

FEECA

Annual Report on Activities Pursuant to the Florida Energy Efficiency and Conservation Act

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

DECEMBER 2022

Florida Public Service Commission

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The Florida Energy Efficiency and Conservation Act

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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

Energy Conservation Cost Recovery ECCR

 \mathbf{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 **Gulf Power Company GWh** Gigawatt-Hour

HVAC Heating, Ventilation, and Air Conditioning

IGC Indiantown Gas Company Investor-Owned Utility IOU

JEA Formerly known as Jacksonville Electric Authority

kWh Kilowatt-Hour

LDC Natural Gas Local Distribution Company

One Million British Thermal Units **MMBtu**

MWMegawatt

MWh Megawatt-Hour

NGCCR Natural Gas Conservation Cost Recovery

OUC Orlando Utilities Commission O&M Operations and Maintenance

PV Photovoltaic

PGS Peoples Gas System

Rate Impact Measure Test **RIM**

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 2021 annual goal results for each of the FEECA utilities and fulfills these statutory obligations.

The seven electric utilities and single natural gas utility subject to FEECA in 2021 are listed below in order of sales:¹

Electric Investor-Owned Utilities

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

¹For 2021, FPL and Gulf operated as separate ratemaking entities. However, by Order PSC-2021-0446-S-EI, the Commission approved consolidating the rates and tariffs of FPL and Gulf, with all former Gulf customers becoming FPL customers, and Gulf ceasing to exist as a separate ratemaking entity, effective January 1, 2022. In future publications of this report, only six electric utilities will be identified as subject to FEECA.

The Commission regulates the rates and conservation cost recovery of the five 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, program impacts of COVID-19, and information on audit, low-income, and research and development programs.
- Section 4 provides an overview of the associated 2021 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 2021 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.² In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C.³

In 2020, the Commission approved the DSM plans proposed by the investor-owned electric utilities and the municipal electric utilities.⁴

²Order 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*.

³See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

⁴Order 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*.

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.⁵ 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. ⁶ 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.

2021 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 2021, statewide totals reflect that summer peak demand has been reduced by 7,982 MW, winter peak demand has been reduced by 7,294 MW, and annual energy consumption has been reduced by 19,678 GWh. During 2021, the electric FEECA utilities offered 114 residential and commercial programs which focused on demand reduction and energy conservation (see Appendices A and B). In addition, FEECA electric utilities performed over 212,000 residential and commercial energy audits in 2021, as shown in Section 3.3. Each FEECA utility's achievements toward the 2021 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. The Commission has implemented this authority for electric IOUs through the ECCR clause since 1980. For 2021, Florida's investor-owned electric utilities recovered approximately \$307 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

⁵Order 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*.

⁶Order 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.*

⁷Florida Reliability Coordinating Council (FRCC), 2022 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.
⁸Section 366.05(1), F.S.

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 electric demand and energy usage 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 2021 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 seven 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 in 2021

Florida's Electric FEECA Utilities	Energy Sales (GWh)	Percent of Total Energy Sales
Florida Power & Light Company	112,176	46.4%
Duke Energy Florida, LLC	39,682	16.4%
Tampa Electric Company	20,093	8.3%
JEA	12,066	5.0%
Gulf Power Company	10,732	4.4%
Orlando Utilities Commission	6,824	2.8%
Florida Public Utilities Company	626	0.3%
Electric FEECA Utilities' Total	202,199	83.7%
Non-FEECA Utilities' Total	39,307	16.3%
Total Statewide Energy Sales	241,506	100.0%

Source: FPSC's Statistics of the Florida Electric Utility Industry (Table 26) published in October 2022.

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

⁹FPSC's Review of the 2022 Ten-Year Site Plans of Florida's Electric Utilities (October 2022).

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

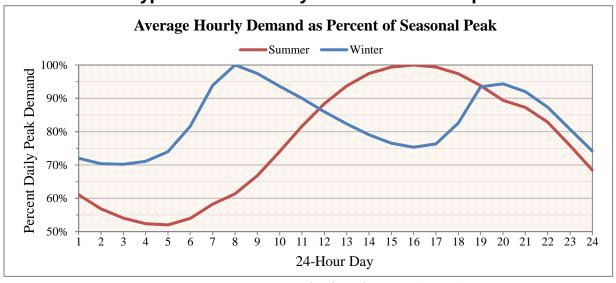
Table 2
Florida's Electric Customers by Class and Consumption in 2021

Customer Class	Number of Customers	Percent of Customers	Energy Sales (GWh)	Percent of Sales
Residential	9,895,491	87.7%	130,203	53.9%
Commercial	1,206,110	10.7%	84,732	35.1%
Industrial	24,864	0.2%	20,121	8.3%
Other*	158,726	1.4%	6,449	2.7%
Total	11,285,191	100.0%	241,506	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 2022.

Figure 1 shows the daily electric load curves for a 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 2021 Ten-Year Site Plans of Florida's Electric Utilities published October 2022.

¹⁰ National data as reported for 2021 by the U.S. Energy Information Administration in the annual *Electric Sales*, *Revenue*, *and Average Price (ESR)* report (Table 2): https://www.eia.gov/electricity/sales_revenue_price/

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 2021, 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 2021, as reported in the Florida Reliability Coordinating Council's (FRCC) 2022 Regional Load & Resource Plan. In 2021, the FEECA DSM programs contributed annual energy savings of 147.1 GWh, which is enough electricity to power approximately 11,188 homes for a year.

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¹¹Electric 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.

¹²The cumulative MW savings for summer peak demand and winter peak demand shown in Table 3 reflect the maximum capability of demand response programs.

¹³This estimate is based on an average annual household energy use of 13,150 kWh for Florida in 2021 as reported by the U.S. Energy Information Administration in the annual *Electric Sales*, *Revenue*, *and Average Price (ESR)* report (Table 5.a): https://www.eia.gov/electricity/sales_revenue_price/

Table 3
Statewide Cumulative Demand and Energy Savings (Through 2021)

Туре	Achieved Reduction
Summer Peak Demand	7,982 MW
Winter Peak Demand	7,294 MW
Annual Energy Reduction	19,678 GWh

Source: Florida Reliability Coordinating Council's 2022 Regional Load & Resource Plan (S-3, S-4, S-5).

In 2021, the electric FEECA utilities offered 114 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 2021, FEECA electric utilities performed 207,066 residential audits. Though FEECA does not require commercial energy audits, FEECA electric utilities also performed 5,591 commercial energy audits in 2021. 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 attempting 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.¹⁴

¹⁴Order 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.*

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 held to determine the cost recovery factors to be applied to customer bills in the following year. The Commission-approved 2023 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

	Participants	RIM	TRC
D 014	1 at ticipants	KIIVI	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 ¹⁵ 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. Rule development workshops for this docket were conducted in January 2021, May 2021, and November 2022. ¹⁶

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.

