229 in 2021), but reported no virtual audits for 2022, which resulted in an overall decline for the year. OUC's decline in virtual audits conducted in 2022 was attributable to the change in reporting by the utility to clarify the distinction between an energy survey and an energy audit.<sup>30</sup>

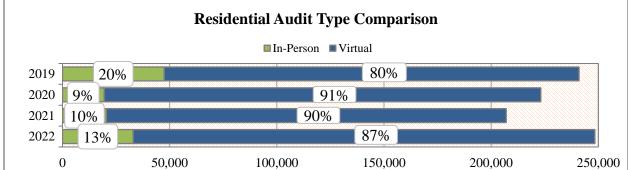
In 2019, before the onset of COVID-related program suspensions, approximately 80 percent of all residential audits were conducted virtually, and the balance were conducted in person. For 2020, when periods of suspensions were experienced, not only did the overall number of audits

<sup>&</sup>lt;sup>29</sup>Walk-Through, BERS, and Computer-Assisted audits all require a utility auditor to physically inspect the customer's premises, and therefore are consolidated for the purposes of Figures 3 and 4. On a percentage basis, the number of residential audits conducted in 2022 grew by about 20 percent, compared with 2021.

<sup>&</sup>lt;sup>30</sup>Although not reflected in Table 9, OUC conducted 1,185 online energy surveys for residential customers in 2022.

decline, but a proportional shift was observed, with virtual audits growing from 80 percent of total audits to 91 percent, and in-person audits declining from 20 percent of total audits to 9 percent, as shown in Figure 3 below. For 2021, the proportional relationship remained similar to 2020, even though fewer total audits were conducted. For 2022, the proportional relationship between in-person audits and virtual audits moved in the direction of pre-pandemic levels, with increased in-person audits. In addition, the overall number of audits was higher than the three previous years.

Figure 3
Residential Audits Type Comparison (2019-2022)



Source: FEECA utilities' 2019-2022 demand-side management annual reports.

#### **Commercial / Industrial Audits**

On an overall basis, Table 10 below shows that the FEECA electric utilities performed 6,931 commercial/industrial energy audits in 2022, compared to 5,591 such audits in 2021. Although in 2021, FPL, DEF, TECO, and Gulf all offered C/I audits through in-person and virtual means, only DEF and primarily FPL continued the practice of offering virtual audits in 2022. For TECO, JEA, and OUC, all of the audits conducted for this customer class in 2022 were conducted by site visits as in-person audits. FPUC does not offer an audit program for commercial/industrial customers.

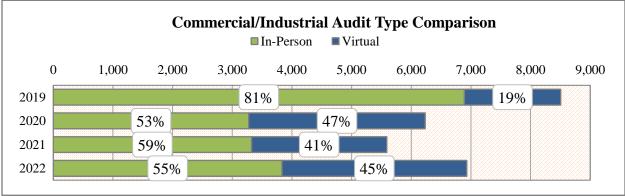
Table 10
Commercial / Industrial Audits by Type (2022)

	In-Person	Virt		
Utility	Walk-Through, BERS, and Computer- Assisted	Online	Phone	Total
FPL	2,574	536	2,559	5,669
DEF	143	0	3	146
TECO	766	0	0	766
FPUC	0	0	0	0
JEA	320	0	0	320
OUC	30	0	0	30
Total	3,833	536	2,562	6,931

Source: FEECA utilities' 2022 demand-side management annual reports.

Figure 4 below shows that a higher number of C/I audits were conducted in 2019, prior to all of the periods of suspensions that occurred at different times in 2020 and 2021. In 2019, about 81 percent of all commercial/industrial audits were conducted as on-premises (in-person) audits, with the balance conducted virtually. In 2020, a pronounced shift to this proportion was observed, such that on-premises audits in that year declined to 53 percent of total commercial/industrial audits. In 2021, that shift reversed slightly, when the on-premises audits as a percentage of total audits rose to 59 percent. The total number of commercial/industrial audits declined significantly in 2020, and a smaller decrease was noted in 2021. In 2022, the total number of commercial/industrial audits increased compared to 2021, although the proportional number of virtual audits is dominated by the results from one utility (FPL).

Figure 4
Commercial / Industrial Audit Type Comparison (2019-2022)



Source: FEECA utilities' 2019-2022 demand-side management annual reports.

#### 3.3 Low-Income Programs

The 2014 DSM Goals Order<sup>31</sup> states, "When the FEECA utilities file their DSM implementation plans, each plan should address how the utilities will assist and educate their low-income customers, specifically with respect to the measures with a two-year or less payback." In accordance with this Order, each electric FEECA utility has implemented programs within its DSM plan that address low-income conservation. Low-income customer participation in energy conservation programs furthers the intent of FEECA by encouraging potential demand and energy reduction in Florida. Customers that participate in these programs benefit through increased knowledge of conservation opportunities and through rebates on energy saving equipment, resulting in potential bill reduction.

Low-income programs mainly focus on efforts to provide energy efficiency information, weatherization opportunities and the installation of energy efficient measures to residential homes. In many cases, the utilities have established partnerships with government and non-profit agencies. They work together to help identify low-income neighborhoods and educate customers on conservation opportunities through energy audits, bill inserts, presentations, and other measures.

<sup>&</sup>lt;sup>31</sup>The 2014 DSM Goals Order references electric utilities only.

<sup>&</sup>lt;sup>32</sup>Order No. PSC-14-0696-FOF-EU, issued December 16, 2014, in Docket Nos. 20130199-EI through 20130205-EI, *In re: Commission review of numeric conservation goals.* 

Since 2015, all of the electric FEECA utilities have submitted programs in their DSM plans tailored to offer assistance to qualifying customers. Each FEECA utility's conservation efforts with respect to low-income customers during 2022 are discussed below.

#### **FPL**

Through its Low Income Weatherization program, FPL leverages its partnerships with Weatherization Assistance Providers throughout its territory to offer these providers rebates for installation of program measures in qualifying homes.<sup>33</sup> In 2022, FPL focused on direct outreach to income qualified communities by coordinating with property managers for large income qualified communities, as well as to individuals who have requested a home energy survey in income qualified zip codes. In it Northwest Florida service territory, FPL uses former Gulf Power vendor Honeywell International to deliver this program.

There are three ways a qualified customer can enroll in FPL's Low Income Weatherization program. First, when a customer in an income qualified zip code initiates contact with the company with a high bill concern or an energy survey request, the customer is encouraged to schedule an in-home energy survey. During that field service visit, the FPL representative conducting the energy survey will install program measures. Second, income qualified neighborhoods are identified and targeted for canvassing by FPL representatives who offer installation of program measures in a proactive manner. Finally, FPL customers can contact Weatherization Assistance Providers for direct assistance. The Weatherization Assistance Providers are responsible for qualifying customers who approach them for direct assistance, and would receive rebates directly from FPL when providing measure to customers.

#### **DEF**

DEF's Low Income Weatherization Assistance program is operated through weatherization agencies. The company and participating agencies, including the State of Florida's Department of Economic Opportunity, forge agreements to address direct payments from DEF to those entities upon the installation of weatherization measures. From DEF's website, customers must select a link requesting financial assistance, and thereafter, must make a selection for the "Low Income Energy Assistance program." Once that selection is made, customers must follow an additional website link to reach partnering agencies to obtain information on qualifying for this program. The company meets directly with participating agencies and organizations to share information about their Low Income Weatherization Assistance program and offers assistance in getting incentives through the program. In addition, DEF conducts Energy Education workshops for both agencies and their customers. DEF does not use advertising resources to promote this program.

In 2022, DEF worked with the Pinellas County Urban League, Mid-Florida Community Services, Osceola Council on Aging and other social service organizations to ensure these entities are aware of the benefits available to low-income customers. Currently, DEF is finalizing the arrangements for the Pinellas County Housing Authority to offer the program. DEF believes that this move will help increase participation in its Low Income Weatherization program.

