

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

Florida Public Service Commission

Annual Report on

Activities
Pursuant
to the
Florida
Energy
Efficiency and
Conservation
Act

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

February 2021

Table of Contents

Tables and Figures	iii
List of Acronyms	v
Executive Summary	1
Section 1. Florida Energy Efficiency and Conservation Act	7
1.1 FEECA History and Implementation	7
1.2 FEECA's Influence on the Florida Energy Market	8
1.3 Recovery of Conservation Expenditures	11
Section 2. DSM Goalsetting	13
2.1 DSM Program Cost-Effectiveness and Energy Savings	13
2.2 Summary of the 2019 Goalsetting Process for Peoples Gas	16
2.3 Impact of Outside Factors on FEECA Utility DSM Programs	17
Section 3. FEECA Utilities' Goal Achievements	19
3.1 Assessing Goal Achievement	19
3.2 Low-Income Programs	22
3.3 Investor-Owned Utility Research and Development Programs	24
Section 4. Conservation Cost Recovery	27
4.1 Electric IOU Cost Recovery	27
4.2 Natural Gas Cost Recovery	29
Section 5. Educating Florida's Consumers on Conservation	31
5.1 Commission Consumer Education Outreach	31
5.2 Related Websites	34
Appendix A. FEECA Utilities' Conservation Programs	35
Appendix B. FEECA Utilities' Conservation Program Descriptions	41
Appendix C. FEECA Utilities' Energy Audits	57
Impact of COVID-19 on Audit Programs	59

Tables and Figures

4.

T	ables	
1.	Energy Sales by Florida's Electric FEECA Utilities in 2019	8
2.	Florida's Electric Customers by Class and Consumption in 2019	9
3.	Estimated Cumulative DSM Savings Since 1980	10
4.	Summary of Electric Cost-Effectiveness Methodologies	13
5.	Cumulative Commission-Approved Electric DSM Goals, 2015-2024	15
6.	Commission-Approved DSM Goals for PGS, 2019-2028	17
7.	Electric DSM Goals Compared to Annual (2019) Achievements	21
8.	PGS DSM Goals Compared to Annual (2019) Achievements	22
9.	DSM Expenditures Recovered by IOUs	27
10.	Residential Energy Conservation Cost Recovery Factors in 2021	28
11.	DSM Expenditures Recovered by LDCs	29
12.	Residential Natural Gas Conservation Cost Recovery Factors in 2021	30
13.	Residential Audits by Type in 2019	58
14.	Commercial Audits by Type in 2019	58
F	'igures	
1.	Typical Florida Daily Electric Load Shapes	9
2.	Demand Side Renewable Energy Systems	16
3.	DSM Expenditures Recovered by Electric IOUs	28

List of Acronyms

C/I Commercial and Industrial (Customers)
Commission or FPSC Florida Public Service Commission

COVID-19 Coronavirus Disease 2019
DEF Duke Energy Florida, LLC
DOE U.S. Department of Energy
DSM Demand-Side Management

ECCR Energy Conservation Cost Recovery

EV Electric Vehicle

F.A.C. Florida Administrative Code

FEECA Florida Energy Efficiency and Conservation Act

FLBC Florida Building Code

FPL Florida Power & Light Company
FPUC Florida Public Utilities Company

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

GRIM Gas Rate Impact Measure Test

Gulf Power Company
GWh Gigawatt-Hour

HVAC Heating, Ventilation, and Air Conditioning

IOU Investor-Owned Utility

JEA Formerly known as Jacksonville Electric Authority

kWh Kilowatt-Hour

LDC Natural Gas Local Distribution Company

Load Demand for Electricity

MMBtu One Million British Thermal Units

MWMegawattMWhMegawatt-Hour

NGCCR Natural Gas Conservation Cost Recovery

OUC Orlando Utilities Commission
O&M Operations and Maintenance

PV Photovoltaic

PGS Peoples Gas System
RIM Rate Impact Measure Test
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 is 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 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. Pursuant to Section 366.82(10), F.S., this report on conservation results achieved by the FEECA utilities is due to the Florida Legislature and Governor by March 1, 2021. This report reviews the 2019 annual goal results for each of the FEECA utilities and fulfills these statutory obligations.

The seven electric utilities and single natural gas utility currently subject to FEECA are:

- Five electric investor-owned utilities (IOUs), listed in order of sales
 - o Florida Power & Light Company (FPL)
 - o Duke Energy Florida, LLC (DEF)
 - o Tampa Electric Company (TECO)
 - o Gulf Power Company (Gulf)
 - o Florida Public Utilities Company (FPUC)
- Two municipal electric utilities, listed in order of sales
 - o JEA
 - o Orlando Utilities Commission (OUC)
- One investor-owned natural gas local distribution company (LDC)
 - o Peoples Gas System (PGS)

The Commission regulates the rates and conservation cost recovery of the five electric IOUs and the single FEECA LDC. In contrast, 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 Commission-established goals set for the FEECA utilities.

Section 3 reviews the utilities' goal achievements and progress within low-income programs and research and development programs.

Section 4 provides an overview of the associated 2019 DSM program costs recovered through the Energy Conservation Cost Recovery (ECCR) Clause (as applies to the five electric IOUs subject to FEECA) and Natural Gas Conservation Cost Recovery (NGCCR) Clause (as applies to a single FEECA LDC).

Section 5 discusses methods the Commission has used to educate consumers about conservation during the prior period, including a list of related web sites.

Appendices A and B provide a list of the currently-offered conservation programs and a description of each program's purpose.

Appendix C provides an overview of the audit programs sponsored by FEECA Utilities and information regarding how electric IOUs are adjusting energy audit program offerings in 2020 as a result of the COVID-19 pandemic.

2019 Goalsetting Proceeding

In April 2019, the electric FEECA utilities filed proposed conservation goals, including numeric goals for summer demand, winter demand, and annual energy savings, for the 2020-2029 period. On November 5, 2019, the Commission chose to reject the goals proposed by the electric FEECA utilities. Instead, the Commission opted 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. In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C. A rule development workshop for this docket is scheduled for January 14, 2021.

¹Order 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*.

²See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

In May and June 2020, the Commission approved as filed the DSM Plans the municipal electric FEECA utilities submitted to meet the approved goals.³ In August 2020, the Commission approved as filed the DSM Plans the investor-owned electric FEECA utilities submitted.⁴

The 2014 approved goals were based on estimated energy and demand savings from measures that passed the Rate Impact Measure (RIM) and Participants cost-effectiveness tests. These tests were used to ensure that all ratepayers benefit from energy efficiency programs due to downward pressure on electric rates. Compared to its review in 2009, the Commission identified fewer cost-effective energy efficiency measures in 2014 as a result of more stringent building codes and appliance efficiency standards. Higher appliance efficiency standards and building codes contribute to conservation outside of utility-sponsored DSM programs. Additionally, reduced utility avoided costs, caused by relatively low natural gas prices, resulted in fewer cost-effective measures.

Section 366.82(2), F.S., also requires that the Commission adopt goals for increasing the development of demand-side renewable energy systems. In 2014, the Commission acknowledged that the solar pilot programs that were initiated in 2009 to satisfy this statutory requirement did not ultimately prove to be a cost-effective and equitable method for encouraging demand-side renewable energy as required by Section 366.82, F.S. However, the Commission recognized at that time, as it did again in its 2019 review, that the Commission's customer-owned renewable generation rule (Rule 25-6.065, F.A.C.) adopted in 2008 offered an effective means to encourage the development of demand-side renewable energy in the state, allowing customers a method for offsetting their energy usage. In addition, in 2020, the Commission initiated a fact-finding workshop to explore various topics regarding demand-side renewable energy system development.

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

³Order 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*.

⁴Order 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*.