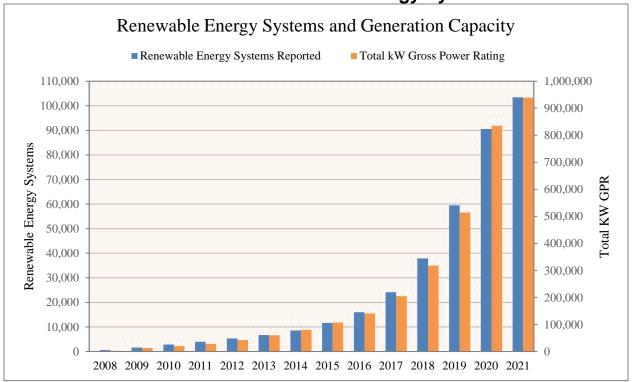
The goals established in 2014 were based upon estimated energy and demand savings from measures that passed both the RIM and Participants cost-effectiveness tests. Measures that pass the Participants test ensure that participating customers' benefits exceed the costs of the measure or program to the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

¹⁵ 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*.

¹⁶See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

Figure 2
Demand-Side Renewable Energy Systems



Source: Data compiled from Interconnection and Net Metering Reports provided to the Commission from IOU, municipal, and rural electric cooperative electric companies, 2008-2021.

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. 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 audit programs. PGS utilized the Participants and GRIM tests to calculate its goals.¹⁷ 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.

¹⁷Rule 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.

Table 6
Commission-Approved DSM Goals for PGS, 2019-2028

Cumulative Savings (Therms)				
Residential Small Commercial		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. 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. In

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.

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.

¹⁸See Docket No. 20190210-EG, Petition for approval of demand-side management plan, by Peoples Gas System. ¹⁹Order 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.*

Federal efficiency standards and state building codes establish a baseline in assessing the cost-effectiveness 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 7th Edition (2020) was issued. The 7th Edition (2020) became effective in December 2020, although in August 2021, the FLBC issued the 2021 Supplement to the 7th Edition (2020). 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 2021 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. Within the Building Technologies Office, the 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. ²¹ Some of the consumer products regulated by these Conservation Standards and Test Procedures include laundry appliances, dishwashers, microwave ovens, televisions, and several other common

²⁰The 2021 Supplement to the 7th Edition (2020) became effective August 18, 2021. Details of the Seventh Edition (2020) Florida Building Code and 2021 Supplement to the 7th Edition (2020), including legislative updates in the 2022 Supplement, can be found at https://www.floridabuilding.org/fbc/Links_to_Code_Resources.html. In addition, details are provided regarding the development of the 8th Edition, currently scheduled for 2023.

²¹Federal Appliance and Equipment Standards Program: http://energy.gov/eere/buildings/appliance-and-equipment-standards-program.

household products. In addition to consumer products, there are categories for lighting, plumbing, and commercial/industrial products.²²

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.²³ 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.²⁴

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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²² Federal Conservation Standards and Test Procedures: http://energy.gov/eere/buildings/standards-and-test-procedures

²³Executive Order No. 13990, 86 Federal Register 7037 (January 25, 2021): https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01765.pdf

²⁴U.S. Department of Energy, Semi-Annual Report to Congress on Appliance Energy Efficiency Rulemakings, Energy Conservation Standards Activities (August 2021): https://www.energy.gov/sites/default/files/2021-08/EXEC-2019-005022%20-%20Final%20Report%20ksb.pdf

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 (2021) and archived annual DSM reports from prior years can be found on the Commission's website: http://www.psc.state.fl.us/.

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 2021 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

The company met its summer and winter demand reduction goals for the C/I customer class, but missed its annual energy savings goal for that class. FPL did not achieve any of its three 2021 goals for the residential customer class. For an illustration of one residential metric, FPL's goal for summer demand reduction in this customer class was 27.30 MWs, yet FPL recorded 18.04 MWs of summer demand reduction, a shortfall of 34 percent. FPL met its total (i.e. all classes combined) summer demand reduction goal and its total winter demand reduction goals, but it did not meet its total annual energy savings goal. According to FPL, program participation fell in 2021 below projections in programs that required in-home contractors, specifically referencing their residential insulation and air conditioning programs. The company attributes the lower program participation in these programs as a contributing factor for missing its goals for the residential customer class. In 2022, FPL reported that it has engaged in efforts to improve customer receptivity to in-home visits in order to increase program participation.

DEF

In 2021, DEF exceeded all of its demand reduction and annual energy savings goals for the C/I customer class. The company met its annual energy savings goal for the residential customer class, but it did not meet its residential summer and winter demand reduction goals for this class. For summer demand reduction in the residential customer class, DEF's goal was 14.00 MWs, yet the company recorded 10.00 MWs of summer demand reduction, a shortfall of 29 percent. DEF met the total goals for summer demand reduction and annual energy savings. The company did not meet its total winter demand reduction goal.

Although the company attributed impacts of the COVID-19 pandemic as the principle reason for not achieving all of its goals in 2021, it stated that in 2022, it has increased staffing for work crews that install conservation measures, and is examining dispatch efficiencies that will enable such crews to stay in one area for extended times.

TECO

TECO met all of its 2021 demand and energy savings goals for the C/I customer class. TECO achieved its residential 2021 energy savings and summer demand reduction goals. However, the company missed achieving its residential winter demand reduction goal, which resulted in it missing its total winter demand reduction goal as well. TECO's goal for winter demand reduction in the residential customer class was 8.00 MWs, yet the utility recorded a reduction of 4.50 MWs, a shortfall of 44 percent. Through most of 2021, TECO suspended offering programs that required on-site interactions for the safety of its customers, employees, and contractors. The company believes the decline in on-site interactions particularly impacted its ability to achieve its winter demand reduction goal for the residential customer class.

Although participation in the company's on-line residential audit program grew in 2021, many of the suspended programs had lower participation numbers than projected for 2021. From early November 2020 through the end of 2021, TECO maintained a waiting list so that it could address program participation requests received. Normal field operations resumed on November 8, 2021, and the waiting list numbers declined thereafter.

Gulf

Gulf missed all of its 2021 energy and demand reduction goals for both classes, thus it missed its total energy and demand reduction goals as well. For an illustration of one residential metric, Gulf's summer demand reduction goal for 2021 was 7.50 MWs, yet Gulf recorded 1.33 MWs of summer demand reduction, a shortfall of 82 percent. Gulf stated lower program participation combined with the ongoing impacts of COVID-19 pandemic as the reason for its missed demand reduction and annual energy savings goals for both classes.

Calendar year 2021 was the last time period that goal achievement results for Gulf will be reported as stand-alone entity. Beginning in 2022, FPL and Gulf, two formerly separate companies, combined their operations. For 2022, the energy and demand reduction goal achievement results that FPL reports will reflect the operationally-merged entity.