<sup>33</sup>The Weatherization Assistance Program offered by FPL and other investor-owned electric utilities in Florida is a United States Department of Energy program that is administered at the state and local levels. Resource links are provided at this website: https://www.energy.gov/scep/wap/how-apply-weatherization-assistance

#### **TECO**

After periods of COVID-related suspensions in 2021, TECO's Neighborhood Weatherization (Low Income) program experienced a large increase in participation in 2022. (Participation in this program rose from 2,923 in 2021 to 9,159 in 2022.) In 2022, TECO used social media outlets (Facebook and Twitter) to promote this program and also to announce energy education and awareness events in their service territory. As in prior years, TECO partnered with and provides resources and training on an ongoing basis to different social service agencies regarding access to this and all of the company's DSM programs. In 2022, TECO customers learned about the program through direct contact with call center employees, or through referrals through social service agencies. After such referrals, company personnel were directly involved in determining if customers qualified for enrolling in the Neighborhood Weatherization program.

Although unrelated to it Neighborhood Weatherization program, TECO also began an energy equity initiative with the American Council for an Energy Efficient Economy to develop energy scorecards for measuring and benchmarking energy equity. TECO started a three year study through the Consortium for Energy Efficiency to characterize and define hard to reach audiences and to ensure the program administrators are equitably serving all their customers. TECO began sponsoring the Distributed Energy Financial Group's Executive Advisory Panel of the Equity in the Clean Energy Economy, which examines the impacts of distributed and renewable energy on the grid with particular attention provided to ensure that at-risk customers share the benefits of the transition to a clean energy economy. This sponsorship focuses on improving customer options, experience, and service to low income customers through the Low Income Energy Issues Forum. Also in 2022, TECO also joined a new partnership with the Center of Economic Development Organization to create awareness and provide education to veterans, disabled customers, seniors, and low income homeowners.

## **FPUC**

FPUC does not offer a low income program, although it conducts outreach programs to all customers, including low-income customers, through the company's website, customer contact centers, billboards, and other forms of advertising in its service territory. From the company's website, all customers can access an on-line tool, Energy Expert, which provides energy-related tips, advice, articles, videos, blog content, and other downloadable materials. Via the Energy Expert program, FPUC customers learn about basic and advanced energy efficiency and conservation. FPUC also provides a downloadable reference file containing contact information for all Special Assistance Programs and Agencies within its operating territory. This on-line energy conservation resource features an "Ask the Energy Expert" feature which allows customers to submit energy-related questions to the company and receive a direct response from FPUC personnel.

#### **JEA**

JEA's specific program for low-income customers called its Neighborhood Energy Efficiency Program. This program included free installation of conservation products and provides energy education packets that give customers energy-saving ideas and information about JEA's other DSM programs. JEA also promotes the availability of nonprofit community-based utility bill assistance programs, including its Neighbor to Neighbor donation program. These programs are found on the JEA website and amplified through social media and direct email promotions.

In 2022, JEA continued its partnership with multiple government and non-profit agencies that provide direct and indirect financial assistance to customers in its service territory. In addition, JEA developed and presented conservation based educational resources designed to help homeowners understand the biggest users of energy and water inside and outside the home, and how to better manage usage.

## **OUC**

In 2022, OUC continued its Project Care and Efficiency Delivered programs to assist low-income customers in conserving energy and demand. Project Care assists customers in paying their energy bills and implementing energy efficiency measures. OUC donates \$2 for every \$1 donated to the program. In the income-based Efficiency Delivered program, OUC pays for 85 percent of the costs for energy and water efficiency upgrades up to a cap of \$2,500 per installation. Income qualified participants pay the remaining 15 percent over the first 24 months, interest free.

In 2022, OUC worked with contractors to send out energy reports to over 40,000 customers every month with tips and suggestions on ways to save energy. And although unrelated to specific program, the utility also enabled a Google Translate feature on its main website (OUC.com) in order to mitigate any language barriers for customers that speak languages other than English or Spanish.

## 3.4 Investor-Owned Utility Research and Development Programs

In addition to specific DSM programs that provide measurable demand and energy savings, the four electric IOUs conduct conservation research and development initiatives to evaluate emerging DSM opportunities. In these programs, Florida's electric IOUs often partner with universities or established industry research organizations. With the arrival of new electricity-consuming products and new technologies, research and development by Florida's electric IOUs creates opportunities to identify emergent options to conserve electricity. The recent initiatives undertaken by the electric IOUs are discussed below.

## **FPL**

In 2022, FPL did not formally launch any new research initiatives, although it began exploring the prospect of retro-commissioning as a vehicle to expand the application of technologies such as energy recovery ventilators, demand control ventilators, and variable speed drives. FPL hopes to initiate a scoping project in the northwest portion of its service territory. A candidate customer facility has been identified, local engineering expertise has been retained, and the scoping study has started.

In 2022, FPL continued to develop their Smart Panel Customer pilot program started in 2020. After reviewing proposals from multiple existing and emerging equipment providers, FPL acquired small samples of three technologies to evaluate in employee homes. FPL continues to monitor and support these installations and incorporated early leanings into the subsequent Smart Panel Customer Pilot. FPL also continues dialogue with the Florida Solar Energy Center (FSEC) and the building science and engineering departments of several Florida universities. FPL continued its participation in Electric Power Research Institute (ERPI) and E-source research initiatives.

#### **DEF**

In 2022, DEF launched a project to evaluate the demand response capability of the Ford Lightning Electric Pickup Truck in a Vehicle-to-Grid (V2G) configuration. The pilot will consist of lab testing of the vehicle, electric vehicle charger and home integration system. DEF will also test the system in four employee volunteer homes. This project will focus on the capabilities of the Ford Lightning EV to provide V2G demand response, Vehicle-to-Home backup power and EV charging control. These systems could be used as a part of DEF's Demand Response Program. The project is expected to conclude in 2024.

In 2022, DEF continued a research project with the University of Central Florida (UCF) to document the value of long-duration customer-side energy storage systems, and with the University of South Florida (USF) to leverage customer-sited solar PV and energy storage. DEF continued a pilot to develop software, firmware, and applications for a Smart Home Gateway to evaluate the potential for a future home energy management program and its ability to enhance the Company's future energy efficiency and DR programs. In this pilot, capabilities are being developed and tested to enable appliance demand response using CTA-2045 (EcoPort) local control and also circuit breaker devices that can monitor and respond to changes in demand in real time. The Smart Home Gateway can also potentially be used to engage customer awareness of how energy is being used in the home. In addition, DEF continued the Electric Power Research Institute (EPRI) Solar DPV project for data collection to document customer solar resources with a focus on larger PV arrays with and without energy storage. DEF also continued participation in an EPRI project to study the potential of using customer demand response to compensate for variable loads and intermittent renewable generation resources.

In 2022, DEF completed the EPRI Energy Management Circuit Breaker (EMCB) Project. This project explored the potential for developing a program for customer circuit breakers that include communication, metering, and remote operation for potential applications including EE, DR, and integration of distributed energy resources. The EMCB hardware and software in the field pilot program collected operational data from appliances in 9 customer homes. The hardware from this project is being utilized in other ongoing Technology Development pilots including the V2G Project and the Smart Home Gateway Project. The commercial version of the EMCB-EV (a self-contained electric vehicle charger) is still being studied for potential opportunities for controlled charging for EVs and Demand Response capabilities. This data will be used to document the operation of these breakers and assess the cost-effectiveness for potential EE and DR programs.

## **TECO**

TECO did not initiate any new projects in 2022. TECO, although it continued several, including its Light Emitting Diode (LED) Street and Outdoor Lighting program and also its Integrated Renewable Energy System (IRES) program that was initiated in 2021. The IRES program is gathering data from an array featuring an 862 kW photovoltaic system located on five carports, five commercial-sized power pack batteries capable of storing 1,160 kWh of energy, six dual headed level "2" electric vehicle charging systems, and 10 industrial truck battery charging stations.

In 2022, TECO also continued a research project with the University of South Florida (USF) to evaluate small to mid-size commercial battery storage installations through research and field study with at least one battery being installed at a commercial/industrial customer's facility.

## **FPUC**

FPUC did not initiate any new research projects in 2022, although it continued work on its Powerhouse Project that began in 2021. This research study has been extended through 2023 at the request of the participant, an industrial customer in the Company's service territory. The Powerhouse Project gathers usage data and uses an engineered apparatus to moderate the amount of energy used by reducing the reactive power delivered to the customer. Results from the Powerhouse Project research are being analyzed by the manufacturer of the apparatus, by the utility, and also by the industrial customer. This project is expected to run through December 2023.