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

⁶Although Section 366.82, F.S., requires the Commission to adopt goals for increasing the development of demandside renewable energy systems, the Commission must also take into account the benefits and costs to participants and to the general body of ratepayers. In the 2014 Goalsetting Order, the Commission found that the FEECA utilities' continued implementation and compliance with Rule 25-6.065, F.A.C., Interconnection and Net Metering of Customer-Owned Renewable Generation ("Net Metering Rule"), was an appropriate goal for promoting the development of small customer-owned renewable generation.

upon programs it found were cost-effective. ⁷ 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.

2019 Achievements and Related Program Costs

Since FEECA's inception, it is estimated that DSM programs offered by electric FEECA utilities have reduced summer peak demand by 8,046 megawatts (MW) and winter peak demand by 7,373 MW. During 2019, the Florida electric FEECA utilities offered 110 residential and commercial programs focused on demand reduction and energy conservation. In addition, FEECA electric utilities performed over 249,000 residential and commercial energy audits. Each FEECA utility's achievements toward the 2019 Commission-approved goals are detailed in Section 3.

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 2019, Florida's investor-owned electric utilities recovered approximately \$330 million in conservation program expenditures.

Conclusion

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

⁷Order 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.*

⁸Section 366.05(1), F.S.

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 conservation goals and the FEECA utilities must develop DSM programs to meet those goals.

Originally, 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 Gigawatt-Hour (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 measured as of July 1, 1993, and two municipal utilities met the threshold of the new law: 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 currently 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 FEECA 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 FEECA.

Table 1 lists the seven electric FEECA utilities and shows their 2019 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 83.9 percent of all Florida energy sales.

Table 1
Energy Sales by Florida's Electric FEECA Utilities in 2019

Florida's Electric FEECA Utilities	Energy Sales (GWh)	Percent of Total Energy Sales
Florida Power & Light Company	111,929	46.5%
Duke Energy Florida, LLC	39,187	16.3%
Tampa Electric Company	19,784	8.2%
JEA	12,322	5.1%
Gulf Power Company	11,079	4.6%
Orlando Utilities Commission	6,826	2.8%
Florida Public Utilities Company	652	0.3%
Electric FEECA Utilities' Total	201,779	83.9%
Non-FEECA Utilities' Total	38,797	16.1%
Total Statewide Energy Sales	240,576	100.0%

Source: Commission's "Statistics of the Florida Electric Utility Industry" (Table 26) published in October 2020.

Sections 366.82(2) and 366.82(6), F.S., require the Commission to set demand-side management 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 cost-effective 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 reliance on electricity for heating and cooling.

Florida is typically a summer-peaking state. On a typical summer day, the statewide demand for electricity can increase from approximately 18,000 MW to 34,000 MW over the span of hours. Additionally, 87.6 percent of Florida's electricity customers are residential, consuming approximately 52.4 percent of the electrical energy produced. In contrast, nationally, residential

⁹Electric IOU responses to Staff's First Data Request, re: 2019 Ten-Year Site Plan.

customers account for only 38.1 percent of total electric sales, while commercial customers represent 36 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 2019

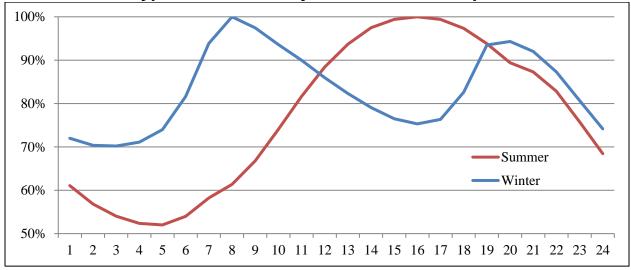
Customer Class	Number of Customers	Percent of Customers	Energy Sales (GWh)	Percent of Sales
Residential	9,583,632	87.6%	127,155	52.9%
Commercial	1,176,166	10.8%	86,831	36.1%
Industrial	25,245	0.2%	19,418	8.1%
Other*	153,454	1.4%	7,171	3.0%
Total	10,938,497	100.0%	240,576	100.0%

^{*}Street and highway lighting, sales to public authorities, and interdepartmental sales.

Source: Commission's "Statistics of the Florida Electric Utility Industry" (Tables 26 and 33) published in October 2020.

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: Electric IOU responses to Staff's Data Request, re: 2020 Ten-Year Site Plan.

¹⁰ Annual data for 2019. http://www.eia.gov/electricity/data.cfm#sales Retail sales of electricity to ultimate consumers, annual, by sector by provider.

Residential load patterns are rapidly shifting 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 to follow the customer load patterns. Peaking generating units, which are dispatched during high peak 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. Therefore, they reduce the need to dispatch relatively fuel-inefficient generating units. ¹¹ Over time, the need for additional generating capacity has grown in Florida, in large part due to population growth. In addition to providing fuel savings at existing generating units, utility-sponsored DSM programs and conservation efforts by individual consumers 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.

FEECA has been successful in reducing the growth rates of weather-sensitive peak electric demand and conserving expensive fuel resources. Since its inception, FEECA utility-sponsored electric DSM programs have cumulatively saved 8,046 MW of summer peak demand and 7,373 MW of winter peak demand, referenced in Table 3. This reduction in peak demand has deferred the need for new generating capacity. In 2019, FEECA DSM programs saved 252 GWh, enough electricity to power approximately 18,953 homes for a year. These energy savings have offset the use of existing generating units, resulting in fuel and variable operations and maintenance (O&M) cost savings.

Table 3
Estimated Cumulative DSM Savings Since 1980

Туре	Savings
Summer Peak Demand	8,046 MW
Winter Peak Demand	7,373 MW
Annual Energy Reduction	11,348 GWh

Source: Florida Reliability Coordinating Council Load and Resource Plan 2020, S-3, S-4, S-5.

¹¹Electric generating units typically are 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.

Average annual Florida household energy usage in 2019 was 13,296 kWh. See https://www.eia.gov/electricity/sales_revenue_price/pdf/table5_a.pdf

Currently, the electric FEECA utilities provide 110 programs for residential, commercial, and industrial customers. 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 the potential participation in utility-sponsored DSM and conservation programs. Energy audits also educate customers on behavioral changes and energy efficiency investments they can make outside of utility-sponsored DSM programs. During 2019, FEECA electric utilities performed 241,025 residential audits. Though FEECA does not require commercial energy audits, FEECA electric utilities also performed 8,506 commercial energy audits in 2019. Additional information about these results is presented in Appendix C.

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 prove that its DSM programs are cost-effective. 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, many LDCs have expanded their rebate programs to commercial customers.¹³

On an annual basis, the Commission conducts financial audits of DSM program expenses that are included in the electric IOUs' and LDCs' ECCR 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 2021 conservation cost recovery factors are discussed further in Section 4.

Page | 11

_

¹³Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 20130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida.*

Section 2. DSM Goalsetting

2.1 DSM Program Cost-Effectiveness and Energy Savings

Section 366.81, F.S., requires utility conservation programs to be cost-effective. This statutory requirement 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 prove that their conservation programs are cost-effective by passing 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
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 that 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 ¹⁴ 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. ¹⁵ 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. A rule development workshop for this docket is scheduled for January 14, 2021. 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-2014-0696-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 required the electric IOUs to continue implementing Rule 25-6.065, F.A.C., (Customer-owned Renewable Generation Rule) as a means of encouraging the development of demand-side renewable energy systems. Figure 2 shows the

¹⁴ 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*.

¹⁵Within 90 days of the issuance of the Order approving goals, the electric FEECA Utilities shall file individual DSM plans designed to meet their approved goals.

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

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) from 2008 through 2019.

Renewable Energy Systems Count and Generation Capacity ■ Renewable Generation Systems ■ Total kW GPR 70,000 600,000 Renewable Energy Systems 60,000 500,000 50,000 number reported 400,000 40,000 300,000 30,000 200,000 20,000 100,000 10,000 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

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, 2008-2019.

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 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 in 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 conservation programs to pass the Participants test and the GRIM test in order to prove cost-effectiveness.

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

Cumulative Savings, in 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.