FPUC

FPUC met all of its 2021 demand reduction and energy savings goals for the residential customer class, but did not meet any of its goals in the C/I customer class. For an example of one C/I measure, FPUC's goal for winter demand reduction was 0.018 MWs, yet the utility recorded a reduction of 0.002 MWs, a shortfall of 89 percent. However, the goal achievement for 2021 in the residential customer class enabled FPUC to also meet all of its total winter and summer demand reduction goals, as well as its total annual energy savings goal.

JEA

JEA met all its 2021 individual customer class goals, thus it met its total demand and energy savings goals as well.

OUC

OUC met all its 2021 individual customer class goals, thus it met its total demand and energy savings goals as well.

Table 7
Electric DSM Goals Compared to Annual (2021) Achievements

	Winter (MW)		Summer (MW)		Annual (GWh)	
Utility	Goals	Achieved Reduction	Goals	Achieved Reduction	Goals	Achieved Reduction
FPL*						
Residential	16.90	11.41	27.30	18.04	25.70	21.87
Commercial/Industrial	16.50	22.45	26.60	37.96	30.10	17.71
Total	33.40	33.87	53.90	55.99	55.80	39.58
DEF*						
Residential	28.00	16.00	14.00	10.00	6.00	25.00
Commercial/Industrial	5.00	11.00	7.00	24.00	4.00	22.00
Total	33.00	27.00	21.00	34.00	10.00	47.00
TECO*						
Residential	8.00	4.50	3.30	6.40	7.70	16.40
Commercial/Industrial	1.90	4.70	3.60	5.60	10.40	20.40
Total	9.90	9.20	6.90	12.10	18.10	36.80
Gulf*						
Residential	4.30	1.11	7.50	1.33	7.60	3.89
Commercial/Industrial	0.20	0.04	0.90	0.04	2.70	0.13
Total	4.50	1.15	8.40	1.36	10.30	4.01
FPUC*						
Residential	0.031	0.095	0.099	0.167	0.067	0.318
Commercial/Industrial	0.018	0.002	0.058	0.004	0.182	0.007
Total	0.049	0.097	0.157	0.171	0.249	0.325
JEA						
Residential	0.960	1.830	0.940	2.150	2.500	4.200
Commercial/Industrial	0.007	0.240	0.140	0.470	0.080	2.500
Total	0.967	2.070	1.080	2.620	2.580	6.660
OUC						
Residential	0.220	0.659	0.210	0.631	0.800	1.422
Commercial/Industrial	0.780	1.676	0.400	1.859	0.860	11.330
Total	1.000	2.335	0.610	2.489	1.660	12.752

^{*}Bold numbers shown in Table 7 indicate the utility did not meet its annual goals within that category.

Source: FEECA utilities' 2021 demand-side management annual reports.

PGS

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 2021 total energy reduction goal and its individual customer class goals.

Table 8
PGS DSM Goals Compared to Annual (2021) Achievements

T 14:11:4	Annual Energy Reduction (Therms)			
Utility	Goals	Achieved Reduction		
PGS				
Residential	355,569	425,798		
Small Commercial	227,968	292,210		
Total	583,537	718,008		

Source: PGS' 2021 demand-side management annual report.

3.2 Program Impacts of COVID-19

As in 2020, the COVID-19 pandemic continued to impact DSM program implementation in 2021 for Florida's electric FEECA utilities. COVID-related health concerns prompted most FEECA utilities to restrict implementing DSM programs requiring face-to-face or on-site contact with their customers throughout portions of 2021. In most instances, the duration of suspensions was brief, although in a few limited cases, some programs remained suspended for most of 2021, and into the early portions of 2022.

The FEECA utilities responded to this challenge through enhanced communications with their customers using traditional channels (radio, television, bill messaging, and print mediums), and continued into 2021 offering information via internet-based and social media (Facebook and Twitter) platforms that were launched in 2020. In addition, the FEECA utilities used their corporate websites to provide frequently updated information regarding the availability of their conservation programs, and to offer webinars and other informative content for their customers. In 2021, the FEECA utilities continued communicating with their customers using technology-based applications (FaceTime, Teams, and Zoom) in efforts to assist customers to learn about and engage in conservation programs and measures. Discussed below is a summary of the practices the FEECA utilities implemented in response to COVID-19 impacts.

FPL

Since October 2020, and through all of 2021, FPL resumed offering all residential and commercial conservation programs. During 2021, FPL launched updates to an online resource (Energy Analyzer) customers can access to obtain information about their specific energy usage and energy-saving opportunities.

According to FPL, COVID-related concerns may be the root cause behind a reluctance from its customers to participate in programs that required in-home contractors. Innovations that were offered in 2020 for the first time, such as allowing insulation contractors to issue rebate certificates for the Residential Ceiling Insulation program without a pre-qualifying FPL in-home energy survey, were continued in 2021 and incorporated on a permanent basis into the 2022

program standards. FPL continued offering alternatives to in-home energy surveys as part of its communication efforts to engage all customers, including those that may remain reluctant to allow in-home visits.

DEF

In 2021, COVID-related health concerns impacted DEF's ability to offer some residential and commercial conservation programs for varying durations. Although the company's Home Energy Check, Residential Incentive and Residential Load Management programs were not offered in January and February, these programs resumed normal operations on March 1, 2021. The Low Income Weatherization Assistance program followed a very similar schedule, and resumed normal operations the following day. DEF's Neighborhood Energy Saver program had the longest period of suspension in 2021, and was not offered until May 17, 2021.

In 2021, DEF continued the practice of posting current information about conservation programs on its website, using a banner to provide information about suspended programs or measures. In addition, the company used video conferencing tools as an alternative to face-to-face communications.

As it did in 2020, the company relied more heavily on its online and social media outlets (Facebook and Twitter) over print or more traditional communication outlets for messaging about the conservation programs, and increased its marketing efforts to promote telephonic and online audits.

TECO

For most of 2021, TECO did not offer conservation programs that involved person-to-person interactions, only resuming those programs in early November. Nevertheless, the company developed call-back lists for in-home audits and for other programs, and when normal operations resumed, worked aggressively to fulfill the requests it received throughout the year.

In 2021, TECO's energy education efforts mirrored those used in 2020, using both traditional and emerging communication channels. Through its website and other digital avenues, the company provided information about suspended conservation programs, while also actively promoting the non-suspended programs. According to TECO, the company placed an emphasis on promoting telephonic and online audits as it did in 2020, TECO's online customer portal featured popup messaging to promote Online Energy Audits and other programs. TECO continued to maintain social media content focused on educating its customers on energy saving tips, while simultaneously promoting residential and commercial conservation programs.

TECO continued to support process changes that allowed on-going participation in some of the company's COVID-impacted DSM programs. Working through its vendors, the company continued the practice of allowing photographs to document the installation of qualifying energy efficient equipment. TECO also continued to allow use of an electronic signature tool in order to enroll customers in load management and demand response programs. For the company's Weatherization program, TECO specialists ordinarily install all of the items in the energy efficiency kits that are offered with that program. However, during COVID-related suspensions, the company mailed the kits and instructed the participating customers to self-install what they

were comfortable with, leaving the remaining items for a specialist to install at a later date. Late in 2021, the company diligently made contact with these participating customers to fully install any of the remaining items from their kits.