## **Section 4. Conservation Cost Recovery**

Florida's IOUs are allowed to recover reasonable expenses for Commission-approved DSM programs through cost recovery clauses. For electric IOUs, the recovery mechanism is the ECCR clause. For natural gas LDCs, the recovery mechanism is the NGCCR clause. These costs include utility expenses such as administrative costs, equipment, and incentive payments to customers. Before requesting recovery of costs through the ECCR clause, an electric IOU must provide data on DSM program cost-effectiveness. The Commission conducts a financial audit each year prior to approving cost recovery of these expenses.

## 4.1 Electric IOU Cost Recovery

From 2010 through 2014, annual electric utility expenditures to fund conservation programs grew due to additions and modifications of these programs. However, total annual costs recovered from customers through the ECCR clause after 2014 have declined for most IOUs due to DSM program modifications. In addition, these utilities have reported that 2020 and 2021 COVID-related impacts have resulted in lower levels of customer participation in DSM programs, contributing to the more recent decline in DSM expenditures. Table 11 shows the annual DSM expenditures recovered by Florida's IOUs from 2013-2022.

Table 11
DSM Expenditures Recovered by IOUs (2013-2022)

	FPL	DEF	TECO	Gulf	FPUC	Total
2013	\$244,443,534	\$115,035,455	\$47,502,652	\$27,431,962	\$806,698	\$435,220,301
2014	\$316,311,166	\$107,033,335	\$46,620,508	\$17,412,618	\$772,612	\$488,150,239
2015	\$208,643,788	\$108,455,141	\$46,516,401	\$17,961,885	\$718,616	\$382,295,831
2016	\$158,174,787	\$109,155,438	\$37,242,148	\$11,915,459	\$687,590	\$317,175,422
2017	\$154,916,595	\$107,890,962	\$37,585,598	\$11,854,558	\$640,996	\$312,888,709
2018	\$158,735,829	\$112,863,333	\$44,558,717	\$11,399,250	\$656,154	\$328,213,283
2019	\$161,738,898	\$114,084,224	\$43,988,528	\$9,607,262	\$865,843	\$330,284,755
2020	\$157,892,907	\$114,692,900	\$37,850,526	\$8,637,394	\$782,143	\$319,855,870
2021	\$149,275,934	\$102,542,901	\$46,328,538	\$7,852,934	\$751,683	\$306,751,990
2022	\$153,282,683	\$110,172,154	\$48,985,457	*	\$668,543	\$313,108,837
Total						\$3,220,836,400

Source: Docket Nos. 20140002-EG through 20230002-EG, Schedules CT-2 from the IOUs' May testimonies.

<sup>\*</sup>Effective January 1, 2022, FPL and Gulf Power Company (Gulf) operationally merged.

Figure 5 shows trends in annual DSM expenditures for the five electric IOUs from 2013 to 2022.<sup>34</sup>

**Electric Utility DSM Expense Recovery Trends** \$350,000,000 \$300,000,000 \$250,000,000 FPL DEF \$200,000,000 TECO \$150,000,000 Gulf FPUC \$100,000,000 \$50,000,000 \$0 2014 2015 2016 2017 2019 2020 2022 2013 2018 2021

Figure 5
DSM Expenditures Recovered by Electric IOUs (2013-2022)

Source: Docket Nos. 20140002-EG through 20230002-EG, Schedules CT-2 from the IOUs' May testimony. \*FPL's 2014 recovery included a one-time \$56.3 million payment to Solid Waste Authority of Palm Beach County related to a construction project to expand the capacity of an existing waste-to-energy facility. See DN 20110018-EU.

During the annual ECCR clause proceedings, the Commission approves the ECCR factors, by customer class, which each utility will apply to the energy and demand portions of customer bills. These factors are set using each IOU's estimated conservation costs for the next year and reconciliation for any actual conservation cost over- or under-recovery amounts associated with the current and prior years.

In November 2023, the Commission set the ECCR factors for the period January through December 2024. Table 12 illustrates the approved ECCR factors and the monthly bill impact for a residential customer. For illustrative purposes, these factors are applied to a monthly residential bill based on 1,000 kilowatt-hours (kWh) per month energy usage.

<sup>&</sup>lt;sup>34</sup>Because Table 5 incorporates the dollar amounts for DSM expenditures between the largest (FPL) and smallest (FPUC) investor-owned electric utilities, the scale for the X-axis (dollars) must accommodate very small and very large data points. As such, the data points in the line graph for FPUC appears as near zero values, although the actual values range between \$640,000 and \$870,000.

Table 12
Residential Energy Conservation Cost Recovery Factors (2024)

Utility*	ECCR Factor (Cents per kWh)	Monthly Bill Impact (Based on usage of 1,000 kWh)
FPL	0.124	\$1.24
DEF	0.330	\$3.30
TECO	0.215	\$2.15
FPUC	0.144	\$1.44

Source: Order No. PSC-2023-0342-FOF-EG, Docket No. 20230002-EG.

## 4.2 Natural Gas Cost Recovery

Commission Rule 25-17.015, F.A.C., establishes a mechanism for recovery of reasonable costs attributed to natural gas conservation programs. While PGS is the only natural gas utility subject to FEECA, the other LDCs covered in this section offer Commission-approved DSM programs without a specific therm savings goal. As it does for the electric IOUs, the Commission also conducts financial audits of the LDCs' conservation expenditures on a yearly basis and adjusts the LDCs' cost recovery factors to allow for recovery of actual and projected program-related costs. Table 13 shows the amounts each LDC recovered in natural gas conservation program expenditures from 2013-2022.

Table 13
DSM Expenditures Recovered by LDCs (2013-2022)

	2011 Exponentar 00 11000 1010 a by 2000 (2010 2022)							
			FPUC (	Consolidated Co	ompanies			
	PGS	FCG	FPUC and Fort Meade	Chesapeake	Indiantown	SJNG	SGS	Total
2013	\$9,432,551	\$4,342,603	\$2,935,140	\$742,412	\$10,222	\$96,575	\$53,967	\$17,613,470
2014	\$11,229,211	\$5,343,191	\$3,844,386			\$128,000	\$58,382	\$20,603,170
2015	\$12,335,245	\$5,240,383	\$6,768,175			\$123,400	\$33,563	\$24,500,766
2016	\$13,345,716	\$5,037,863	\$5,098,245			\$156,250	\$36,801	\$23,674,875
2017	\$14,543,555	\$5,149,573	\$4,617,501	*	*	\$144,900	\$42,237	\$24,497,766
2018	\$18,605,532	\$5,067,917	\$4,562,021			\$190,625	\$47,126	\$28,473,221
2019	\$16,619,336	\$5,564,237	\$4,252,769			\$231,600	\$46,184	\$26,714,126
2020	\$17,031,280	\$5,824,651	\$4,447,010			\$189,625	\$52,162	\$27,544,728
2021	\$16,999,771	\$6,421,893	\$3,653,829			\$179,450	\$40,411	\$27,295,354
2022	\$22,801,408	\$6,070,844	\$4,573,742			\$173,225	\$30,841	\$33,650,060
Total								\$254,567,536

Source: Docket Nos. 20130004-GU through 20230004-GU, Schedules CT-2 from LDCs' May testimonies.

<sup>\*</sup>While JEA and OUC fall under the FEECA Statute, the Commission does not regulate electric rates for municipal utilities.

<sup>\*</sup>Spending combined with FPUC.

Figure 6 shows the trends in annual conservation expenditures for all LDCs from 2013 to 2022.<sup>35</sup> In 2013, the Commission approved the LDCs' Commercial Conservation programs, resulting in additional overall conservation expenditures.<sup>36</sup>

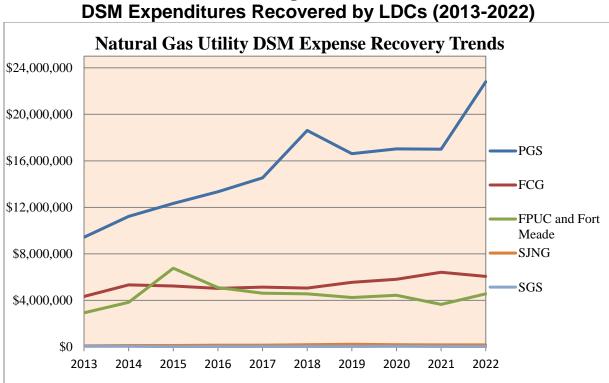


Figure 6

Source: Docket Nos. 20130004-EG through 20230004-EG, Schedules CT-2 from the LDCs' May testimony. \*Note that since 2014, DSM expenditures for CUC and IGC were consolidated with FPUC-Fort Meade, and reported as FPUC Consolidated Companies.