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 and 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 new and renovated homes.

Utilities design DSM programs to encourage conservation 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.

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 prices tend to reduce customer energy efficiency investments. 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.

The cost-effectiveness of DSM measures has declined due to several factors outside of the FEECA utilities' control. First, new federal efficiency standards and state building codes have become more stringent over time. These higher standards and codes decrease the number of costeffective DSM measures that can be offered by the electric utilities. Second, natural gas is the primary fuel source for electricity generation in Florida. The average price of natural gas fell from \$8.86/MMBtu in 2008 to \$3.73/MMBtu in 2013, the most recent full year before the Commission established the 2015-2024 DSM goals. 18 In turn, lower natural gas prices reduced utility avoided costs, making fewer programs pass cost-effectiveness testing. 19 Lower fuel prices can also impact customer participation in utility-sponsored DSM programs due to reduced monthly electric bills. As a result, customers could have less of an incentive to implement energy efficiency measures.

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. In 2017, the FLBC was updated and became effective in December 2017. After review of the updated FLBC and the existing DSM programs, it was found that there was no impact on the programs established as a result of the 2014 goalsetting proceeding. The FLBC is scheduled to be updated again in December 2020.

Federal Government Efficiency Standards

At the federal government level, the U.S. Department of Energy's (DOE) Building Technologies Office establishes minimum energy efficiency standards for more than 60 categories of appliances and other equipment, including HVAC equipment. According to DOE, "Products covered by standards represent about 90 percent of home energy use, 60 percent of commercial building use, and 30 percent of industrial energy use."²⁰ In July 2019, DOE reported that they had completed 14 rulemaking actions in the first half of the year, including one final rule for conservation standards addressing external power supplies. The DOE also reported 73 pending Energy Conservation Standards and Test Procedures in consideration or development. Some of the products being considered for Conservation Standards and Test Procedures include commercial ice makers, ceiling fans, dishwashers, faucets, and showerheads. Further details can be found on the DOE Office of Energy Efficiency and Renewable Energy's buildings reports website at http://energy.gov/eere/buildings/reports-and-publications.

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.

¹⁸EIA Henry Hub Natural Gas Spot Price Annual Average https://www.eia.gov/dnav/ng/hist/rngwhhdD.htm

¹⁹Current gas prices have remained low at \$2.56/MMBtu as of August 28, 2020. https://www.eia.gov/naturalgas/weekly/

²⁰http://energy.gov/eere/buildings/appliance-and-equipment-standards-program

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) customers, 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 goals.

Each 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 (2019) and archived annual DSM reports from prior years can be found on the Commission's website: http://www.floridapsc.com/.

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 may request additional information from the utilities on their demand and energy saving achievements. Staff's data requests can, for example, seek explanations of factors preventing the utilities from achieving projected participation levels. Each FEECA utility's DSM performance in 2019 is discussed below. The utility achievements have been compared to the annual goals established by the Commission in November 2014. Table 7 provides a breakdown of each electric utility's goal achievements for the period.

FPL

FPL met its 2019 total goals and all individual demand goals. However, it achieved 90 percent of its total Residential Energy Savings Goal. FPL cited changes in the air conditioning marketplace for the lack of residential savings.

DEF

DEF met its 2019 total goals and all individual customer class goals.

TECO

TECO met its 2019 total goals and all individual customer class goals.

Gulf

Gulf did not achieve any of its 2019 goals. Gulf cited the lingering impacts of Hurricane Michael and the reduction in vendor partners as impacting customer participation in DSM programs. Hurricane Michael struck Northwest Florida in October 2018, impacting all eight counties in Gulf's service territory, and resulting in wide-spread damage and property losses suffered by Gulf's customer. ²¹ Gulf has indicated that the lingering impacts of Hurricane Michael

²¹See Docket No. 20190038-EI, Petition by Gulf Power Company for Limited Proceeding for Recovery of Incremental Storm Restoration Costs Related to Hurricane Michael. Hurricane Michael, which generated maximum

contributed to the decline in customer participation in Gulf's residential and commercial audit programs recorded for 2019 relative to 2018. Energy audits function as a gateway to greater DSM program participation.

A review of Gulf's annual DSM report reveals that Gulf did not achieve anticipated demand or energy savings in six out of the eight residential programs that count towards goals, as well as all four commercial/industrial programs. Gulf cited that feedback from its vendor partners indicated that the level and nature of the incentives in some of its DSM programs were not attractive to customers or to the Company's vendor partners. For example, Gulf's Residential HVAC Efficiency Improvement program, which showed year over year declines in customer participation since 2017, experienced a decline in vendor partners who assist in publicizing this program.

Gulf's new DSM plan and programs approved in 2020 feature reworked programs and incentives.

FPUC

FPUC met all of its 2019 total and residential goals; however, it did not meet any of its C/I goals. The Company cited a lack of customer interest in its C/I programs and low incentives as factors.

JEA

JEA met its 2019 total goals and all individual customer class goals.

OUC

OUC met its 2019 total goals and all individual customer class goals.

Table 7
Electric DSM Goals Compared to Annual (2019) Achievements

Utility	Winter (MW)		Summer (MW)		Annual (GWh)	
	Goals	Achieved Reduction	Goals	Achieved Reduction	Goals	Achieved Reduction
FPL*						
Residential	16.4	19.7	26.5	29.8	24.2	21.7
Commercial/Industrial	15.7	18.8	25.8	29.7	27.3	32.5
Total	32.1	38.5	52.3	59.4	51.5	54.2
DEF						
Residential	38.0	46.0	18.0	27.0	13.0	43.0
Commercial/Industrial	5.0	70.0	9.0	91.0	8.0	38.0
Total	43.0	116.0	27.0	118.0	21.0	81.0
TECO						
Residential	7.6	8.3	3.1	5.7	6.9	16.8
Commercial/Industrial	1.6	22.4	3.3	29.2	9.9	74.6
Total	9.2	30.7	6.4	35.0	16.8	91.4
Gulf						
Residential	3.40	1.86	5.90	2.58	6.00	3.80
Commercial/Industrial	0.20	0.02	0.70	0.49	2.20	1.09
Total	3.60	1.88	6.60	3.07	8.20	4.89
FPUC						
Residential	0.03	0.11	0.08	0.19	0.05	0.39
Commercial/Industrial	0.02	0.00	0.05	0.01	0.15	0.03
Total	0.05	0.11	0.13	0.20	0.20	0.42
JEA						
Residential	0.96	2.06	0.94	2.81	2.50	6.30
Commercial/Industrial	0.01	0.02	0.14	0.77	0.08	2.15
Total	0.97	2.08	1.08	3.58	2.58	8.45
OUC						
Residential	0.21	0.35	0.20	0.50	0.72	1.03
Commercial/Industrial	0.66	2.56	0.37	3.03	0.82	11.33
Total	0.87	2.91	0.57	3.54	1.54	12.36

*Bold numbers indicate the utility did not meet its annual goals within that category.

Source: FEECA utilities' 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 2019 total goals and all individual customer class goals.

Table 8
PGS DSM Goals Compared to Annual (2019) Achievements

Utility	Annual Energy Reduction, in Therms			
	Goals	Achieved Reduction		
PGS				
Residential	338,439	392,946		
Commercial/Industrial	216,155	375,139		
Total	554,594	768,084		

Source: PGS' DSM annual report.

3.2 Low-Income Programs

The 2014 DSM Goals Order²² 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."²³ 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 the State of 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.

All of the electric FEECA utilities submitted programs in 2015 in their DSM plans highlighting how they reach and encourage qualifying customers. Each FEECA utility's conservation efforts with respect to low-income customers during 2019 are discussed below.²⁴

²²The 2014 DSM Goals Order references electric utilities only.

²³Order 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.*

²⁴This report covers the programs in 2019, which were a part of the 2015 approved DSM Plans. The newly approved 2020 DSM plans and programs will be addressed in next year's report.