Gulf

Gulf began the year with its residential in-home audit program suspended, along with three commercial/industrial programs as well. These suspensions were terminated on various dates through the first portion of 2021. While these programs were under suspensions, Gulf offered its customers the opportunity to be placed on waiting lists. In addition to the offer of a waiting list, those requesting an in-person residential or business audit were offered the opportunity to participate in on-line and/or telephonic audits. For non-suspended programs that required on-site work at a customer's location, Gulf employees adhered to strict masking and social distancing protocols.

As it did in 2020, Gulf shifted its messaging to encourage customers to participate in telephonic and virtual audit programs, which were offered through 2021 as the preferred alternative to inperson audits. Gulf continued communicating with its customers through internet-based platforms and its social media avenues (Facebook and Twitter) to educate customers and also offer information about conservation programs. During the warmest summer months of 2021, Gulf conducted an advertising campaign offering information on conservation practices, and promoting its on-line Energy Survey tool. The campaign used local television, printed flyers, digital channels and social media channels. Gulf also maintained a COVID-19 resource page on its website that also included links to payment arrangements and bill payment assistance, along with energy saving tips.

FPUC

Although none of FPUC's residential or commercial conservation programs were suspended in 2021, customers that requested to participate in the company's Residential Energy Survey Program were only offered an online and/or a telephonic energy audit in lieu of an on-site audit. In addition, the company only offered off-site resources for customers that requested to participate in its commercial Energy Consultation Program. FPUC states that its website offered information on all other conservation programs, and this resource and its call center staff promoted the company's free online energy survey software and conservation calculator.

In 2021, the company maintained its usual marketing efforts to promote its entire energy conservation portfolio through bill messaging, print advertising, and by billboards and banners in its service territories.

JEA

In 2021, JEA offered its full portfolio of conservation programs without any suspensions or modified practices attributable to COVID-related concerns. The utility states that all DSM program delivery has returned to its pre-pandemic state, with no additional tools or adjusted practices deemed necessary.

OUC

Like JEA in 2021, OUC also offered its conservation programs to customers without suspensions or significantly modified practices. The utility states that on limited occasions, on-site conservation specialists used modified field practices whereby they would remain outdoors during their visits to customer locations, and made use of video-conferencing tools to give guidance to customers. OUC expressed that its modified audit program obviated the need to create waitlists that would have otherwise been necessary if the utility had fully suspended their program.

3.3 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 2021, a total of 7,983 audits of this type were conducted. In addition, PGS announced plans to launch its Commercial Walk-Through Energy Audit program before the end of 2022.

Residential Audits

The FEECA electric utilities performed a total of 207,066 residential audits in 2021, as shown in Table 9 below.²⁵ Similar to 2020, the number of audits conducted by the FEECA electric utilities was impacted by varying restrictions regarding on-site visitation to customers' homes and businesses. During the suspension periods, the utilities were not able to offer Walk-Through, BERS, and Computer-Assisted Audits since these types of audits require a utility auditor to

²⁵Walk-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.

physically inspect the customer's premises. The FEECA electric utilities responded to these suspensions by offering virtual energy audits via online or telephonic audit programs.

Table 9
Residential Audits by Type in 2021

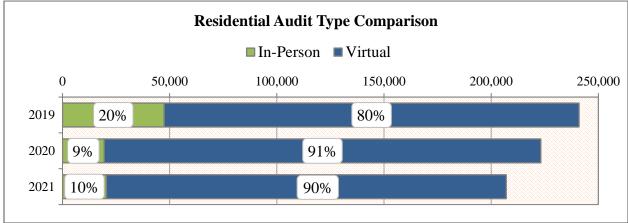
1. Tooladiilla 7 taalid by 1 y po iii 202 i					
	In-Person	Virtual			
Utility	Walk-Through, BERS, and	Online	Phone	Total	
	Computer-Assisted	O 222220	2 220220		
FPL	8,626	65,236	11,016	84,878	
DEF	5,983	8,393	7,356	21,732	
TECO	1,035	68,540	819	70,394	
Gulf	251	10,929	554	11,734	
FPUC	6	40	22	68	
JEA	3,346	8,059	0	11,405	
OUC	1,229	5,626	0	6,855	
Total	20,476	166,823	19,767	207,066	

Source: FEECA utilities' 2021 demand-side management annual reports.

FEECA electric utilities conducted 207,066 residential audits in 2021, which was almost 16,000 fewer residential audits compared to 2020 when 223,146 audits were conducted. Although FPL, DEF, Gulf, FPUC, and JEA each conducted fewer audits in 2021 compared to 2020, two FEECA electric utilities, TECO and OUC, reported more audits in the same period. For TECO, fewer inperson audits were conducted in 2021 (1,035 in 2021 compared to 1,514 in 2020), but a higher number of virtual audits more than offset that decline for in-person audits, resulting in an overall total increase of about 15 percent (70,394 in 2021 compared to 61,280 in 2020). In 2021, OUC launched a new online audit tool, and reported an extraordinary gain in the number of residential audits conducted (5,626 audits in 2021 compared to 164 in 2020).

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 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.

Figure 3
Residential Audits in 2019, 2020, and 2021



Source: FEECA utilities' 2019-2021 demand-side management annual reports.

Commercial / Industrial Audits

The FEECA electric utilities also performed 5,591 commercial/industrial energy audits in 2021, down from 6,071 such audits in 2020. As with the residential audit programs, the suspension of on-site visits during 2021 impacted the overall number of commercial/industrial energy audits reported by all of the FEECA electric utilities. FPL and Gulf reported conducting more in-person and telephonic audits in 2021 compared to 2020, and fewer online audits. JEA conducted more in-person audits in 2021 compared to 2020 (173 in 2021 compared to 142 in 2020), while DEF, TECO, and OUC reported fewer commercial/industrial audits. FPUC does not offer an audit program for commercial/industrial customers.

Table 10
Commercial / Industrial Audits by Type in 2021

	In-Person	Vir	Virtual		
Utility	Walk-Through, BERS, and Computer-Assisted	Online	Phone	Total	
FPL	2,702	400	1,649	4,751	
DEF	262	0	25	287	
TECO	101	0	105	206	
Gulf	55	67	22	144	
FPUC	0	0	0	0	
JEA	173	0	0	173	
OUC	30	0	0	30	
Total	3,323	467	1,801	5,591	

Source: FEECA utilities' 2021 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.

Commercial/Industrial Audit Type Comparison ■ In-Person ■ Virtual 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9.000 2019 19% 81% 2020 53% 47% 2021 59% 41%

Figure 4
Commercial / Industrial Audits in 2019, 2020, and 2021

Source: FEECA utilities' 2019-2021 demand-side management annual reports.

3.4 Low-Income Programs

The 2014 DSM Goals Order²⁶ 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."²⁷ 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.