In November 2023, the Commission set the natural gas LDC conservation cost recovery factors for the 2024 billing cycle. Table 14 provides the LDCs' residential cost recovery factors for 2024 and the impact on a residential customer bill using 20 therms of natural gas per month.

<sup>&</sup>lt;sup>35</sup>Because Table 6 incorporates the dollar amounts for DSM expenditures between the largest (PGS) and smallest (SGS) investor-owned natural gas utilities, the scale for the X-axis (dollars) must accommodate very small and very large data points. As such, the data points in the line graph for SGS and SJNG appear as near zero values, although the actual values range between \$30,000 and \$58,000 for SGS and \$96,000 and \$231,000 for SJNG. The upwardsloping trend line shown for PGS in 2022 was due to an under-recovery of actual costs primarily attributable to new construction activity in its service territory.

<sup>&</sup>lt;sup>36</sup>Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 130167-EG, In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida.

Table 14
Residential Natural Gas Conservation Cost Recovery Factors in 2024

Utility	Cost Recovery Factor (Cents per Therm)	Monthly Bill Impact (Based on usage of 20 Therms)
PGS	21.579	\$4.32
FCG	29.484	\$5.90
FPUC – Consolidated	13.035	\$2.61
SJNG	33.922	\$6.78
SGS	12.985	\$2.60

Source: Order No. PSC-2023-0346-FOF-GU, Docket No. 20230004-GU.

## Section 5. Educating Florida's Consumers on Conservation

## 5.1 Commission Consumer Education Outreach

While the Commission has statutory authority to require conservation efforts by regulated utilities, as part of the agency's outreach program, the Commission complements utility efforts with its conservation-related activities. To effectively reach as many consumers as possible, the Commission's consumer education program uses a variety of platforms to share conservation information, including the Commission website, public events, brochures, press releases and articles, E-Newsletters, YouTube, LinkedIn, and X (formerly Twitter). Most of the data in this section covers October 2022 through August 2023.

Conservation information is also available through other governmental and utility websites. Section 5.2 lists related websites for state and federal agencies, investor-owned electric utilities, and local gas distribution companies to assist consumers further.

## **Triple E Award**

Every four months, the Commission recognizes a small business for implementing Commission-approved, cost-effective conservation programs. Covering the state's five major geographic areas, the Commission presents its Triple E Award—for Energy Efficiency Efforts—to a local business that has accomplished superior energy efficiency by working with its local utility to help reduce its energy footprint. Triple E Award recipients receive an award plaque, are highlighted statewide via a press release and on X (@floridapsc), and are featured and archived on the FPSC website, <a href="https://www.FloridaPSC.com">www.FloridaPSC.com</a>, under Consumer Information/Consumer Portal.

#### **Website Outreach Resources**

In January 2023, the Commission launched its new and improved consumer-friendly website, <a href="www.FloridaPSC.com">www.FloridaPSC.com</a>. There is an assortment of energy conservation brochures, publications, and other free resources to help consumers save energy on the new FPSC website. Conservation brochures may be viewed and printed directly from <a href="FloridaPSC.com/publications">FloridaPSC.com/publications</a>, <a href="ordered ordered online">ordered online</a>, or requested by mail or phone. The Commission received almost 50,000 requests for its publications during the reporting period, and according to Google Analytics, Consumer Assistance website page views reached nearly 525,000.

## **Newsletters**

Recently redesigned and updated, the Commission's quarterly Consumer Connection Newsletter (CCN) features current energy and water conservation topics, consumer tips, and general Commission information. Conservation-related information highlighted through video and text during the reporting period includes: Chairman Andrew Fay Demonstrates Drone Technology Used by Utilities, How to Spot a Scam, New Mini Guide on Transportation Electrification, and Conquer the Chill with a Lower Electricity Bill. The CCN is available under Consumer Assistance on the Commission's homepage and distributed to consumers via X (@floridapsc) or by subscribing to the free <a href="mewsletter">mewsletter</a> online.

#### **National Consumer Protection Week**

National Consumer Protection Week (NCPW), March 5-11, 2023, highlights consumer protection and education. The Commission joins the annual Federal Trade Commission effort to promote conservation education to help protect consumers' bottom line. Chairman Andrew Fay recognized the 25<sup>th</sup> Annual NCPW by raising awareness and education on scams targeting utility customers that oftentimes offer erroneous home energy audits.

For NCPW 2023, the Commission presented information to consumers in Bay, Duval, and Leon Counties, showing them how to save money through energy and water conservation and avoid scams. A virtual meeting was also held with a housing authority in Pasco County. For more than a decade, the FPSC has joined government agencies, advocacy organizations, and private sector groups nationwide to highlight NCPW.

#### **Older Americans Month**

Each May, the Commission participates in Older Americans Month, a national project to honor and recognize older Americans for their contributions to families, communities, and society. "Aging Unbound" was the theme for Older Americans Month 2023. The FPSC partnered with community centers in Clay, Lake, and Leon Counties to meet with seniors in person and discuss FPSC information. A virtual meeting was also held with a housing authority in Collier County.

## **Energy Awareness Month**

Each October, the U.S. Department of Energy sponsors National Energy Awareness Month to promote smart energy choices and highlight economic and job growth, environmental protection, and increased energy independence. In 2022, the FPSC shared daily conservation tips on X (@floridapsc) during the month, including its <u>Conservation House</u>, <u>Conserve Your World</u> and related outreach information with consumer energy saving tips.

## **Community Events**

FPSC Commissioners are active in communities around the state and present energy conservation information to students at area schools, seniors and low-income residents at local community centers, and county and city businesses at meetings or other events. Through ongoing partnerships with governmental entities, consumer groups, and many other service organizations, the Commission regularly distributes energy and water conservation materials. The FPSC also actively seeks new community events, venues, and opportunities where conservation materials can be distributed and discussed with consumers. In-person outreach events resumed during the 2022-2023 reporting period and virtual events continued, with more public meetings and events scheduled in the future.

In-person events where conservation information was shared from October 2022 through August 2023 included:

- Ft. Braden Community Center Lunch and Learn
- Dixie County Senior Center
- Gilchrist County Client Senior/Service Center
- Levy County Client Senior Services Chiefland
- Chaires Community Center Lunch and Learn
- Miccosukee Community Center Lunch and Learn

- Holmes County Council on Aging
- Bradfordville Community Center Lunch and Learn
- Baker County Council on Aging
- Mary Sue Rich Community Center
- 8<sup>th</sup> Avenue Adult Activity Center
- Bay County Council on Aging, First Baptist Church
- Bay County Council on Aging, Coulliette Senior Center
- Frances Padgett Senior Center
- Mary L. Singleton Senior Center
- Woodville Community Center
- Suwannee County Health and Wellness Fair
- Hernando County Day at the Capitol
- Washington County on Aging 2023 Senior Expo
- Holmes County Council on Aging 2023 Health Fair
- William M. Beam Senior Center
- Weigel Senior Center
- Leesburg Senior Center
- Southside Umatilla Community Center
- Grandparents as Parents (GaP)
- Woodville Community Center
- Jefferson County Senior Citizens Center
- Hamilton County Senior Service Center
- Madison County Senior Citizens Counsel

Virtual meetings where conservation information was shared from October 2022 through August 2023 included:

- Bradford County Senior Center
- Hendry County State Housing Initiatives Program
- Flagler County Board of County Commissioners, Social Services/Senior Division
- Mid-Florida Community Services, Inc.
- Tampa Housing Authority
- Pasco County Housing Authority
- Okeechobee County Housing Authority
- Collier County Housing Authority
- Nassau County State Housing Initiatives Program
- Nassau County Council on Aging
- Osceola Council on Aging

## **Hearings and Customer Meetings**

As an ongoing outreach initiative, the Commission supplies conservation brochures to consumers at FPSC service hearings and customer meetings across the state. Over the past few years, most service hearings and customer meetings have become virtual for the convenience of utility customers, limiting one-on-one educational opportunities. Outreach is achieved through an FPSC

Rate Case Overview, which all participating customers receive, that answers FAQs on the utility's rate increase request and includes Commission website links to consumer information. Two in-person service hearings during the reporting period allowed FPSC staff to share and discuss conservation brochures with attending customers.