FPL

FPL states that its energy audit, the Residential Energy Survey, is available to all customers and is a way to identify energy-saving opportunities at no cost to the customer. In 2017, FPL continued to enhance the Energy Retrofit sector of its Residential Low-Income Program. Changes included proactive outreach to customers in designated low-income zip codes to offer retrofit services. It also allowed field service representatives the ability to perform retrofits in designated low-income zip codes during energy surveys. These enhancements helped the program exceed projected participation in each period since 2017. Participation levels in 2019 were approximately 40 percent higher than FPL's original projection.

DEF

DEF offers information to its customers about energy conservation programs through bill inserts, the Company's website, and community outreach efforts. DEF's outreach efforts include meetings with community leaders and presentations at local conferences. In 2019, DEF hosted neighborhood dinner meetings at local community centers where they shared information about how to lower utility bills and explained the opportunities available through DEF's Low-Income Weatherization Assistance Program and other DSM programs.

TECO

TECO utilizes a multi-pronged approach of communication and education to reach out to low-income customers. Over the past few years, TECO has increased customer awareness by adding several new communication avenues, largely in social media, and focusing on increasing participation in energy education and awareness events. In 2019, TECO reviewed its low-income programs in order to make changes in 2020, including providing direct market materials to its Neighborhood Weatherization Program team.

Gulf

Gulf's customer service representatives provide conservation program information, as appropriate, when customers contact the Company with billing concerns or questions about savings options. These services, as well as the audit programs it offers, are available to all customers regardless of economic status. Gulf specifically targets lower-income neighborhoods via its Community Energy Saver program. Gulf has also partnered with the Salvation Army to provide an instructor-led energy education session as part of the agency's financial literacy training for clients. Since 2018, this partnership has provided an additional avenue for Gulf to access customers who are in the most need of assistance.

FPUC

In 2019, the Company hosted on-site events to educate its customers about energy efficiency and to offer energy conservation surveys and measures to combat high electrical usage. These events targeted low-income senior centers or housing developments. On an on-going basis, the Company searches for opportunities like this to reach this key demographic.

JEA

JEA provides a specific program for low-income customers called its Neighborhood Energy Efficiency Program. This program includes the installation of conservation products and provides energy education packets that give customers energy-saving ideas and information

about JEA's other DSM programs, as well as community conservation programs. JEA also provides speakers from its Ambassador Team to give a "Savings Without Sacrifice" presentation to neighborhood associations, churches, schools, community development groups, and other organizations in low-income neighborhoods. JEA holds regular meal events with leaders of multiple advocacy groups for low-income customers, seniors, and disabled persons to keep these leaders aware of utility programs, changes, and resources.

OUC

In 2019, OUC continued its Project Care and Efficiency Delivered programs to reach low-income customers. Project Care assists customers in paying their energy bills and implementing energy efficiency measures. OUC donates \$2 for every \$1 donated to the program. Efficiency Delivered offers up to \$2,000 of energy and water efficiency upgrades. For households with income of less than \$40,000, OUC pays 85 percent of costs. Qualified participants pay the remaining 15 percent over the first 12 months, interest free.

OUC's Power Pass Program allows customers to pay-as-they-go or pay in advance for utility services. The program is ideal for low-income customers because it requires no deposits, late fees, or monthly bills.

3.3 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 constant arrival of new electricity-consuming products and new technologies, research and development by Florida's electric IOUs creates a unique opportunity to identify emergent options to conserve electricity. The recent initiatives undertaken by the electric IOUs are discussed below.

FPL

FPL participates in relevant co-funded projects through the DOE and national organizations such as Electric Power Research Institute (EPRI). This co-funding approach enables FPL to participate in larger research projects and gain insights at a fraction of the total cost. In 2018, FPL continued its participation in multiple EPRI programs, such as the Technology Innovation Program and the End-Use Energy Efficiency and Demand Response Research Program. These projects are ongoing and therefore did not produce any final reports in 2019.

DEF

DEF continued a project with the University of South Florida to leverage customer-sited solar PV and energy storage for a 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, and its potential for energy conservation programs. The Company continued to work on numerous other projects, including Energy Management Circuit Breakers, cloud communications to control variable-capacity heat pumps, and gathering data on how customers charge their electric vehicles. New for 2019, DEF is looking into leveraging DSM of residential

loads to provide grid resiliency and launched a project to document the value of long-duration customer-side energy storage systems.

TECO

In 2019, TECO continued several of its battery storage research initiatives, including a project exploring the use of large commercial electric vehicle lithium-ion 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 researching Home Energy Management Systems, including Heat Pump Water Heaters, in its Energy Planner Program.

Gulf

Gulf completed two projects in 2018 that revolve around the Tesla Powerwall, a rechargeable energy storage product designed for home use. The Tesla Powerwall Demand Response project investigates the ability of the Powerwall to improve the effectiveness of current DSM programs, specifically its impact on load-shifting and peak reduction. The Tesla Powerwall Demand Photovoltaic Project evaluates the impact of solar shifting and solar smoothing, and how battery storage may be able to overcome the typical shortcomings of grid-tied solar photovoltaics. Gulf did not initiate any new projects in 2019.

FPUC

In 2019, FPUC installed the second and third systems in its Distributed Battery Technology Pilot Program. This research explores the impacts battery technology has on FPUC's electrical system and how this may provide future benefits to customers. FPUC is currently monitoring the performance of the program's solar array while connected to various battery systems.

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 prove that its DSM programs are cost-effective and benefit the general body of ratepayers. 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 designed to meet the Commission's 2014 goals. Table 9 shows the annual DSM expenditures recovered by Florida's IOUs from 2010-2019.

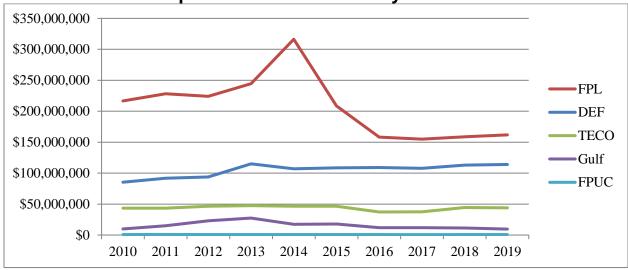
Table 9
DSM Expenditures Recovered by IOUs

	FPL	DEF	TECO	Gulf	FPUC	Total
2010	\$216,568,331	\$85,354,924	\$43,371,442	\$9,859,407	\$693,331	\$355,847,435
2011	\$228,293,640	\$91,738,039	\$43,349,092	\$15,003,596	\$954,297	\$379,338,664
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
Total						\$3,717,351,379

Source: Docket Nos. 20110002-EG through 20200002-EG, Schedules CT-2 from the IOUs' May testimony.

Figure 3 shows trends in annual DSM expenditures for the five electric IOUs from 2010 to 2019.

Figure 3
DSM Expenditures Recovered by Electric IOUs



Source: Docket Nos. 20110002-EG through 20200002-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 2020, the Commission set the ECCR factors for the 2021 billing cycle. Table 10 illustrates the approved ECCR factors and the monthly bill impact for a residential customer. For illustrative purposes, these factors are applied to a typical monthly residential bill based on a 1,000 kilowatt-hour (kWh) per month energy usage.

Table 10
Residential Energy Conservation Cost Recovery Factors in 2021

Utility*	ECCR Factor (cents per kWh)	Monthly Bill Impact (Based on usage of 1,000 kWh)
FPL	0.149	\$1.49
DEF	0.338	\$3.38
TECO	0.166	\$1.66
Gulf	0.090	\$0.90
FPUC	0.150	\$1.50

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

Source: Order No. PSC-2020-0447-FOF-EG, Docket No. 20200002-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 11 shows the amounts each LDC recovered in natural gas conservation program expenditures from 2010-2019.