²⁶The 2014 DSM Goals Order references electric utilities only.

²⁷Order 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 2021 are discussed below.

FPL

FPL reported that proactive marketing efforts resulted in program participation being higher than projected for 2021. The company provided assistance to low-income customers through the Residential Low-Income Weatherization Assistance program, which provides direct installation of energy saving measures through government designated Weatherization Assistance Providers. A home energy survey with customer specific recommendations for saving energy is also offered with this program. FPL Home and Business Energy representatives targeted income-qualified zip codes in its service territory in order to offer energy saving tips and related information to the property managers and customers in those areas. This outreach included the installation of energy efficiency measures at no cost to participants.

FPL's program manager for this DSM program is a member of the advisory board for the Florida Housing Coalition, which sponsors an annual Affordability Conference. Through engagement at this conference, the program manager is able to discuss strategies for increasing the adoption of the Residential Low-Income Weatherization Assistance program with representatives from regional social service agencies that offer services throughout FPL's service territory.

DEF

DEF promotes its conservation programs to all customers, including low-income customers through a variety of marketing channels. These channels include bill stuffers, emails, direct mail, and social media. Promotional information about conservation programs is also published on the company's website.

In 2021, DEF worked with the Pinellas County Urban League, Mid-Florida Community Services, Capitol Area Community Action Agency and other social service organizations to ensure these entities are aware of the benefits available to low-income customers. For portions of 2021, COVID-19 related concerns prompted DEF to suspend offering in-home direct installations of measures in customers' homes. Safety related concerns also impacted the social service agencies DEF partnered with, although in 2021 these agencies have resumed activity and have submitted some applications for rebates through DEF's Weatherization Program.

Despite these ongoing efforts by DEF, participation in low-income DSM programs was not as high in 2021 as in 2020. In July 2021, DEF petitioned the Commission to request approval for several modifications to the company's DSM Plan and standards intended to provide both short-term and long-term relief to low-income customers. ²⁸ In December 2021, the Commission granted partial approval of the requested modifications. ²⁹

²⁸See Docket No. 20210121-EG, Petition for Approval of Modifications to Demand-side Management Program Plan and Participation Standards.

²⁹See Order No. PSC-2021-0465-PAA-EG, issued December 20, 2021, in Docket No. 20210121-EG, *Petition for Approval of Modifications to Demand-side Management Program Plan and Participation Standards*.

TECO

In 2021, as in 2020, TECO continued its multi-pronged approach for communicating with customers of all income levels. TECO used paid advertising channels (television and radio), social media (Facebook and Twitter), as well as bill communications, direct mail, and website banners to promote its non-customer contact DSM programs. Social media outlets were used to publicize the company's Energy and Renewable Education, Awareness and Agency Outreach program, as well as to provide information about community energy education and awareness events. Historically, these efforts have proven to be effective at encouraging the participation of low-income customers. Through TECO's marketing efforts, participation in the Energy and Renewable Education, Awareness and Agency Outreach program improved in 2021, from historically low enrollment in 2020. ³⁰ Customers, including low-income customers, who attended free community energy education events in 2021 received energy-saving tips and program information directly from company personnel. Eligible attendees also received free energy-saving kits. Social media was also used to announce the details for offering the company's Neighborhood Weatherization Program, which also rebounded from historically low participation in 2020.³¹

In 2021, TECO also leveraged its on-going relationships with the Tampa Housing Authority and Hillsborough County's Sustainability department as avenues for offering virtual energy education to all customers, including low-income customers.

Gulf

In 2021, Gulf engaged in several initiatives to ensure low-income customers were aware of and had access to conservation programs. While overall participation was impacted by COVID-19 restrictions, Gulf specifically targeted lower income neighborhoods with its Residential Low Income (Community Energy Saver) program, a program where company representatives canvas specifically-identified neighborhoods to provide basic energy conservation recommendations as well as installation of conservation measures including energy efficient LED light bulbs and low-flow shower heads. Information promoting this program was featured in direct mail campaigns, and through outreach via community awareness events, yard signs, and by engaging community leaders. In 2021, these efforts resulted in Gulf more than doubling the number of customers participating in its Residential Low Income (Community Energy Saver) program, compared to 2020.³²

As the summer and winter peak season approached, Gulf sent emails to all of its customers that it had valid email addresses for, including low-income customers, offering energy saving tips and bill assistance information. In 2021, Gulf also ran an advertising campaign on local TV, digital channels and social media channels during some of the warmest summer months to encourage

³⁰In 2021, a total of 810 customers participated in TECO's Energy and Renewable Education, Awareness and Agency Outreach program. In 2020, only 445 did so.

³¹In 2021, a total of 2,923 customers participated in TECO's Neighborhood Weatherization program. In 2020, only 1,760 did so.

³²In 2021, a total of 3,795 participants enrolled in Gulf's Residential Low Income (Community Energy Saver) program, compared to 1,436 in 2020.

customers to identify more ways to save energy and money through the online energy checkup tool.

FPUC

In 2021, FPUC continued its outreach programs to all customers, including low-income customers, through the company's website and various forms of advertising in its service territory. FPUC's Energy Expert program provides energy-related tips, advice, articles, videos, blog content, and other downloadable materials. This on-line energy conservation resource features an "Ask the Energy Expert" tool which allows customers to submit energy-related questions to the company and receive a direct response from FPUC personnel. As part of the Energy Expert program, FPUC energy conservation professionals continuously interact with employees from other departments to provide basic energy efficiency and conservation training. This training helps customer service, sales, and other customer-facing employees address high-bill complaints and to effectively communicate with customers regarding their energy usage, and FPUC's energy conservation measures and programs.

JEA

As in prior years, JEA provided a 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. In 2021, JEA formed a partnership with the Wealth Watchers Florida organization to provide energy efficiency kits to the group's Home Buyer Education program.

OUC

In 2021, 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 2021, OUC continued a partnership with the City of Orlando to conduct neighborhood meetings in low-income communities. OUC also participated in the construction of 16 new, affordable single family homes within its service territory through its affiliation with the Central Florida Regional Housing Trust Partnership.

3.5 Investor-Owned Utility Research and Development Programs

In addition to specific DSM programs that provide measurable demand and energy savings, the five 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 2021, FPL performed a review of smart thermostat programs, smart panel pilot programs, and other control device demand response programs currently being administered by investor-owned utilities across the nation. Smart panels function as a replacement technology for traditional circuit breaker panels. FPL is considering using smart thermostats, smart panels, and smart breakers as potential supplements to its Residential On Call Program, where air conditioning, strip heating, water heating, and pool pump circuits could be targeted for monitoring and control. FPL reported that those evaluations are being conducted through a pilot program which was approved in the 2021 rate case. In addition to evaluating the load control capabilities of these replacement panels, the pilot will also study the optimization of electric vehicle chargers, solar PV systems, and battery storage technologies.