## **Library Outreach Campaign**

Each August, the Commission provides educational packets, including FPSC conservation materials, to Florida public libraries across the state for consumer distribution. The Commission's electronic Library Outreach Campaign reached 617 state public libraries and branches in 2023. Following the Campaign, many libraries request hard copies of FPSC brochures throughout the year.

## **Media Outreach**

News releases are posted to the website and distributed via email and X (formerly Twitter) on major Commission decisions, meetings, and public events. The FPSC also issues news releases or posts videos to X and LinkedIn, urging energy and water conservation during annual outreach programs, such as Energy Awareness Month and NCPW. Water conservation was highlighted in March with a release on Fix a Leak Week, sponsored by the Environmental Protection Agency, and in May for National Drinking Water Week, sponsored by the American Water Works Association. FPSC articles on conservation are also featured in <u>Aging Outlook</u>, the biannual digital newspaper of the Florida Department of Elder Affairs.

## Youth Education

The Commission supports conservation education for Florida's young consumers. Through the FPSC's student resource booklet, <u>Get Wise and Conserve Florida!</u>, children can learn about energy and water conservation through engaging puzzles and games. The booklet is promoted to all public libraries through the Library Outreach Program, is available at all Commission outreach events, and continues to be a favorite during senior events.

## 5.2 Related Websites

## **State Agencies and Organizations**

- Florida Public Service Commission <a href="http://www.floridapsc.com/">http://www.floridapsc.com/</a>
- Florida Department of Environmental Protection http://www.dep.state.fl.us
- The Office of Energy <a href="https://www.fdacs.gov/Divisions-Offices/Energy">https://www.fdacs.gov/Divisions-Offices/Energy</a>
- Florida Solar Energy Center <a href="https://energyresearch.ucf.edu/">https://energyresearch.ucf.edu/</a>
- Florida Weatherization Assistance <a href="https://www.benefits.gov/benefit/1847">https://www.benefits.gov/benefit/1847</a>
- Florida's Local Weatherization Agencies List <a href="https://floridajobs.org/community-planning-and-development/community-services/weatherization-assistance-program/contact-your-local-weatherization-office-for-help">https://floridajobs.org/community-planning-and-development/community-services/weatherization-assistance-program/contact-your-local-weatherization-office-for-help</a>

## **U.S. Agencies and National Organizations**

- U.S. ENERGY STAR Program https://www.energystar.gov/
- U.S. Department of Energy Energy Efficiency and Renewable Energy Information http://www.eere.energy.gov/
- National Energy Foundation https://nef1.org/

## Florida's Utilities Subject to FEECA

- Florida Power & Light Company http://www.fpl.com/
- Duke Energy Florida, LLC <a href="http://www.duke-energy.com/">http://www.duke-energy.com/</a>
- Tampa Electric Company http://www.tampaelectric.com/
- Florida Public Utilities Company <a href="http://www.fpuc.com/">http://www.fpuc.com/</a>
- JEA <a href="http://www.jea.com/">http://www.jea.com/</a>
- Orlando Utilities Commission http://www.ouc.com/
- Peoples Gas System <a href="http://www.peoplesgas.com/">http://www.peoplesgas.com/</a>

## Florida's Investor-Owned Natural Gas Utilities

- Florida City Gas <a href="http://www.floridacitygas.com/">http://www.floridacitygas.com/</a>
- Florida Division of Chesapeake Utilities <a href="http://www.chpk.com/companies/chesapeake-utilities/">http://www.chpk.com/companies/chesapeake-utilities/</a>
- Florida Public Utilities Company <a href="http://www.fpuc.com/">http://www.fpuc.com/</a>
- Florida Public Utilities Company Ft. Meade Div. <a href="http://www.fpuc.com/fortmeade/">http://www.fpuc.com/fortmeade/</a>
- Florida Public Utilities Company Indiantown Div. <a href="http://www.fpuc.com/about/fpufamily">http://www.fpuc.com/about/fpufamily</a>
- Peoples Gas System <a href="http://www.peoplesgas.com/">http://www.peoplesgas.com/</a>
- Sebring Gas System http://www.sebringgas.com/
- St. Joe Natural Gas Company <a href="http://www.stjoenaturalgas.com/">http://www.stjoenaturalgas.com/</a>

# **Appendix A. 2022 FEECA Utility Conservation Programs**

# **Electric IOUs**

	Florida Power & Light Company
	Residential Home Energy Survey
	Residential Load Management (On Call®)
Desidential Programs	Residential Air Conditioning
Residential Programs	Residential New Construction (BuildSmart®)
	Residential Ceiling Insulation
	Residential Low-Income Weatherization
	Business Energy Evaluation (BEE)
	Business On Call®
	Commercial/Industrial Demand Reduction (CDR)
Commercial/Industrial	Commercial/Industrial Load Control (CILC)
Programs	Business Heating, Ventilating, and Air Conditioning (HVAC)
	Business Lighting
	Business Custom Incentive (BCI)
	Curtailable Load
Othon	Conservation Research and Development (CRD)
Other	Cogeneration & Small Power Production

Duke Energy Florida, LLC			
Residential Programs	Home Energy Check Residential Incentive Neighborhood Energy Saver Low-Income Weatherization Assistance Residential Load Management		
Commercial/Industrial Programs	Business Energy Check Smart \$aver Business (f/k/a Better Business) Commercial Energy Management Smart \$aver Custom Incentive Interruptible Service Curtailable Service Standby Generation		
Other Technology Development Qualifying Facilities			

Tampa Electric Company			
Residential Programs	Residential Energy Audits (4 Programs) Residential Ceiling Insulation Residential Duct Repair Energy Education, Awareness, and Agency Outreach ENERGY STAR for New Multi-Family ENERGY STAR for New Homes ENERGY STAR Pool Pumps ENERGY STAR Thermostats Residential Heating and Cooling Neighborhood Weatherization (Low-Income) Residential Price Responsive Load Management (Energy Planner) Residential Prime Time Plus (Residential Load Management) Residential Window Replacement		
Commercial/Industrial Programs	Commercial/Industrial Energy Audits (2 Programs) Commercial Chiller Cogeneration Conservation Value Commercial Cooling Demand Response Facility Energy Management System Industrial Load Management (GSLM 2&3) Street and Outdoor Lighting Conversion Lighting Conditioned Space Lighting Non-Conditioned Space Lighting Occupancy Sensors Commercial Load Management (GSLM 1) Commercial Smart Thermostats Standby Generator Variable Frequency Drive for Compressors Commercial Water Heating		
Other	Conservation Research and Development Integrated Renewable Energy System Renewable Energy		

Florida Public Utilities Company		
Residential Programs	Residential Energy Survey Residential Heating and Cooling Efficiency Upgrade	
	Commercial Energy Consultation	
Commercial/Industrial	Commercial Heating and Cooling Efficiency Upgrade	
Programs	Commercial Chiller Upgrade	
	Commercial Reflective Roof	
Other	Conservation Demonstration and Development	
o thei	Low-Income Energy Outreach	

# **Electric Municipal Utilities**

JEA		
Residential Programs  Residential Energy Audit Residential Solar Water Heating Neighborhood Efficiency (Low-Income) Residential Efficiency Upgrade Energy Efficient Products MyWay Prepaid Program		
Commercial/Industrial Programs	Commercial Energy Audit Commercial Prescriptive Lighting Program Commercial Prescriptive Small Business Direct Install Custom Commercial	

Orlando Utilities Commission			
Residential Programs	Home Energy Survey Duct Repair Rebate Ceiling Insulation Rebate High-Performance Windows Rebate Efficient Electric Heat Pump Rebate		
	New Home Rebate Heat Pump Water Heater Rebate Efficiency Delivered (Low-Income)		
Commercial/Industrial Programs  Energy Audit Efficient Electric Heat Pump Rebate Duct Repair Rebate Ceiling Insulation Rebate Cool/Reflective Roof Rebate Indoor Lighting Billed Solution Indoor Lighting Rebate Custom Incentive			

## **Natural Gas LDC**

Peoples Gas System	
Residential Programs	Residential Customer Assisted Energy Audit
	Residential New Construction
	Residential Retrofit
	Residential Retention
	Commercial Walk-Through Energy Audit
	Commercial New Construction
Commercial/Industrial	Commercial Retrofit
Programs	Commercial Retrofit Combined Heat & Power
	Commercial Retrofit Electric Replacement
	Commercial Retention
Other	Conservation Research and Development

# Appendix B. 2022 FEECA Utility Conservation Program Descriptions

## **Electric FEECA IOUs**

## A. Florida Power & Light Company

## **Residential Programs**

## • Residential Home Energy Survey

The Residential Home Energy Survey Program educates customers on energy efficiency and encourages implementation of recommended energy efficiency measures, even if they are not included in FPL's DSM programs. The Residential Home Energy Survey Program is also used to identify potential candidates for other FPL DSM programs. FPL offers in-home, phone-assisted, and online audits for its residential customers.