Table 11
DSM Expenditures Recovered by LDCs

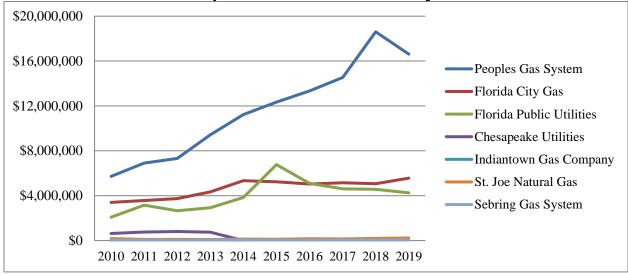
	Peoples Gas System	Florida City Gas	Florida Public Utilities	Chesapeake Utilities	Indiantown Gas Company	St. Joe Natural Gas	Sebring Gas System	Total
2010	\$5,721,003	\$3,404,142	\$2,084,724	\$627,734	\$8,733	\$170,374	\$37,283	\$12,053,993
2011	\$6,906,668	\$3,573,513	\$3,163,050	\$755,779	\$11,357	\$106,300	\$34,640	\$14,551,307
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
Total								\$207,336,599

Source: Docket Nos. 20110004-GU through 20200004-GU, Schedules CT-2 from LDCs' May testimony.

^{*} Spending combined with Florida Public Utilities Company

Figure 4 shows the trends in annual conservation expenditures for all LDCs from 2010 to 2019. In 2013, the Commission approved the LDCs' Commercial Conservation programs, resulting in additional overall conservation expenditures. ²⁵

Figure 4
DSM Expenditures Recovered by LDCs



Source: Docket Nos. 20110004-EG through 20200004-EG, Schedules CT-2 from the LDCs' May testimony.

In November 2020, the Commission set the natural gas LDC conservation cost recovery factors for the 2021 billing cycle. Table 12 provides the LDCs' residential cost recovery factors for 2021 and the impact on a typical residential customer bill using 20 therms of natural gas per month.

Table 12
Residential Natural Gas Conservation Cost Recovery Factors in 2021

Utility	Cost Recovery Factor (Cents per Therm)	Monthly Bill Impact (Based on usage of 20 Therms)
Peoples Gas System	9.591	\$1.92
Florida City Gas	26.401	\$5.28
Florida Public Utilities	7.642	\$1.53
Chesapeake Utilities	12.747	\$2.55
Indiantown Gas Company	7.366	\$1.47
St. Joe Natural Gas	57.353	\$11.47
Sebring Gas System	10.222	\$2.04

Source: Order No. PSC-2020-0436-FOF-GU, Docket No. 20200004-GU.

²⁵Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 20130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida*.

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, and Twitter. Conservation information is also available through other governmental and utility websites. Section 5.2 lists related websites for state and federal agencies, investorowned electric utilities, and local gas distribution companies to further assist consumers. Most of the data in this section covers October 2019 through September 2020.

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 under Hot Topics on the FPSC homepage, www.Floridapsc.com, and are highlighted statewide via a press release, tweeted @floridapsc, and archived on the FPSC website.

Website Outreach Resources

An assortment of information is available on the Commission website to help consumers save energy. According to Google Analytics, website page views for October 1, 2019 through August 18, 2020 totaled over 1.1 million. Requests to use the Commission's Conservation House, highlighted on the homepage, have come from the U.S. and also overseas. Its interactive design illustrates energy saving strategies for both inside and outside the home. "Find Your Utility" and "Lifeline Assistance" pages were among the most heavily visited of the Consumer Assistance pages.

The Commission also offers several energy conservation brochures to help consumers save energy. Brochures may be viewed and printed directly from the website, FloridaPSC.com/publications, ordered online, or requested by mail or phone. From October 2019 through September 2020, the FPSC received more than 25,000 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: Chairman Gary Clark's message on National Consumer Protection Week, the Florida Channel's "On the Line" coverage of the Commission's Conservation Goals and Storm Hardening meeting, and FPSC Encourages Hurricane Preparedness/Utilities Prepare For Busy Storm Season. 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 newsletter online.

National Consumer Protection Week

National Consumer Protection Week (NCPW), highlighting consumer protection and education efforts, was instrumental to the Commission's 2020 conservation education efforts. Chairman Gary Clark recognized the 22nd Annual NCPW (March 1-7, 2020) with the importance of education and awareness about utility services and about avoiding scams targeting utility customers. The Commission keeps consumers informed year-round through outreach awareness and education events, free resources, and hearings, meetings and workshops. Also during the week, the Commission made presentations to consumers statewide showing them how to save money through energy and water conservation and how to avoid scams. For 13 years, 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. "Make Your Mark" was this year's theme, but the Commission had to cancel its planned 2020 educational sessions due to the COVID-19 pandemic. Also canceled in May was the Jacksonville Expo, which the Commission annually attends for consumer outreach.

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 2019, the Commission created a Twitter campaign, #NationalEnergyAwarenessMonth, providing daily energy saving tips to its followers throughout the month of October.

Community Events

FPSC Commissioners are active in communities around the state and regularly 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. With in-state travel suspended in April 2020 due to the COVID-19 pandemic, many outreach events were canceled during the reporting period. The following are events where conservation information was shared:

- Taylor Senior Center
- Leon County Lunch and Learn, Bradfordville Community Center
- Hands of Central Florida
- Leon County Lunch and Learn, Lake Jackson

- Dixie County Senior Service Center
- Levy County Senior Service Center
- Leon County Lunch and Learn Ft. Braden Community Center
- Lake Jackson Community Center
- Lake Panasoffkee Senior Center
- 21st Annual Active Living Expo (2-day event)
- Museum of Florida History's 37th Annual Children's Day
- Florida Children's Week at the Florida Capitol
- Florida Senior Day Florida Capitol
- Gilchrist Senior Service Center
- Lafayette Senior Service Center
- Bethel Towers Senior Independent Living Facility
- Lane Wiley Senior Center
- Jim Fortuna Senior Center
- Bay County Council on Aging
- Callaway Arts and Conference Center
- New Smyrna Beach Senior Center
- Deltona Senior Center
- Lunch and Learn Miccosukee Community Center

Hearings and Customer Meetings

As an ongoing outreach initiative, the Commission supplies conservation brochures to consumers at Commission hearings and customer meetings across the state. From October 2019 through September 2020, Commission staff distributed information and addressed consumer questions at 8 public hearings and meetings. Consumers who file a complaint with the Commission about high electric or natural gas bills also receive conservation information.

Library Outreach Campaign

Each August, the Commission provides educational packets, including conservation materials, to Florida public libraries across the state for consumer distribution. The Commission's Library Outreach Campaign reached 616 state public libraries and branches in 2020. To reduce mailing and production costs, the Commission's 2020 campaign included a cover letter, bookmarks, and our consumer-friendly brochure order form. 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 Office of Consumer Assistance & Outreach also issues news releases urging conservation. For instance, in March, the Commission highlighted the federal government's Fix a Leak Week and offered easy repairs to save valuable water and money, and in April, Water Conservation Month was recognized. For May's National Drinking Water Week, the FPSC reminded consumers to conserve water.