DEF

DEF continued research projects with the University of South Florida and University of Central Florida to gain insights into energy storage. The company hopes to use the results of this research for design of a potential cost-effective demand response program. DEF also continued its research on CTA-2045 Technology, a port that enables connected appliances to receive and execute commands, as well as its Energy Management Circuit Breaker (EMCB) Project. The purpose of the EMCB Project is to examine the potential for developing a customer circuit breaker program that incorporates communication, metering, and remote operations for a variety of energy efficiency and demand response applications. DEF also continues to participate in research with the Electric Power Research Institute (EPRI) on projects evaluating customer solar resources with a focus on larger arrays with and without energy storage systems. With the EPRI, DEF also participated in studies to measure the potential of using customer demand response to compensate for variable loads and intermittent renewable generation resources.

In 2021, DEF completed a two-year research project that gathered data about residential customers who drive electric vehicles (EV). The study analyzed what types of hardware customers use for charging, where customers do the majority of their charging, and how much power is consumed by EV charging. The final results of this study appear in a report published in October 2021.

In 2021, DEF launched a project for a study to evaluate the demand response capability of internet-connected residential batteries. The project will focus on the capabilities of a particular aggregator to collect data from multiple battery manufacturers, feasibility of utilizing the technology to dispatch demand response event commands, and the net impacts these have on shaping demand. These aggregation systems enable existing units that have already been installed by residential customers in DEF's territory to be used in this study. Residential batteries have the potential to offer the ability to provide power reduction for demand response while reducing discomfort to the customer, in comparison to residential appliance demand response.

TECO

In 2021, TECO continued several of its battery storage research initiatives with University of South Florida, including a project exploring the use of large commercial electric vehicle lithiumion batteries to export power to the company's grid during peak times. TECO also continued

examining a Commercial Small to Mid-sized Business Online Energy Audit program and research to include Heat Pump Water Heaters, in its Energy Planner Program.

TECO issued a final report on its two-year study of a home energy management system, which indicated a 641 kWh reduction in annual energy usage for a typical home, as well as a summer demand reduction of 0.08 KWs and a winter demand reduction of 0.10 KWs. Although the company gained valuable insights and data from this study, it is not intending on developing a DSM offering at this time. Nonetheless, TECO intends to continue to monitor the technology, stating that as the next goal-setting proceeding approaches, there is a high probability that technology from this study will be included in the Residential Measures List.

Gulf

Gulf did not initiate any new projects in 2021, and its work with the Electric Power Research Institute (EPRI) SHINES Project was completed late in the year. Through this program, Gulf and other partners in the EPRI's Integration of Distributed Energy Resources program developed an educational tool for the public to monitor the performance characteristics of a solar energy system, a battery energy storage system, and household energy loads in a residential setting. Visitors to the SHINES Project website can also access historical performance measurements and weather information though interactive charts. Data collection was completed in late 2021.

FPUC

In December 2021, FPUC completed its Battery Storage Conservation Demonstration and Development (CDD) project. This research explored the impacts battery technology has on FPUC's electrical system, by comparing data from stand-alone battery units to various configurations that combine solar and battery components. The research was intended to provide the company with data and insights for determining appropriate business model design and regulatory structure for a conservation program offering for residential customers. A final report was completed in May 2022. FPUC states that it gained valuable insights into customer-level acceptance of battery storage system technology. The company believes the data from this study will be useful to the engineering firm that will assist the company to prepare for the 2024 DSM Goals docket. FPUC hopes to leverage the data from this study and the customer insights into one or more conservation programs at a future date, pending the cost-effectiveness review.

FPUC started another CDD effort in 2021, which targets commercial customers, and is expected to run through 2022. This project will examine technologies and systems that increase the electrical efficiency for certain large commercial and industrial customers. The core component of this study is a mechanical control device that reduces energy consumption by controlling the voltage across all phases of supply. Preliminary findings indicate this device can effectively lower kilowatt demand and overall energy consumption. The study is expected to run through December 2022.

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 Natural Gas Conservation Cost Recovery (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, 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 2012-2021.

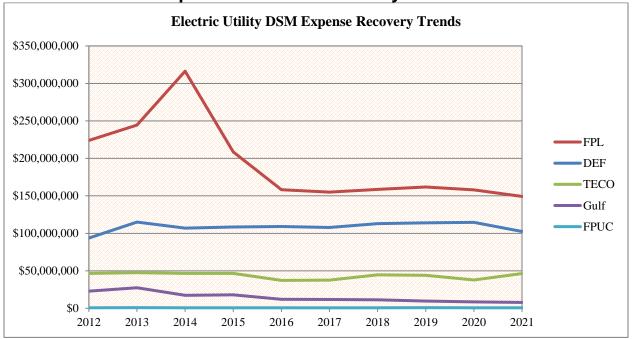
Table 11
DSM Expenditures Recovered by IOUs

	FPL	DEF	TECO	Gulf	FPUC	Total
2012	\$224,033,738	\$93,728,110	\$46,593,831	\$22,885,826	\$695,235	\$387,936,740
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
Total						\$3,608,773,140

Source: Docket Nos. 20130002-EG through 20220002-EG, Schedules CT-2 from the IOUs' May testimonies.

Figure 5 shows trends in annual DSM expenditures for the five electric IOUs from 2012 to 2021.

Figure 5
DSM Expenditures Recovered by Electric IOUs



Source: Docket Nos. 20130002-EG through 20220002-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.

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 2022, the Commission set the ECCR factors for the 2023 billing cycle. 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.

Table 12
Residential Energy Conservation Cost Recovery Factors in 2023

Utility*	ECCR Factor (Cents per kWh)	Monthly Bill Impact (Based on usage of 1,000 kWh)
FPL	0.122	\$1.22
DEF	0.320	\$3.20
TECO	0.281	\$2.81
FPUC	0.113	\$1.13

Source: Order No. PSC-2022-0422-FOF-EG, Docket No. 20220002-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 2012-2021.

Table 13
DSM Expenditures Recovered by LDCs

			FPUC C	Consolidated Co	ompanies			
	PGS	FCG	FPUC and Fort Meade	Chesapeake	Indiantown	SJNG	SGS	Total
2012	\$7,314,940	\$3,743,811	\$2,655,654	\$806,747	\$5,238	\$102,425	\$25,090	\$14,653,905
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
Total								\$235,571,381

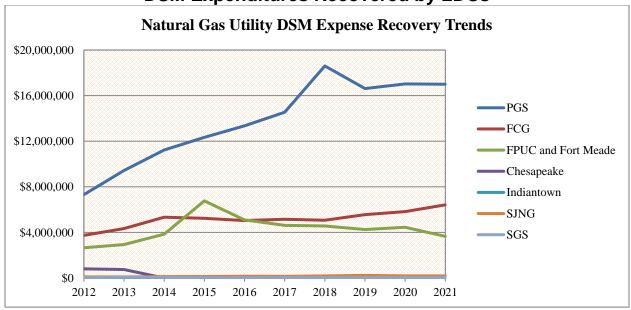
Source: Docket Nos. 20130004-GU through 20220004-GU, Schedules CT-2 from LDCs' May testimonies.