## • Residential Load Management (On Call)

The Residential Load Management Program allows FPL to turn off certain customer-selected appliances using FPL-installed equipment during periods of extreme demand, capacity shortages, or system emergencies.

## • Residential Air Conditioning

The Residential Air Conditioning Program encourages customers to install high-efficiency central air conditioning systems.

## • Residential New Construction (BuildSmart®)

The Residential New Construction Program encourages builders and developers to design and construct new homes that achieve BuildSmart® certification and move towards ENERGY STAR® qualifications.

## • Residential Ceiling Insulation

The Residential Ceiling Insulation Program encourages customers to improve their homes' thermal efficiency.

#### • Residential Low-Income Weatherization

The Residential Low-Income Weatherization Program assists low-income customers through state Weatherization Assistance Provider (WAP) agencies and FPL-conducted Energy Retrofits.

## **Commercial/Industrial Programs**

## • Business Energy Evaluation (BEE)

The Business Energy Evaluation Program educates customers on energy efficiency and encourages implementation of recommended practices and measures, even if these are not

included in FPL's DSM programs. The Business Energy Evaluation is also used to identify potential candidates for other FPL DSM programs. FPL offers the Business Energy Evaluation in on-site or online formats.

#### • Business On Call®

The Business On Call® Program allows FPL to turn off customers' direct expansion central air-conditioning units using FPL-installed equipment during periods of extreme demand, capacity shortages, or system emergencies.

## • Commercial/Industrial Demand Reduction (CDR)

The Commercial/Industrial Demand Reduction Program allows FPL to control customer loads of 200 kW or greater during periods of extreme demand, capacity shortages, or system emergencies. FPL installs a load management device at the customer's facility and provides monthly credits to customers. Unlike the CILC program, the CDR program is still open to new customers.

## • Commercial/Industrial Load Control (CILC)

The Commercial/Industrial Load Control Program allows FPL to control customer loads of 200 kW or greater during periods of extreme demand, capacity shortages, or system emergencies. The CILC Program was closed to new participants as of 2000, but is available for existing participants who entered into a CILC agreement as of March 1996.

## • Business Heating, Ventilating, and Air Conditioning (HVAC)

The Business HVAC Program encourages customers to install high-efficiency HVAC systems.

## • Business Lighting

The Business Lighting Program encourages customers to install high-efficiency lighting systems.

## • Business Custom Incentive (BCI)

The Business Custom Incentive Program encourages customers to install unique high-efficiency technologies not covered by other FPL DSM programs.

#### Curtailable Load

The Curtailable Load program provides qualifying customers capacity payments for electric load which could be curtailed during certain conditions. This program was closed for new enrollment as of January 1, 2022.

## **Other Programs**

## • Conservation Research and Development (CRD) Project

This project consists of research studies designed to: identify new energy efficient technologies; evaluate and quantify their impacts on energy, demand, and customers; and where appropriate and cost-effective, incorporate an emerging technology into a DSM program.

## • Cogeneration & Small Power Production

The Cogeneration and Small Power Production Program facilitates the interconnection and administration of contracts for cogenerators and small power producers.

## B. Duke Energy Florida, LLC

## **Residential Programs**

## • Home Energy Check

The Home Energy Check is a residential energy audit program that provides residential customers with an analysis of their energy consumption and educational information on how to reduce energy usage and save money. The Home Energy Check Program is the foundation for other residential demand-side management programs and offers walkthrough, online, phone-assisted, and Home Energy Rating audits for its residential customers. Participants in the program may receive a residential Energy Efficiency Kit that contains energy-saving measures that can be easily installed and utilized by the customer.

#### • Residential Incentive

The Residential Incentive Program provides incentives to residential customers for energy efficiency improvements in both existing and new homes. This includes incentives for measures such as duct testing, duct repair, attic insulation, replacement of windows, high-efficiency heat pump replacing resistance heat, high-efficiency heat pump replacing a heat pump, and newly constructed Energy Star homes.

## Neighborhood Energy Saver

The Neighborhood Energy Saver Program installs energy conservation measures, identified through an energy assessment, in the homes of customers in selected neighborhoods where at least 50 percent of households have incomes equal to or less than 200 percent of the poverty level established by the U.S. government.

## • Low-Income Weatherization Assistance Program

The Low-Income Weatherization Assistance Program works with the Florida Department of Economic Opportunity and local weatherization providers to deliver energy education, efficiency measures, and incentives to weatherize the homes of income-eligible families. DEF assists by providing energy education materials and financial incentives to weatherize the homes of low-income families.

## • Residential Load Management

The Residential Load Management Program is a voluntary program that uses direct control of customer equipment to reduce system demand during winter and summer peak capacity periods by controlling service to select customer appliances.

## **Commercial/Industrial Programs**

## • Business Energy Check

The Business Energy Check Program is a commercial energy audit program that provides commercial customers with an analysis of their energy usage and information about energy-saving practices and cost-effective measures that they can implement at their facilities.

#### • Smart \$aver Business (f/k/a Better Business

Smart \$aver Business is an umbrella efficiency program that provides incentives to existing C/I and government customers for HVAC, ceiling and roof insulation upgrades, duct leakage and repair, demand-control ventilation, and cool roof coating.

## • Commercial Energy Management

The Commercial Energy Management Program uses direct control of customer equipment to reduce system demand during winter and summer peak capacity periods. The Commercial Energy Management Program was closed to new participants in 2000, but is still open for existing participants.

## • Smart \$aver Custom Incentive

The Smart \$aver Custom Incentive Program is designed to encourage C/I customers to make capital investments for energy-efficiency measures which reduce peak demand and provide energy savings. This program provides incentives for projects which are cost-effective but not otherwise addressed through DEF's incentive programs.

## • Interruptible Service

Interruptible Service is a direct load control program that allows DEF to reduce system demand by interrupting electrical service during times of capacity shortage during peak or emergency conditions. In return, customers receive a monthly bill credit.

## • Curtailable Service

Curtailable Service is an indirect load control program that reduces system demand through customer contracts to curtail all or a portion of their electricity demand at times of capacity shortage during peak or emergency conditions. In contrast to the Interruptible Service Program, the customer is able to control whether their appliances are turned off during times of stress on the grid. In return, customers receive a monthly bill credit.

## • Standby Generation

The Standby Generation Program is a demand control program that allows DEF to reduce system demand by dispatching the customer's standby generator. This is a voluntary program available to C/I customers who have on-site generation capability and are willing to reduce demand on DEF's system when requested for system reliability purposes.

## **Other Programs**

## Technology Development

The Technology Development Program allows DEF to investigate technologies that support the development of new demand response and energy-efficiency programs. DEF is investigating hardware and software to manage residential loads, the value of long-duration customer-side energy storage systems, precision temperature measurement and analysis, solar resources, and data and patterns related to charging electric vehicles.

## • Qualifying Facilities Program

This program develops standard offer contracts, negotiates, enters into, amends and restructures nonfirm energy, and firm energy and capacity contracts entered into with qualifying cogeneration, small power producers, and renewable facilities.

## C. Tampa Electric Company

## **Residential Programs**

## • Residential Energy Audit Programs

Tampa Electric offers four Residential Energy Audits Programs, including walk-through free energy audits, customer assisted energy audits, and also computer assisted audits.