Youth Education

The Commission emphasizes conservation education for Florida's young consumers. During 2019 and 2020, the Commission continued to produce its student resource booklet, *Get Wise and Conserve Florida!*, to teach children about energy and water conservation. The booklet is promoted to all public libraries through the Library Outreach Program and is available at all Commission outreach events. The student resource book also 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

 $Florida's \ Local \ Weatherization \ Agencies \ List-\underline{https://floridajobs.org/community-planning-and-development/community-services/weatherization-assistance-program/contact-your-local-weatherization-office-for-help$

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/

Gulf Power Company – http://www.gulfpower.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. FEECA Utilities' Conservation Programs

Electric IOUs

Florida Power & Light Company			
https://www.fpl.com/save/programs-and-resources.html			
	Residential Home Energy Survey		
	Residential Ceiling Insulation		
Residential Programs	Residential Air Conditioning		
	Residential New Construction (BuildSmart)		
	Residential Low-Income		
	Residential Load Management (On Call)		
	Business Energy Evaluation		
	Business Lighting		
	Business Heating, Ventilating, and Air Conditioning		
Commercial/Industrial	Business Custom Incentive		
Programs	Business On Call		
	Commercial/Industrial Load Control (CILC)		
	Commercial/Industrial Demand Reduction (CDR)		
Oth an	Conservation Research and Development (CRD)		
Other	Cogeneration & Small Power Production		

Duke Energy Florida, LLC		
<u>ht</u>	tps://www.duke-energy.com/home/savings	
	Home Energy Check	
	Residential Incentive	
Residential Programs	Low-Income Weatherization Assistance Program	
	Neighborhood Energy Saver	
	Residential Energy Management	
	Business Energy Check	
	Commercial Energy Management	
6	Better Business	
Commercial/Industrial	Florida Custom Incentive	
Programs	Standby Generation	
	Interruptible Service	
	Curtailable Service	
Othor	Technology Development	
Other	Qualifying Facility	

Tampa Electric Company http://www.tampaelectric.com/residential/saveenergy/ http://www.tampaelectric.com/business/saveenergy/		
Residential Energy Audits		
	Residential Ceiling Insulation	
	Residential Duct Repair	
	Residential Electronically Commutated Motors (ECM)	
	Energy Education, Awareness, and Agency Outreach ENERGY STAR Multi-Family	
Residential Programs	ENERGY STAR Multi-Failing ENERGY STAR for New Homes	
	Residential Heating and Cooling	
	Neighborhood Weatherization (Low-Income)	
	Residential Price Responsive Load Management (Energy Planner)	
	Residential Wall Insulation	
	Residential Window Replacement Commercial/Industrial Energy Audits	
	Commercial Ceiling Insulation Commercial Chiller	
	Cogeneration Conservation Value	
	Conservation value Commercial Cool Roof	
	Commercial Cooling	
	Demand Response	
	Commercial Duct Repair	
	Commercial Electronically Commutated Motors (ECM)	
Commercial/Industrial Programs	Industrial Load Management (GSLM 2&3)	
Programs	Lighting Conditioned Space	
	Lighting Non-Conditioned Space	
	Lighting Occupancy Sensors	
	Commercial Load Management	
	Refrigeration Anti-Condensate Control	
	Standby Generator	
	Thermal Energy Storage	
	Commercial Wall Insulation	
	Commercial Water Heating	
	Conservation Research and Development	
Other	Renewable Energy	
	nenewable Lifetsy	

Gulf Power Company					
	https://www.gulfpower.com/residential/savings-and-energy				
nttps://w	ww.gulfpower.com/business/savings-and-energy Residential Energy Audit and Education				
	<i>.</i>				
	Community Energy Saver (Low-Income)				
	Residential Custom Incentive				
Residential Programs	HVAC Efficiency Improvement				
	Residential Building Efficiency				
	Energy Select				
	Residential Service Time of Use Pilot				
	Commercial/Industrial Energy Analysis				
Commencial /Industrial	Commercial HVAC Retrocommissioning				
Commercial/Industrial Programs	Commercial Building Efficiency				
riogianis	Commercial/Industrial Custom Incentive				
	Critical Peak Option				
Other	Conservation Demonstration and Development				

Florida Public Utilities Company			
	://www.fpuc.com/electric/residential/rebates/		
http://www	.fpuc.com/electric/commercial/commercial-rebates/		
Posidontial Drograms	Residential Energy Survey		
Residential Programs	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	Low-Income Energy Outreach		
Other	Conservation Demonstration and Development		

Electric Municipal Utilities

JEA			
	https://www.jea.com/ways_to_save/home/ https://www.jea.com/ways_to_save/business/		
<u>inc</u>	Residential Energy Audit		
	Residential Solar Water Heating		
	Residential Solar Net Metering		
Residential Programs	Neighborhood Efficiency (Low-Income)		
	Residential Efficiency Upgrade		
	Energy Efficient Products		
	Residential New Build		
	Commercial Energy Audit		
Canana maial/la da atrial	Commercial Solar Net Metering		
Commercial/Industrial Programs	Commercial Prescriptive		
Fiograms	Small Business Direct Install		
	Custom Commercial		

Orlando Utilities Commission			
http://www.ouc.com/residential/save-energy-water-money			
http://ww	w.ouc.com/business/business-rebates-programs		
	Residential Home Energy Survey		
	Residential Duct Repair/Replacement Rebate		
	Residential Ceiling Insulation Upgrade Rebate		
Desidential Duranens	Residential Window Film/Solar Screen Rebate		
Residential Programs	Residential High Performance Windows Rebate		
	Residential Efficient Electric Heat Pump Rebate		
	Residential New Home Rebate		
	Residential Efficiency Delivered (Low-Income)		
	Commercial Energy Survey		
	Commercial Efficient Electric Heat Pump Rebate		
Common annial /Industrial	Commercial Duct Repair Rebate		
Commercial/Industrial Programs	Commercial Window Film/Solar Screen Rebate		
riogianis	Commercial High Performance Windows Rebate		
	Commercial Ceiling Insulation Rebate		
	Commercial Cool/Reflective Roof Rebate		

Natural Gas LDC

Peoples Gas System				
https://www.peoplesgas.com/residential/saveenergy/rebates/				
https://w	ww.peoplesgas.com/business/saveenergy/rebates/			
	Residential Customer Assisted Energy Audit			
	Residential New Construction			
Residential Programs	Residential Appliance Retention			
	Residential Appliance Replacement			
	Oil Heat Replacement			
	Commercial Walk-Through Energy Audit			
	Commercial Electric Replacement			
Commonsial/Industrial	Gas Space Conditioning			
Commercial/Industrial	Small Package Cogeneration			
Programs	Commercial New Construction			
	Commercial Retention			
	Commercial Replacement			
	Monitoring and Research			
Other	Conservation Demonstration and Development			

Appendix B. FEECA Utilities' Conservation Program Descriptions

Electric FEECA IOUs

A. Florida Power & Light Company

Residential Programs

Residential Home Energy Survey

The Residential Home Energy Survey Program encourages implementation of recommended energy efficiency measures, even if they are not included in FPL's DSM programs. The Residential Home Energy Survey Program also identifies FPL DSM programs that could be appropriate considering the residential customers' home layouts and electricity usage patterns. 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 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

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

Residential Load Management (On Call)

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

Commercial/Industrial Programs

Business Energy Evaluation

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 opportunities to implement for other FPL DSM programs. FPL offers the Business Energy Evaluation in on-site or online formats.

Business Lighting

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

Business Heating, Ventilating, and Air Conditioning (HVAC)

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

Business Custom Incentive

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

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.

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.

Cogeneration & Small Power Production

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

Research and Development Programs

Conservation Research and Development (CRD)

Under Conservation Research and Development, FPL conducts research projects to identify, evaluate, and quantify the impact of new energy efficient technologies. FPL uses the findings to potentially add new energy efficient technologies to DSM programs.

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. DEF offers walkthrough, online, and phone-assisted audits for its residential customers.

Residential Incentive

The Residential Incentive Program provides incentives to residential customers for energy efficiency improvements in both existing and new 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 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 Energy Management

The Residential Energy Management Program uses direct control of customer equipment to reduce system demand during winter and summer peak capacity periods by temporarily interrupting select customer appliances.

Commercial/Industrial Programs

Business Energy Check

The Business Energy Check Program provides no-cost energy audits at non-residential facilities either over the phone or at the customer's facility.

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.

Better Business

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

Florida Custom Incentive

The Florida Custom Incentive Program provides incentives for individual custom projects, such as new construction measures or thermal energy storage systems, that are cost effective but not addressed by DEF's other programs.

Standby Generation

The Standby Generation Program is a demand control program that reduces DEF's system demand based on control of customer equipment. This program is 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.