^{*}While JEA and OUC fall under the FEECA Statute, the Commission does not regulate electric rates for municipal utilities.

^{*}Spending combined with FPUC.

Figure 6 shows the trends in annual conservation expenditures for all LDCs from 2012 to 2021. In 2013, the Commission approved the LDCs' Commercial Conservation programs, resulting in additional overall conservation expenditures.³³

Figure 6
DSM Expenditures Recovered by LDCs



Source: Docket Nos. 20130004-EG through 20220004-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. The graph does not reveal that the amounts for SJNG and SGS are relatively low.

In November 2022, the Commission set the natural gas LDC conservation cost recovery factors for the 2023 billing cycle. Table 14 provides the LDCs' residential cost recovery factors for 2023 and the impact on a residential customer bill using 20 therms of natural gas per month.

³³Order 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 2023

Utility	Cost Recovery Factor (Cents per Therm)	Monthly Bill Impact (Based on usage of 20 Therms)
PGS	9.056	\$1.81
FCG	25.615	\$5.21
FPUC – Fort Meade	8.852	\$1.77
Chesapeake	14.368	\$2.87
Indiantown	9.466	\$1.89
SJNG	27.254	\$5.45
SGS	12.192	\$2.44

Source: Order No. PSC-2022-0423-FOF-GU, Docket No. 20220004-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 own 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, E-Newsletters, YouTube, LinkedIn, and Twitter. 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 further assist consumers. Most of the data in this section covers October 2021 through August 2022.

Triple E Award

Each quarter, 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 featured and archived under Hot Topics on the FPSC homepage—www.FloridaPSC.com—and are highlighted statewide via a press release and on Twitter (@floridapsc).

Website Outreach Resources

The FPSC invites consumers to visit its website to find an assortment of information to help save energy. According to Google Analytics, website page views for October 1, 2021 through August 24, 2022 totaled over 1,051,000. "Find Your Utility" and "Lifeline Assistance" were among the most popular FPSC Consumer Assistance pages.

The Commission offers several energy conservation brochures and other helpful free consumer resources. Conservation brochures may be viewed and printed directly from the FPSC website, <u>FloridaPSC.com/publications</u>, ordered online, or requested by mail or phone. From October 2021 through August 31, 2022, the FPSC received more than 32,400 requests for brochures.

Newsletters

The Commission's quarterly <u>Consumer Connection E-Newsletter</u> features current energy and water conservation topics, consumer tips, and general Commission information. Consumer tips and information highlighted through video and text during the reporting period include: Commissioner Andrew Fay Highlights National Drive Electric Week with Statewide Electric Vehicle Tour, Chairman Andrew Fay Experiences the Line Life, and Hardening the Electric Grid to Withstand Storms. The Consumer Connection E-Newsletter is available under Consumer Corner on the Commission's homepage and distributed to consumers via Twitter (@floridapsc) and by subscribing to the free <u>newsletter</u> online.

National Consumer Protection Week

National Consumer Protection Week (NCPW), March 6-12, 2022, highlighting consumer protection and education efforts, aided the Commission's 2022 conservation education efforts.

Chairman Andrew Fay recognized the 24th Annual NCPW by raising awareness and education on scams targeting utility customers, and securing online privacy and personal information.

For NCPW 2022, the Commission made presentations to consumers at the Jefferson County Senior Citizens Center and the Senior Citizens Council of Madison County showing them how to save money through energy and water conservation and how to avoid scams. 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. "Age My Way" was the theme for Older Americans Month 2022. The FPSC partnered with centers in Hamilton, Suwanee, Lafayette, and Leon Counties to meet with seniors in-person and discuss FPSC information. Virtual meetings were also held with senior centers in Sarasota, Charlotte, Putnam and DeSoto Counties.

Energy Awareness Month

Each October, the U.S. Department of Energy (DOE) sponsors National Energy Awareness Month to promote smart energy choices and highlight economic and job growth, environmental protection, and increased energy independence. In 2021, as consumers spent more time at home, average home electricity usage increased. Chairman Gary Clark provided energy saving tips for the home in a video featured on Twitter and LinkedIn. Commission outreach resources such as our <u>Conservation House</u>, <u>Conserve Your World</u> and related FPSC information provided energy saving tips for consumers.

Community Events

FPSC Commissioners are active in communities around the state and present energy conservation information to students at area schools, to seniors and low-income residents at local community centers, and to 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 Commission also actively seeks new community events, venues, and opportunities where conservation materials can be distributed and discussed with consumers. Virtual and in-person outreach events resumed during the 2021-2022 reporting period, with more public meetings and events to be scheduled in the future. In-person events where conservation information was shared during October 2021 through August 2022 included:

- Jacksonville Senior Expo
- Children's Day at the Florida Capitol
- Jefferson Senior Citizens Center
- Madison County Senior Citizens Counsel
- Museum of Florida History's 39th Annual Children's Day
- Lunch and Learn at Chaires Community Center
- Hamilton County Senior Center
- Suwannee County Senior Center

- Lafayette County Senior Center
- Lunch and Learn at Ft. Braden Community Center
- Lunch and Learn at Lake Jackson Community Center

Virtual meetings where conservation information was shared during October 2021 through August 2022 included:

- Career Source Community Resource Center Port St. Joe, Northwest Regional Library System, Career Source Community Resource Center – Apalachicola
- Florida Impact to End Hunger
- One Senior Place Altamonte Springs/Greater, Orlando, One Senior Place Brevard County/Space Coast
- Florida Association for Community Action
- North County Senior Center Palm Beach Gardens, Mid County Senior Center Lake Worth, and West County Senior Center – Belle Glade
- Fairview Shores Branch Library
- Friendship Senior Centers in Venice, Sarasota, Punta Gorda, and Arcadia
- Edgar Johnson Senior Center
- Miami Gardens Senior Family Center
- Monroe County Senior Nutrition Program Key West
- Osceola Council on Aging, Kissimmee
- Oaks at Riverview Senior Center
- Council on Aging, St. Lucie County
- Council on Aging, Volusia County

Hearings and Customer Meetings

As an ongoing outreach initiative, the Commission supplies conservation brochures to consumers at Commission service hearings and customer meetings across the state. From October 2021 through August 2022, the majority of the FPSC's service hearings and customer meetings were held virtually. While educational opportunities with consumers were limited, those participating in the virtual customer meetings and customer service hearings received an FPSC Rate Case Overview that explains their energy or water utility's bill change request. FPSC conservation brochures were also offered to customers attending two in-person service hearings this year. Customers' questions were answered by Commission outreach staff, who also helped them find useful information on the FPSC website.

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 Library Outreach Campaign reached 617 state public libraries and branches in 2022. To reduce mailing and production costs, the Commission's 2022 campaign was accomplished electronically. Following the Campaign, the FPSC filled many libraries' brochure order requests.