## • Residential Ceiling Insulation

The Residential Ceiling Insulation Program offers rebates to existing residential customers to install additional ceiling insulation in existing homes.

#### • Residential Duct Repair

The Residential Duct Repair Program encourages residential customers to repair leaky duct work of central air conditioning systems in existing homes.

## Energy Education, Awareness, and Agency Outreach

The Energy Education, Awareness, and Agency Outreach Program engages and educates groups of customers and students on energy efficiency in an organized setting. Also, participants receive an energy savings kit with energy saving devices and information.

## • ENERGY STAR for New Multi-Family Residences

The ENERGY STAR for Multi-Family Residences Program utilizes a rebate to encourage construction of new multi-family residences that meet the requirements to achieve the ENERGY STAR certified apartments and condominiums label.

## • ENERGY STAR for New Homes

The ENERGY STAR for New Homes Program incentivizes residential home builders to build homes that qualify for the ENERGY STAR award by achieving energy efficiency levels greater than current Florida building code baseline practices.

## • ENERGY STAR Pool Pumps

The ENERGY STAR Pool Pumps Program offers customer rebates for installing high efficiency ENERGY STAR rated pool pumps to help reduce their energy consumption while reducing TECO's weather sensitive peak demand.

#### • ENERGY STAR Thermostats

The ENERGY STAR Thermostats Program offers customer rebates for installing an ENERGY STAR certified smart thermostat to help reduce their energy consumption while reducing TECO's weather sensitive peak demand.

## Residential Heating and Cooling

The Residential Heating and Cooling Program offers rebates to residential customers for installing high-efficiency heating and cooling equipment in existing homes.

## • Neighborhood Weatherization (Low-Income)

The Neighborhood Weatherization Program provides for the installation of energy efficient measures for qualified low-income customers.

## • Residential Price Responsive Load Management (Energy Planner)

The Residential Price Responsive Load Management (Energy Planner) Program reduces weather-sensitive loads through an innovative price responsive rate. The price responsive rate encourages residential customers to make behavioral or equipment usage changes by preprogramming HVAC, water heating, and pool pumps.

## • Residential Prime Time Plus (Residential Load Management)

The Residential Prime Time Plus (Residential Load Management) is a residential load management program designed to alter the Utility's system load curve by reducing summer and winter demand peaks. Customers participating in Prime Time Plus will receive monthly incentive credits on their electric bill. This program is an enhancement of a retired program with a similar name (Residential Prime Time).

## • Residential Window Replacement

The Residential Window Replacement Program offers rebates to existing residential customers to install window upgrades in existing homes.

## **Commercial Programs**

## • Commercial/Industrial Energy Audit Programs

Tampa Electric offers two C/I Energy Audits Programs, one free, and the other a more comprehensive audit that a customer pays for.

## • Commercial Chiller

The Commercial Chiller Program offers rebates to C/I customers for installing high efficiency chiller equipment.

## • Cogeneration

The Cogeneration Program incentivizes large industrial customers with waste heat or fuel resources to use their onsite energy to avoid fuel waste and install electric generating equipment. The large industrial customers may sell their surplus electric generation to TECO.

#### Conservation Value

The Conservation Value Program offers rebates to C/I customers to invest in energy conservation measures that are not in other C/I programs.

## • Commercial Cooling

The Commercial Cooling Program encourages C/I customers to install high efficiency direct expansion commercial air conditioning cooling equipment.

## • Demand Response

The Demand Response Program incentivizes C/I customers to reduce electricity demand at certain peak times.

## • Facility Energy Management System

The Facility Energy Management System Program offers customer rebates for installing a facility energy management system that provides real time operational, production and energy consumption information which enables the customer to reduce their energy consumption and demand and reducing TECO's peak demand.

## • Industrial Load Management (GSLM 2&3)

The Industrial Load Management Program incentivizes large industrial customers to allow TECO to interrupt part or all of their electrical service during periods of peak grid stress.

## • Street and Outdoor Lighting Conversion

The Street and Outdoor Lighting Conversion Program is designed to encourage the conversion from Non-Light Emitting Diode ("LED") street and outdoor lighting luminaires to eligible LED luminaires in a five-year program. The goal of this program is to install energy efficient LED street and outdoor lighting technology to reduce the energy consumption and demand and reducing TECO's peak demand.

## • Lighting Conditioned Space

The Lighting Conditioned Space Program encourages C/I customers to invest in more efficient lighting technologies in existing conditioned areas of C/I facilities.

## • Lighting Non-Conditioned Space

The Lighting Non-Conditioned Space Program encourages C/I customers to invest in more efficient lighting technologies in existing non-conditioned areas of C/I facilities.

## • Lighting Occupancy Sensors

The Lighting Occupancy Sensors Program encourages C/I customers to install occupancy sensors to control C/I lighting systems.

## • Commercial Load Management

The Commercial Load Management Program incentivizes C/I customers to allow TECO to control weather-sensitive heating, cooling, and water heating systems to reduce the associated weather-sensitive peak demand.

## Commercial Smart Thermostats

The Commercial Smart Thermostats Program offers customer rebates for installing smart thermostats to help reduce their demand while reducing TECO's weather sensitive peak demand.

## • Standby Generator

The Standby Generator Program incentivizes C/I customers to use available emergency electrical generation capacity to reduce weather-sensitive peak demand on the grid.

## • Variable Frequency Drive for Compressors

The Variable Frequency Drive for Compressors Program offers customer rebates for installing variable frequency drives to their new or existing refrigerant or air compressor motors to help reduce their demand while reducing TECO's weather sensitive peak demand.

## • Commercial Water Heating

The Commercial Water Heating Program encourages C/I customers to install high efficiency water heating systems.

## **Other Programs**

## • Conservation Research and Development

The Conservation Research and Development Program allows TECO to explore DSM measures that have insufficient data on cost-effectiveness and the impact on TECO's ratepayers.

## • Integrated Renewable Energy System (Pilot Program)

The commercial/industrial Integrated Renewable Energy System is a five-year pilot program to study the capabilities and DSM opportunities of a fully integrated renewable energy system. The integrated renewable energy system will also be used as an education platform for commercial and industrial customers.

## • Renewable Energy

The Renewable Energy (Sun to Go) Program delivers renewable energy options to TECO's customers through program administration, renewable electricity generation, evaluation of potential new renewable sources, and market research.

## **D. Florida Public Utilities Company**

## **Residential Programs**

## Residential Energy Survey

In the Residential Energy Survey Program, FPUC offers in-home and online audits which provides the customer with specific whole-house energy efficiency recommendations, a list of blower-door test contractors who can check for duct leakage, and a conservation kit.

## Residential Heating and Cooling Efficiency Upgrade

The Residential Heating and Cooling Upgrade Program incentivizes customers operating inefficient heat pumps and air conditioners to replace them with more efficient units.

## **Commercial Programs**

## • Commercial Energy Consultation

In the Commercial Energy Consultation Program, FPUC energy conservation representatives conduct commercial site visits to assess the potential for applicable DSM programs, educate customers about FPUC's commercial DSM programs, conduct a bill review, offer energy savings suggestions, and inform customers about commercial online resources and tools.

## • Commercial Heating and Cooling Efficiency Upgrade

The Commercial Heating and Cooling Upgrade Program provides rebates to small commercial customers (customers with a maximum of 5-ton units) if the customers install a high-efficiency central air conditioner or heat pump with a minimum 15 SEER.

## • Commercial Reflective Roof

The Commercial Reflective Roof Program provides rebates to non-residential customers and contractors who convert or install a new cool roof on existing facilities or on new building construction. The roofing material must be Energy Star Certified.

## • Commercial Chiller Upgrade

The Commercial Chiller Upgrade Program offers commercial customers who replace existing chillers with a more efficient system, an incentive of up to \$100 per kW of additional savings above the minimum efficiency levels.

## **Other Programs**

## Conservation Demonstration and Development

The Conservation Demonstration and Development Program researches energy efficiency and conservation projects to identify, develop, demonstrate, and evaluate promising end-use energy efficient technologies across a wide variety of applications. In 2019, FPUC installed two battery storage systems to improve customer electric system reliability and resiliency, and has extended this study with completion expected in 2021.