Interruptible Service

Interruptible Service is a direct load control DSM program in which customers allow DEF to interrupt their electrical service during times of capacity shortages based on peak or emergency conditions. In return, customers receive a monthly bill credit.

Curtailable Service

Curtailable Service is an indirect load control DSM program in which customers contract to curtail all or a portion of their electricity demand during times of capacity shortages. In contrast to the Interruptible Service Program, the customer, instead of DEF, controls whether or not the customer's appliances are turned off during times of stress on the grid. In return, customers receive a monthly bill credit.

Qualifying Facility

The Qualifying Facility Program supports the interconnection and purchase of asavailable energy as well as firm energy and capacity from qualifying facilities including those that use renewable energy and distributed energy resources.

Research and Development Programs

Technology Development

The Technology Development Program allows DEF to investigate technologies that hold promise for cost-effective demand reduction and energy efficiency. DEF will investigate variable capacity heat pump air conditioners, building automated energy efficiency and demand response, energy management circuit breakers, and more.

C. Florida Public Utilities Company

Residential Programs

Residential Energy Survey

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

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. The program also provides incentives for customers to install a new heat pump.

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, distribute energy conservation materials, and more.

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, and more.

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 who convert or install a new cool roof on an existing or new building. The rebates cover up to 25 percent of the added upfront cost of installing a cool roof compared to an alternative roof.

Commercial Chiller Upgrade

The Commercial Chiller Upgrade Program offers customers an incentive of up to \$175/kW of savings above minimum efficiency levels.

Research and Development Programs

Conservation Demonstration and Development

The Conservation Demonstration and Development Program researches energy efficiency and conservation projects to identify, develop, demonstrate, and evaluate promising enduse energy efficient technologies across a wide variety of applications.

D. Gulf Power Company

Residential Programs

Residential Energy Audit and Education

The Residential Energy Audit and Education Program is the primary educational program to help customers improve the energy efficiency of their new or existing home. 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.

Community Energy Saver (Low-Income)

The Community Energy Saver Program installs energy conservation 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 Custom Incentive

The Residential Custom Incentive Program aims to increase energy efficiency in the residential rental property sector. The program promotes the installation of efficiency measures available through other programs, such as HVAC maintenance and quality installation, high performance windows, and reflective roofing. As suitable, the program has other incentives to surmount the split-incentive barrier in a landlord/renter situation.

HVAC Efficiency Improvement

The HVAC Efficiency Improvement Program aims 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 Building Efficiency

The Residential Building Efficiency Program is an umbrella efficiency program for existing and new residential customers to install eligible equipment such as high-performance windows, reflective roofs, and ENERGY STAR window air conditioners. The goals are to increase customer demand for energy efficient technologies and to create long-term energy savings and peak demand reduction.

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 Service Time of Use Pilot

The Residential Service Time of Use Pilot Program provides residential customers the opportunity to use customer-owned equipment to respond automatically and take advantage of a variable pricing structure with a critical peak component. The pilot will be offered to 400 residential customers. The goal is to measure customers' response, with customer owned equipment, to a variable electricity price.

Commercial Programs

Commercial/Industrial Audit

The Commercial/Industrial Audit Program provides advice to Gulf's existing C/I customers on how to reduce energy consumption. The program ranges from an Energy Analysis Audit and walk-through surveys to a Technical Assistance Audit and computer programs that simulate options for very large, energy-intensive customers. Gulf offers this audit in the form of an on-site walkthrough.

Commercial HVAC Retrocommissioning

The Commercial HVAC Retrocommissioning program offers retrocommissioning at a reduced cost for qualifying installations by C/I customers. Retrocommissioning is a process of identifying suboptimal performance in a facility's systems and replacing the outdated equipment.

Commercial Building Efficiency

The Commercial Building Efficiency Program is an umbrella efficiency program for C/I customers to encourage the installation of high-efficiency equipment in order to reduce energy and demand. The high-efficiency equipment is focused on commercial geothermal heat pumps, ceiling/roof insulation, and reflective roofs.

Commercial/Industrial Custom Incentive

The Commercial/Industrial Custom Incentive Program offers energy efficient end-user equipment to C/I customers. The C/I Custom Incentive Program also offers energy services such as comprehensive audits, design, and construction of energy conservation projects. Covered projects include demand reduction or energy improvement retrofits that are beyond the scope of other DSM programs.

Critical Peak Option

This program allows customers on Gulf's Large Power Time-of-Use rate schedule an option to receive credits for capacity that can be reduced during peak load conditions. The program provides a fixed, per-kW credit for measured on-peak demand and a charge for any measured demand recorded during a called critical peak event.

Research and Development Programs

Conservation Demonstration and Development

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

E. Tampa Electric Company

Residential Programs

Residential Energy Audits

The Residential Energy Audits Program includes a walk-through free energy check, a customer-assisted energy audit, a computer-assisted paid energy audit, 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.

Residential Electronically Commutated Motors (ECM)

The Residential Electronically Commutated Motors Program encourages residential customers to replace their existing HVAC air handler motors with more efficient ECMs.

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.

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.

Renewable Energy

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

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 pre-programming HVAC, water heating, and pool pumps.

Residential Wall Insulation

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

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 Audits

In the C/I Energy Audits Program, C/I customers can receive more limited free energy audits or comprehensive paid energy audits.

Commercial Ceiling Insulation

The Commercial Ceiling Insulation Program incentivizes C/I customers to install additional ceiling insulation in existing commercial buildings.

Commercial Chiller

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

Cogeneration

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

Conservation Value

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

Commercial Cool Roof

The Commercial Cool Roof Program encourages C/I customers to install a cool roof system above conditioned spaces.

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.

Commercial Duct Repair

The Commercial Duct Repair Program encourages C/I customers to repair leaky ductwork of central air conditioning systems in existing C/I facilities.

Commercial Electronically Commutated Motors (ECM)

The Commercial Electronically Commutated Motors Program encourages C/I customers to replace air handler motors or refrigeration fan motors with ECMs.

Industrial Load Management (GSLM 2&3)

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

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.

Refrigeration Anti-Condensate Control

The Refrigeration Anti-Condensate Control Program encourages C/I customers to install anti-condensate equipment sensors within refrigerated door systems.

Standby Generator

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

Thermal Energy Storage

The Thermal Energy Storage Program encourages C/I customers to install an off-peak air conditioning system.

Commercial Wall Insulation

The Commercial Wall Insulation Program encourages C/I customers to install wall insulation in existing C/I structures.

Commercial Water Heating

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

Research and Development

Conservation Research and Development (R&D)

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.

Electric FEECA Municipal Utilities

A. JEA

Residential Programs

Residential Energy Audit

In the Residential Energy Audit Program, JEA examines homes, educates 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.

Residential Solar Net Metering

The Residential Solar Net Metering Program promotes the use of PV by purchasing excess electricity from residential customers who have PV.

Neighborhood Efficiency (Low-Income)

The Neighborhood Efficiency Program offers education concerning 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 is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process. Nevertheless, 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 is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process.

Residential New Build

The Residential New Build Program promotes the use of high efficiency HVAC, water heating, lighting, and appliances in the new construction market. This is one of the DSM programs that JEA offers which has not been approved by the Commission and is not part of the FEECA goalsetting process. Nevertheless, 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 Solar Net Metering

The Commercial Solar Net Metering Program promotes the use of PV by purchasing excess electricity from commercial customers who have PV.

Commercial Prescriptive

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

B. Orlando Utilities Commission

Residential Programs

Residential Home Energy Survey

The Residential Home Energy Survey Program consists of three measures: a Residential Energy Walk-Through Survey, a Residential Energy Survey DVD, and an interactive Online Energy Survey.

Residential Duct Repair/Replacement Rebate

The Residential Duct Repair/Replacement Rebate Program provides up to a \$160 rebate to encourage customers to repair leaking ducts on existing systems.