Media Outreach

News releases are posted to the website and distributed via email and Twitter on major Commission decisions, meetings, and public events. The FPSC also issues news releases, or posts videos to Twitter and LinkedIn, urging energy conservation during annual recognitions, such as Energy Awareness Month and NCPW. Water conservation was highlighted in March with a release on Fix a Leak Week, sponsored by the EPA, and in May for National Drinking Water Week, sponsored by the American Water Works Association. In August, the challenges small water utilities face was discussed in a release.

Youth Education

The Commission emphasizes conservation education for Florida's young consumers. During 2021 and 2022, the Commission continued to distribute its student resource booklet, <u>Get Wise and Conserve Florida!</u>, to teach children about energy and water conservation. The booklet is promoted to all public libraries through the Library Outreach Programs, 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 http://www.floridapsc.com/
- Florida Department of Environmental Protection http://www.dep.state.fl.us
- The Office of Energy https://www.fdacs.gov/Divisions-Offices/Energy
- Florida Solar Energy Center https://energyresearch.ucf.edu/
- Florida Weatherization Assistance https://www.benefits.gov/benefit/1847
- Florida's Local Weatherization Agencies List https://floridajobs.org/community-planning-and-development/community-services/weatherization-assistance-program/contact-your-local-weatherization-office-for-help

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 http://www.duke-energy.com/
- Tampa Electric Company http://www.tampaelectric.com/
- Florida Public Utilities Company http://www.fpuc.com/
- JEA http://www.jea.com/
- Orlando Utilities Commission http://www.ouc.com/
- Peoples Gas System http://www.peoplesgas.com/

Florida's Investor-Owned Natural Gas Utilities

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

Appendix A. 2021 FEECA Utility Conservation Programs

Electric IOUs

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

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

	Tampa Electric Company				
Residential Programs	Residential Energy Audits (3 Programs) Residential Ceiling Insulation Residential Duct Repair Energy Education, Awareness, and Agency Outreach ENERGY STAR 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 Cool Roof 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 (Pilot Program) Renewable Energy (Sun To Go)				

	Gulf Power Company				
Residential Programs	Residential Home Energy Survey Energy Select Residential Low Income (Community Energy Saver Program) Residential HVAC Residential Ceiling Insulation Residential High Efficiency Pool Pump				
Commercial/Industrial Programs	Business Energy Survey Business HVAC Curtailable Load Rider Business Custom Incentive				
Other	Conservation Demonstration and Development				

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

Electric Municipal Utilities

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

Orlando Utilities Commission					
	Home Energy Survey Duct Repair Rebate Ceiling Insulation Rebate				
Residential Programs	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 Customer Assisted Energy Audit			
	Residential New Construction			
Residential Programs	Residential Retrofit			
	Residential Retention			
	Oil Heat Replacement			
	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. 2021 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 Ceiling Insulation

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

• 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 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 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.

• Business Lighting

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

• 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.

• 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.

• 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 Heating, Ventilating, and Air Conditioning (HVAC)

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

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.

• 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.

• 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.

• 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.

• Better Business

Better 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.

• 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.

• 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.

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 three Residential Energy Audits Programs, includes a walk-through free energy check, a customer-assisted energy audits, and a building energy ratings system (BERS) audit.

• 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.

Cool Roof

The Commercial Cool Roof Program encourages C/I customers to install a cool roof system above conditioned spaces. Although this program was closed in November 2020 due to COVID, projects that were approved prior to that date were completed in 2021.

• 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 (Sun to Go)

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. Gulf Power Company

Residential Programs

Residential Home Energy Survey

The Residential Home Energy Survey is the primary educational program to help customers improve the energy efficiency of their new or existing home. The program provides energy conservation advice and information that encourages the implementation of efficiency measures and behaviors that result in electricity bill savings. Gulf offers its residential customers in-home and online audits.

Energy Select

The *Energy Select* Program gives customers a way to manage their energy consumption by programming their heating and cooling systems and major appliances, such as electric water heaters and pool pumps, to respond automatically to prices that vary during the day and by season in relation to Gulf's cost of producing or purchasing energy.

• Residential Low Income (Community Energy Saver Program)

The Community Energy Saver Program will assist low-income families in addressing costs through increased awareness and installation of energy efficiency measures in the homes of low-income families at no cost to the customers. The program also educates families on behavioral changes designed to save money by decreasing energy use.

• Residential Heating, Ventilating, and Air Conditioning (HVAC)

The HVAC Efficiency Improvement Program is designed to increase energy efficiency and improve HVAC cooling system performance for new and existing homes. Gulf increases efficiency through HVAC maintenance, duct repair, and HVAC quality installation.

• Residential Ceiling Insulation

The Residential Ceiling Insulation program encourages customers to improve their homes' thermal efficiency by providing customers an incentive to install a minimum of R-19 insulation in their existing home.

Residential High Efficiency Pool Pump

The Residential High Efficiency Pool Pump Program encourages customers to install a high-efficiency pool pump by providing an incentive in both new and existing residential applications.

Commercial Programs

Business Energy Survey

The Business Energy Survey program educates customers on energy efficiency and encourages them to participate in applicable DSM programs or implement other recommended actions to reduce energy consumption. Gulf offers several types of audits under this program, including on-site walkthrough audits.

Business HVAC

The Business HVAC Program encourages customers to install high-efficiency HVAC systems including chillers; split/packaged direct expansion (DX); demand control ventilation (DCV); and energy recovery ventilation (ERV) by offering incentives which will vary according to the size of the systems or ventilation installed.

Curtailable Load Rider

The Curtailable Load (CL) Program is available to customers taking service under rate schedules LP, LPT, PX, or PXT and who also execute a Curtailable Load Service agreement. The program provides capacity payments for electric load which can be curtailed during certain conditions, and customers must commit a minimum of 4,000 Kw of non-firm load.

• Business Custom Incentive

The Business Custom Incentive Program offers advances energy services and energy efficient end-use equipment to Business customers. The specific focus of this program is demand reduction and/or efficiency improvement retrofits.

Other Programs

• Conservation Demonstration and Development

The Conservation Demonstration and Development Program is an umbrella program for the identification, research, development, and evaluation of new or emerging end-use energy efficient technologies.

E. 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.

• Residential Distributed Generation and Battery Rebate Program

The Residential Distributed Generation and Battery Rebate Program pays a financial incentive to encourage the use of battery storage when purchasing new solar voltaic systems. 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.

• Commercial Distributed Generation and Battery Rebate Program

The Commercial Distributed Generation and Battery Rebate Program pays a financial incentive to encourage the use of battery storage when purchasing new solar voltaic systems. 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.

• Oil Heat Replacement

The Oil Heat Replacement Program is designed to encourage customers to make cost-effective improvements in existing residences by converting/replacing their existing oil heating system to more energy efficient natural gas heating. This program closed for enrollment on December 31, 2021.

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 cost-effective 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.