## • Low-Income Energy Outreach

The Low-Income Energy Outreach Program partners with Department of Economic Opportunity approved Low-Income Weatherization Program operators to offer Residential Energy Surveys, host energy conservation events, and distribute conservation materials.

## **Electric FEECA Municipal Utilities**

## A. JEA

## **Residential Programs**

## • Residential Energy Audit

In the Residential Energy Audit Program, utility auditors examine homes, educate customers, and makes recommendations on low-cost or no-cost energy-saving practices and measures.

## • Residential Solar Water Heating

The Residential Solar Water Heating Program pays a financial incentive to customers to encourage the use of solar water heating technology.

## • Neighborhood Efficiency (Low-Income)

The Neighborhood Efficiency Program offers education on the efficient use of energy and water as well as the direct installation of an array of energy and water efficiency measures at no cost to income qualified customers.

## • Residential Efficiency Upgrade

The Residential Efficiency Upgrade Program provides incentives to encourage the use of high efficiency HVAC and water heating. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Energy Efficient Products

The Energy Efficient Products Program provides incentives to encourage the use of high efficiency lighting and efficient appliances. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

## • MyWay Prepaid Program

The MyWay Prepaid Program offers an option for all customers, especially those who prefer to prepay for services versus being billed monthly. It is consumer-focused experience for environmentally conscious consumers who like to keep their consumption in mind. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

## **Commercial Programs**

## • Commercial Energy Audit

In the Commercial Energy Audit Program, JEA examines businesses, educates customers, and makes recommendations on low-cost or no-cost energy-saving practices.

## • Commercial Prescriptive Lighting Program

Commercial Prescriptive Lighting Program pays a financial incentive to customers to encourage the use of high efficiency lighting technology.

## • Commercial Prescriptive

The Commercial Prescriptive Program provides incentives to encourage the use of high efficiency HVAC, lighting, cooking, and water heating products. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Small Business Direct Install

The Small Business Direct Install Program promotes the use of high efficiency HVAC, lighting, water heating, and appliances in the small business sector. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Custom Commercial

The Custom Commercial Program promotes the use of custom efficiency measures based on specific applications for each customer. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

## **B. Orlando Utilities Commission**

## **Residential Programs**

## • Home Energy Survey

The home energy walk-through surveys were designed to provide residential customers with recommended energy efficiency measures and practices customers can implement, and to encourage participation in various OUC rebate programs. OUC provides participating customers specific tips on conservation and details on customer rebate programs.

## • Duct Repair Rebate

This rebate program is designed to encourage residential customers to repair leaking ducts on existing systems. Qualifying customers must have an existing central air conditioning system, within certain limits and ducts must be sealed with mastic and fabric tape or any other Underwriters Laboratory (UL) approved duct tape.

## • Ceiling Insulation Rebate

The Ceiling Insulation Rebate Program is offered to residential customers to encourage the upgrade of attic insulation.

## • High-Performance Windows Rebate

The High Performance Windows Rebate Program encourages customers to improve energy efficiency in their homes by purchasing ENERGY STAR® rated energy efficient windows.

## • Efficient Electric Heat Pump Rebate

The Efficient Electric Heat Pump Rebate Program provides rebates to customers in existing homes who install heat pumps having a seasonal energy efficiency ratio (SEER) of 15.0 or higher.

#### • New Home Rebate

The New Home Rebate Program offers rebates for cool/reflective roofs, block wall insulation, ceiling insulation upgrades to R-38, heat pumps, ENERGY STAR washing machines, ENERGY STAR heat pump water heaters, and solar water heaters.

## • Heat Pump Water Heater Rebate

The program provides rebates for the heat pumps commonly known as hybrid electric heat pump water heaters for qualifying installations

## • Efficiency Delivered (Low-Income)

The Efficiency Delivered Program is income based and provides up to \$2,500 of energy and water efficiency upgrades based on the needs of the residential customer's home. An OUC Conservation Specialist visits the home, performs a home survey, and recommends which home improvements have the most potential of lowering utility bills.

## **Commercial Programs**

## • Energy Audit

The Energy Audit Program includes a free survey consisting of a physical walk-through inspection of the commercial facility performed by experienced energy experts. The customer receives a written report detailing cost-effective recommendations to make the facility more energy and water efficient.

#### • Efficient Electric Heat Pump Rebate

The Efficient Electric Heat Pump Rebate Program provides rebates to qualifying customers in existing buildings who install heat pumps having a seasonal energy efficiency ratio (SEER) of 15.0 or higher.

## • Duct Repair Rebate

This program for commercial customers provides a rebate to repair leaking ducts on existing systems. Qualifying customers must have an existing central air conditioning system of

within certain limits and ducts must be sealed with mastic and fabric tape or any other UL approved duct tape.

## • Ceiling Insulation Rebate

The Ceiling Insulation Rebate Program for commercial customers aims to increase building resistance to heat loss and gain. Participating commercial customers receive a rebate for upgrading their attic insulation up to R-30.

## • Cool/Reflective Roof Rebate

The Cool/Reflective Roof Rebate Program for commercial customers aims to lower roof surface temperature while increasing the lifespan of the roof. OUC provides rebates for ENERGY STAR cool/reflective roofing that has an initial solar reflectance greater than or equal to 0.70.

## • Indoor Lighting Billed Solution Program

The Indoor Lighting Billed Solution Program assists commercial customers with investments in new lighting technologies. The program is a cash-flow neutral billed solution where the savings pay for the project's cost over the pay-back period or term.

## • Indoor Lighting Rebates Program

The Indoor Lighting Rebates Program offers commercial customers that upgrade the efficiency of their indoor lighting a rebate if they meet certain requirements. Participation is open to facilities located within OUC's service area that receive electric service under an OUC commercial rate.

## • Custom Incentive Program

Through the Custom Incentive Program, commercial customers receive incentives based on the reduction in peak demand their projects achieve plus the first-year energy savings.

## **Natural Gas FEECA Utility**

## A. Peoples Gas System

## **Residential Programs**

## • Residential Customer Assisted Energy Audit

The Residential Customer Assisted Audit is designed to save energy by increasing residential customer awareness of natural gas use in personal residences. Recommendations provided to the customer include an estimated range of energy savings including insightful advice on how to manage their overall energy usage. This audit is only available in an online format.

#### Residential New Construction

The Residential New Construction Program is designed to save energy for new homeowners by offering incentives to builders and developers who construct new single family and multifamily homes with the installation of energy efficient natural gas appliances.

#### • Residential Retrofit

The Residential Retrofit Program offers rebates to encourage customers to make costeffective improvements in existing residences by replacing existing electric appliances with energy efficient natural gas appliances.

#### Residential Retention

The Residential Retention Program offers rebates to encourage new and current natural gas customers to make cost-effective improvements in existing residences by replacing existing natural gas appliances with energy efficient natural gas appliances.

## **Commercial/Industrial Programs**

## • Commercial Walk-Through Energy Audit

This program is designed to reduce demand and energy consumption of C/I facilities by increasing customer awareness of the energy use in their facilities.

## Commercial New Construction

The Commercial New Construction Program is designed to save energy for new commercial facility owners by offering incentives to commercial customers for the installation of natural gas appliances.

#### Commercial Retrofit

The Commercial Retrofit Program is designed to encourage commercial customers to make cost-effective improvements in existing facilities by replacing electric appliances with energy efficient natural gas appliances.

## • Retrofit Combined Heat and Power (CHP)

The Retrofit CHP Program is designed to encourage commercial customers to make costeffective improvements in existing facilities by the installation of an energy efficient on-site natural gas-fired combined heat and power system for the simultaneous production of mechanical and thermal energy.

## • Commercial Electric Replacement

The Commercial Electric Replacement Program is designed to encourage commercial customers to make cost-effective improvements in existing facilities by replacing electric resistance appliances with energy efficient natural gas appliances.

## • Commercial Retention

The Commercial Retention Program is designed to encourage current natural gas commercial customers to make cost-effective improvements in existing residences by replacing existing natural gas appliances with energy efficient natural gas appliances.

## **Other Programs**

## • Conservation Research and Development (R&D)

The Conservation R&D Program is designed to encourage Peoples Gas System and other natural gas LDCs to pursue opportunities for individual and joint research, including testing of technologies to develop new energy conservation programs.