Residential Ceiling Insulation Upgrade Rebate

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

Residential Window Film/Solar Screen Rebate

The Residential Window Film/Solar Screen Rebate Program encourages solar shading on windows.

Residential High Performance Windows Rebate

The Residential High Performance Windows Rebate Program encourages customers to install windows that minimize heating, cooling, and lighting costs.

Residential Efficient Electric Heat Pump Rebate

The Residential 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.

Residential New Home Rebate

The Residential 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.

Residential Efficiency Delivered (Low-Income)

The Residential Efficiency Delivered Program is income based and provides up to \$2,000 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

Commercial Energy Survey

The Commercial Energy Audit Program includes a free survey consisting of a physical walk-through inspection of the commercial facility performed by experienced energy experts. Following the inspection, the customer receives a written report.

Commercial Efficient Electric Heat Pump Rebate

The Commercial 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.

Commercial Duct Repair Rebate

The Commercial Duct Repair Rebate Program provides rebates of 100 percent of the cost, up to \$160, when qualifying customers have an existing central air conditioning system of 5.5 tons or less. Then, customers must seal ducts with mastic and fabric tape or Underwriters Laboratory approved duct tape.

Commercial Window Film/Solar Screen Rebate

The Commercial Window Film/Solar Screen Rebate Program aims to reflect heat during hot summer days and retain heat on cool winter days. The program provides rebates of \$1 per square foot for window tinting and solar screening with a solar heat gain coefficient (SHGC) of 0.44 or shading coefficient of 0.5 or less.

Commercial High Performance Windows Rebate

The Commercial High Performance Windows Rebate Program encourages customers to install windows that minimize heating, cooling, and lighting costs.

Commercial Ceiling Insulation Rebate

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

Commercial Cool/Reflective Roof Rebate

The Commercial Cool/Reflective Roof Rebate Program aims to reflect the sun's rays and lower roof surface temperature while increasing the lifespan of the roof. OUC provides rebates per square foot of ENERGY STAR cool/reflective roofing that has an initial solar reflectance greater than or equal to 0.70.

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 for the installation of natural gas appliances.

Residential Appliance Retention

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

Residential Appliance Replacement

The Residential Appliance Replacement Program is designed to encourage customers to make cost-effective improvements in existing residences by replacing existing electric appliances with energy efficient natural gas appliances.

Oil Heat Replacement

The Oil Heat Replacement Program is designed to encourage customers to make costeffective improvements in existing residences by converting/replacing their existing oil heating system to more energy efficient natural gas heating.

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 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.

Gas Space Conditioning

The Gas Space Conditioning Program is designed to encourage commercial customers to make cost-effective improvements in existing facilities by converting/replacing their electric space conditioning equipment to energy efficient natural gas space conditioning equipment.

Small Package Cogeneration

The Small Package Cogeneration 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 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 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.

Commercial Replacement

The Commercial Replacement 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.

Research and Development

Monitoring and Research

The Monitoring and Research Program is designed to pursue research, development, and demonstration projects designed to promote energy efficiency and conservation.

Conservation Demonstration and Development

The Conservation Demonstration and Development 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.

Appendix C. FEECA Utilities' Energy Audits

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 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 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 also offer Walk-Through audits for their commercial customers. In addition to the required audits, FEECA utilities are now offering online audits and some are offering phone audits, and residential customers have been increasingly requesting these types of audits. 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 needing to schedule appointments with their utility. These audits also typically have lower administrative costs than Walk-Through audits.

Tables 13 and 14 below reflect data for the FEECA utilities that conducted residential and commercial audits in 2019. As previously noted, PGS was granted a waiver, as a part of its goalsetting process, exempting it 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. PGS launched its online audits in 2020. Therefore, the information shown in Table 13 and 14 does not include PGS audit details.

During 2019, the FEECA electric utilities performed 241,025 residential audits, as shown in Table 13.²⁶ Residential online audits attracted nearly three and a half times as many participants as did the residential walk-through audits.

²⁶Walk-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 Tables 13 and 14.

Table 13
Residential Audits by Type in 2019

Utility	Audit Type				
	Walk-Through, BERS, and Computer Assisted	Online	Phone	Total	
FPL	16,955	80,695	19,711	117,361	
DEF	13,754	5,596	9,783	29,133	
TECO	6,787	57,370	0	64,157	
Gulf	2,575	10,006	0	12,581	
FPUC	123	0	0	123	
JEA	5,947	10,265	0	16,212	
OUC	1,278	180	0	1,458	
Total	47,419	164,112	29,494	241,025	

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

These FEECA utilities also performed 8,506 commercial energy audits in 2019. A breakdown of these audits performed in 2019 can be found in Table 14. In-person commercial audits continue to attract more participants than online audits by a wide margin.

Table 14
Commercial Audits by Type in 2019

Utility	Audit Type				
	Walk-Through, BERS, and Computer Assisted	Online	Total		
FPL	5,099	1,556	6,655		
DEF	565	0	565		
TECO	867	0	867		
Gulf	109	60	169		
FPUC	19	0	19		
JEA	157	0	157		
OUC	74	0	74		
Total	6,890	1,616	8,506		

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

Impact of COVID-19 on Audit Programs

Although this report reviews the 2019 annual goal results for the FEECA utilities and fulfills the statutory obligations of Section 366.82(10), F.S., a significant global health pandemic event began early in 2020, which impacted how the seven electric FEECA utilities can offer their audit programs. On March 1, 2020, Governor Ron DeSantis declared a public health emergency²⁷ related to the outbreak of COVID-19. On March 9, 2020, a state of emergency was declared,²⁸ leading to the implementation of the State's Comprehensive Emergency Management Plan.²⁹

Below is a condensed summary describing how the seven electric FEECA utilities modified their practices for offering audit programs in response to the COVID-19 pandemic from roughly March through October 2020.³⁰

FPL

FPL suspended employee visits to customers' homes and businesses in March 2020. FPL does not have a date for when visits will resume, but states that it has successfully shifted all participation to its online and phone channels to offset the suspension of on-site surveys.

DEF

DEF suspended on-site appointments in March 2020. Messages were posted on social media notifying customers of the suspension and encouraged phone-assisted and online audits as an alternative. DEF resumed residential on-site visits in June 2020, and commercial on-site visits in early May on a case-by-case basis. Beginning June 15, 2020, DEF began routinely performing commercial on-site visits when requested by the customer. DEF is performing commercial on-site audits after hours to limit COVID-19 exposure. Safety precautions, such as wearing protective equipment, have been implemented to ensure safety and protection.

TECO

TECO suspended on-site appointments in March 2020. Emphasis was placed on the phone and online offerings in an effort to provide assistance for customers. TECO implemented a commercial phone-audit in place of the field audit, which involves an energy analyst reviewing the customer's billing information and discussing several steps the customer can take to lower their energy usage.

Gulf

Gulf suspended on-site visits in March 2020. Gulf continues to promote phone and online audits through social media, the Company's website, and advertisements. There is no timetable for when Gulf will resume on-site visits.

²⁷Executive Order No. 20-51

²⁸Executive Order No. 20-52

²⁹https://www.floridadisaster.org/globalassets/cemp/2020-cemp/2020-state-cemp.pdf

³⁰Utilities' Responses to Staff's First Set of Interrogatories, Docket No. 20200002-EG.

FPUC

FPUC suspended in home audits mid-March 2020. FPUC has encouraged customers to participate in the phone and online audits provided on the Company's website. There is no timetable for when FPUC will be returning to performing in home audits.

JEA

JEA suspended on-site visits in March 2020, beginning virtual/remote Efficiency Assessments starting in late April. There is no official projected start date to resume on-site visits, but virtual/remote audits continue to assist customers with their conservation and utility consumption needs.

OUC

OUC energy auditors are not currently entering the customer's home. However, energy auditors visit the property and remain outside, where they can verify the meter and other information, and speak to the customer at a safe distance while wearing a mask. OUC will re-evaluate entering customer homes and businesses on a monthly basis.